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INTRODUCTION

The Illinois Register is the official state document for publishing public notice of rulemaking activity initiated by State governmental agencies. The table of contents is arranged categorically by rulemaking activity and alphabetically by agency within each category.

Rulemaking activity consists of proposed or adopted new rules; amendments to or repealers of existing rules; and rules promulgated by emergency or peremptory action. Executive Orders and Proclamations issued by the Governor; notices of public information required by State Statute; and activities (meeting agendas; Statements of Objection or Recommendation, etc.) of the Joint Committee on Administrative Rules (JCAR), a legislative oversight committee which monitors the rulemaking activities of State Agencies; is also published in the Register.

The Register is a weekly update of the Illinois Administrative Code (a compilation of the rules adopted by State agencies). The most recent edition of the Code, along with the Register, comprise the most current accounting of State agencies' rulemakings.

The Illinois Register is the property of the State of Illinois, granted by the authority of the Illinois Administrative Procedure Act [5 ILCS 100/1-1, et seq.].

ILLINOIS REGISTER PUBLICATION SCHEDULE FOR 2012

Issue #	Rules Due Date	Date of Issue
1	December 27, 2011	January 6, 2012
2	January 3, 2012	January 13, 2012
3	January 9, 2012	January 20, 2012
4	January 17, 2012	January 27, 2012
5	January 23, 2012	February 3, 2012
6	January 30, 2012	February 10, 2012
7	February 6, 2012	February 17, 2012
8	February 14, 2012	February 24, 2012
9	February 21, 2012	March 2, 2012
10	February 27, 2012	March 9, 2012
11	March 5, 2012	March 16, 2012
12	March 12, 2012	March 23, 2012
13	March 19, 2012	March 30, 2012
14	March 26, 2012	April 6, 2012
15	April 2, 2012	April 13, 2012
16	April 9, 2012	April 20, 2012
17	April 16, 2012	April 27, 2012
18	April 23, 2012	May 4, 2012
19	April 30, 2012	May 11, 2012

20	May 7, 2012	May 18, 2012
21	May 14, 2012	May 25, 2012
22	May 21, 2012	June 1, 2012
23	May 29, 2012	June 8, 2012
24	June 4, 2012	June 15, 2012
25	June 11, 2012	June 22, 2012
26	June 18, 2012	June 29, 2012
27	June 25, 2012	July 6, 2012
28	July 2, 2012	July 13, 2012
29	July 9, 2012	July 20, 2012
30	July 16, 2012	July 27, 2012
31	July 23, 2012	August 3, 2012
32	July 30, 2012	August 10, 2012
33	August 6, 2012	August 17, 2012
34	August 13, 2012	August 24, 2012
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36	August 27, 2012	September 7, 2012
37	September 4, 2012	September 14, 2012
38	September 10, 2012	September 21, 2012
39	September 17, 2012	September 28, 2012
40	September 24, 2012	October 5, 2012
41	October 1, 2012	October 12, 2012
42	October 9, 2012	October 19, 2012
43	October 15, 2012	October 26, 2012
44	October 22, 2012	November 2, 2012
45	October 29, 2012	November 9, 2012
46	November 5, 2012	November 16, 2012
47	November 13, 2012	November 26, 2012
48	November 19, 2012	November 30, 2012
49	November 26, 2012	December 7, 2012
50	December 3, 2012	December 14, 2012
51	December 10, 2012	December 21, 2012
52	December 17, 2012	December 28, 2012

Editor's Note: The Secretary of State Index Department is providing this opportunity to remind you that the next filing period for your Regulatory Agenda will occur from October 15, 2012 to January 2, 2013.

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Real Estate Appraiser Licensing

2) Code Citation: 68 Ill. Adm. Code 1455

3)

Section Numbers:	Proposed Action:
1455.10	Amendment
1455.100	Amendment
1455.110	Amendment
1455.130	Amendment
1455.150	Amendment
1455.160	Amendment
1455.180	Amendment
1455.190	Amendment
1455.195	New Section
1455.200	Amendment
1455.205	New Section
1455.230	Amendment
1455.240	Amendment
1455.250	Amendment
1455.290	Amendment
1455.310	Amendment
1455.315	Repealed
1455.320	Amendment
1455.350	Amendment
1455.360	Amendment
1455.365	New Section
1455.370	Amendment
1455.400	Amendment
1455.410	Amendment
1455.430	Amendment
1455.440	Amendment
1455.445	New Section
1455.APPENDIX A	Repeal
1455.APPENDIX B	Repeal

4) Statutory Authority: Implementing and authorized by the Real Estate Appraiser Licensing Act of 2002 [225 ILCS 458]

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

5) A Complete Description of the Subjects and Issues Involved: Various Sections will be amended to address changes as a result of the sunset reauthorization of the Act (PA 96-1000) and passage of the Appraisal Management Company Registration Act (PA 97-602).

Specifically, this rulemaking will add procedures for the reinstatement of licenses; require that persons issued a temporary practice permit include certain identifying information within the body of an appraisal report on the certification page, and wherever their signature appears and establishes minimum requirements for a master agreement or written engagement for appraisal assignments performed by a holder of a temporary practice permit. Further, this rulemaking will prohibit distance education as qualifying education for applicants for an Associate Real Estate Trainee Appraiser License; establish standards for applicants who have no appraisal experience prior to July 1, 2006, who have qualifying education from another jurisdiction, who have graduate degrees in real estate, who do not hold at least an Associate's degree or a Bachelor's degree, or who have a degree issued by a school in a foreign nation. This rulemaking will also require licensees to complete the 7-hour National USPAP Update Course within 6 months after the effective date of revisions to USPAP; establish standards and means of verifying experience credit for licensure; require that licensees maintain certain records relating to an appraisal assignment for at least 5 years after completion or 2 years after final disposition of any related judicial proceeding. The list of acts that are defined as unprofessional conduct is expanded and the requirement of a supervising appraiser for Associate Real Estate Trainee Appraisers is repealed. Fees for applications for a temporary practice permit and for licensure as an education provider are reduced. Finally, fees related to qualifying education and continuing education are added; standards for practicum courses and for distance education are established and grounds for education provider discipline are included.

6) Any published studies or reports, along with the sources of underlying data, that were used when comprising this rulemaking, in accordance with 1 Ill. Adm. Code 100.355: None

7) Will this rulemaking replace any emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? Yes, see the definition in Section 1455.10 for AQB; and also USPAP. Additionally there are USPAP provisions contained in Section 1455.240.

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

10) Are there any other proposed rulemakings pending on this Part? No

11) Statement of Statewide Policy Objectives: This rulemaking will not require a local government to establish, expand or modify its activities in such a way as to necessitate additional expenditures from local revenues.

12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: Persons who wish to comment on this proposed rulemaking may submit written comments no later than 45 days after the publication of this Notice to:

Department of Financial and Professional Regulation
Attention: Craig Cellini
320 West Washington, 3rd Floor
Springfield, IL 62786

217/785-0813 Fax: 217/557-4451

All written comments received within 45 days after this issue of the Illinois Register will be considered.

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities and not for profit corporations affected: Real estate appraisal schools and businesses that use real estate appraisers will be affected, but appraisers are required by federal law to operate under the most current version of USPAP.

B) Reporting, bookkeeping or other procedures required for compliance: None

C) Types of professional skills necessary for compliance: Appraiser education and experience is necessary for licensure.

14) Regulatory Agenda on which this rulemaking was summarized: January 2012

The full text of the Proposed Amendments begins on the next page:

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

TITLE 68: PROFESSIONS AND OCCUPATIONS
CHAPTER VII: DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION
SUBCHAPTER b: PROFESSIONS AND OCCUPATIONS

PART 1455
REAL ESTATE APPRAISER LICENSING

SUBPART A: DEFINITIONS

Section
1455.10 Definitions

SUBPART B: LICENSING REQUIREMENTS

Section
1455.100 Application for a State Certified General Real Estate Appraiser License and a State Certified Residential Real Estate Appraiser License; Application for an Associate Real Estate Trainee Appraiser License; Application by Non-Resident for Licensure by Endorsement
1455.110 Application for Renewal of State Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, and Associate Real Estate Trainee Appraiser License; Late Renewal of State Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, and Associate Real Estate Trainee Appraiser License; Reinstatement of State Certified General Real Estate Appraiser License, State Certified Residential Real Estate; Appraiser License, and Associate Real Estate Trainee Appraiser License; Application for Military Deferral; Expiration Date
1455.120 Conversion of a State Licensed Real Estate Appraiser License to an Associate Real Estate Appraiser License; Late Conversion; No Issuance of State Licensed Real Estate Appraiser License (Repealed)
1455.130 Application for Temporary Practice Permit; Term of Permit; Scope of Practice; Regulatory Responsibility; Notice
1455.140 Issuance of Certificate to Real Estate Appraisers; Temporary Practice Permits

SUBPART C: EDUCATION REQUIREMENTS

Section
1455.150 Qualifying Education Requirements; State Certified General Real Estate Appraiser; State Certified Residential Real Estate Appraiser; Associate Real

Estate Trainee Appraiser; Non-Resident Qualifying Education; In Lieu of Requirements; Foreign Degrees
1455.160 Continuing Education Requirements for State Certified General Real Estate Appraiser, State Certified Residential Real Estate Appraiser, and Associate Real Estate Trainee Appraiser; Non-Resident Continuing Education Approval

SUBPART D: EXPERIENCE REQUIREMENTS

Section
1455.170 Experience Requirements for a State Certified General Real Estate Appraiser License
1455.180 Experience Requirements for a State Certified Residential Real Estate Appraiser License
1455.190 Verification of Experience Credit
1455.195 Acceptable Experience Credit and Request for Reconsideration
1455.200 Acceptable Appraisal Experience Credit

SUBPART E: BUSINESS PRACTICES; STANDARDS AND SCOPE OF PRACTICE

Section
1455.205 Record Keeping Requirements
1455.210 Notification of Name Change
1455.220 Assumed Name
1455.230 Address Change~~; Street Address~~
1455.240 Uniform Standards of Professional Appraisal Practice (USPAP)

SUBPART F: ENFORCEMENT PROVISIONS

Section
1455.250 Appraiser Responsibilities as Relating to Appraisal Management Companies~~Grounds for Discipline~~
1455.260 Suspension or Denial for Failure to Pay Taxes, Child Support or any Illinois-Guaranteed Student Loan
1455.270 Additional Education; Reporting Requirements
1455.280 Administrative Warning Letter
1455.290 Cooperation Required with the Division
1455.300 Felony Convictions; Discipline of Other Professional License; Notification
1455.310 Unprofessional Conduct
1455.315 Supervisor and Trainee Requirements (Repealed)

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

SUBPART G: ADMINISTRATIVE PROVISIONS

Section
1455.320 Fees
1455.330 Granting of Variances
1455.340 Duties of the Secretary

SUBPART H: EDUCATION PROVIDER AND COURSE PROVISIONS

Section
1455.350 Education Provider Application; Requirements
1455.360 Qualifying Education Course Requirements of Education Providers
1455.365 Practicum Course Requirements
1455.370 Qualifying Course Curriculum; State Certified General Real Estate Appraiser; State Certified Residential Real Estate Appraiser; Associate Real Estate Trainee Appraiser
1455.380 Examples of Acceptable Pre-License Education Courses (Repealed)
1455.390 Continuing Education Course Requirements of Education Providers
1455.400 Curriculum for Continuing Education Courses; Continuing Education Credit for Participation Other Than as a Student
1455.410 Distance Education
1455.420 Expiration Date and Renewal for Education Providers and Qualifying Education and Continuing Education Courses
1455.430 Continuing Education Reporting
1455.440 Transcript or Certificate of Completion
1455.445 Grounds for Education Provider Discipline

SUBPART I: TRANSITION PROVISIONS

Section
1455.450 Appraiser Applicants − Transition Provisions (Repealed)
1455.460 Education Providers, Pre-License and Continuing Education Courses − Transition Provisions (Repealed)

SUBPART J: HEARINGS

Section
1455.470 Applicability (Repealed)

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

1455.480 Administrative Law Judges (Repealed)
1455.490 Disqualification of an Administrative Law Judge (Repealed)

1455.APPENDIX A Caption for a Case Filed by the Division (Repealed)
1455.APPENDIX B Caption for a Case Filed by the Petitioner (Repealed)

AUTHORITY: Implementing and authorized by the Real Estate Appraiser Licensing Act of 2002 [225 ILCS 458].

SOURCE: Emergency rules adopted at 16 Ill. Reg. 16196, effective September 30, 1992, for a maximum of 150 days; rules adopted at 17 Ill. Reg. 1589, effective January 26, 1993; emergency amendment at 17 Ill. Reg. 6668, effective April 19, 1993, for a maximum of 150 days; amended at 17 Ill. Reg. 13494, effective July 30, 1993; amended at 18 Ill. Reg. 2379, effective January 28, 1994; emergency amendment at 18 Ill. Reg. 3006, effective February 10, 1994, for a maximum of 150 days; amended at 18 Ill. Reg. 8428, effective May 24, 1994; amended at 19 Ill. Reg. 9176, effective June 26, 1995; emergency amendment at 19 Ill. Reg. 12503, effective August 16, 1995, for a maximum of 150 days; amended at 19 Ill. Reg. 16604, effective December 1, 1995; amended at 20 Ill. Reg. 6488, effective April 30, 1996; recodified from Chapter VII, Department of Professional Regulation, to Chapter VIII, Office of Banks and Real Estate, pursuant to PA 89-23 and PA 89-508, at 20 Ill. Reg. 11984; amended at 21 Ill. Reg. 1685, effective January 27, 1997; amended at 21 Ill. Reg. 5538, effective April 18, 1997; emergency amendment at 22 Ill. Reg. 4132, effective February 4, 1998, for a maximum of 150 days; emergency amendment at 22 Ill. Reg. 8534, effective April 29, 1998, for a maximum of 150 days; old Part repealed by emergency rulemaking at 22 Ill. Reg. 12979, effective July 1, 1998, for a maximum of 150 days; new Part adopted by emergency rulemaking at 22 Ill. Reg. 13011, effective July 1, 1998, for a maximum of 150 days; old Part repealed and new Part adopted at 22 Ill. Reg. 20815, effective November 20, 1998; old Part repealed at 26 Ill. Reg. 10883 and new Part adopted by emergency rulemaking at 26 Ill. Reg. 10844, effective July 1, 2002, for a maximum of 150 days; old Part repealed at 26 Ill. Reg. 17689 and new Part adopted at 26 Ill. Reg. 17692, effective November 27, 2002; emergency amendment at 27 Ill. Reg. 14653, effective August 29, 2003, for a maximum of 150 days; amended at 28 Ill. Reg. 824, effective December 29, 2003; amended at 29 Ill. Reg. 16445, effective October 13, 2005; amended at 31 Ill. Reg. 4741, effective March 9, 2007; amended at 33 Ill. Reg. 7121, effective May 14, 2009; amended at 35 Ill. Reg. 1967, effective January 20, 2011; amended at 35 Ill. Reg. 19505, effective November 17, 2011; amended at 37 Ill. Reg. _____, effective _____.

SUBPART A: DEFINITIONS

Section 1455.10 Definitions

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

Unless otherwise clarified by this Part, definitions set forth in the Act also apply for the purposes of this Part.

"Act" means the Real Estate Appraiser Licensing Act of 2002 [225 ILCS 458].

"Applicant" means a person applying for licensure under this Act as a State Certified General Real Estate Appraiser, State Certified Residential Real Estate Appraiser, or Associate Real Estate Trainee Appraiser. Any applicant or any person who holds himself or herself out as an applicant is considered a licensee for purposes of enforcement, investigation, hearings, and the Illinois Administrative Procedure Act [5 ILCS 100].

"Appraisal management company" means any corporation, limited liability company, partnership, sole proprietorship, subsidiary, unit, or other business entity that directly or indirectly performs the following appraisal management services:

administers networks of independent contractors or employee appraisers to perform real estate appraisal assignments for clients;

receives requests for real estate appraisal services from clients and, for a fee paid by the client, enters into an agreement with one or more independent appraisers to perform the real estate appraisal services contained in the request; or

otherwise serves as a third-party broker of appraisal management services between clients and appraisers. [225 ILCS 459/10]

~~"Appraisal management company" means any corporation, partnership, sole proprietorship, subsidiary, unit, or other business entity that directly or indirectly performs the following appraisal management services:~~

~~administers networks of independent contractors and/or employee appraisers to perform real estate appraisal assignments for clients;~~

~~receives requests for real estate appraisal services from clients and, for a fee paid by the client, enters into an agreement with one or more~~

~~independent appraisers to perform the real estate appraisal services contained in the request; or~~

~~otherwise serves as a third-party broker of appraisal management services between clients and appraisers. For the purposes of this Part, a corporation, partnership, sole proprietorship, subsidiary, unit, or other business entity owned by one or more Illinois State Certified General Real Estate Appraisers or State Certified Residential Real Estate Appraisers holding more than 50% interest in the corporation, partnership, sole proprietorship, subsidiary, unit, or other business entity is not an appraisal management company.~~

"AQB 2008 Criteria" means the Real Property Appraiser Qualification Criteria (effective January 1, 2008, no later amendments or editions), published by the Appraiser Qualifications Board of The Appraisal Foundation, 1155 15th Street, NW, Suite 1111, Washington DC 20005.

"Board" or "AQB" means the Appraiser Qualification Board.

"Classroom hour" or "hour" as it pertains to the education requirements means classroom attendance for a minimum of 50 minutes of lecture or its equivalent through a distance education~~learning~~ program approved by the Division.

"Client" means the party or parties who engage an appraiser, by employment or contract, in a specific assignment. If an appraisal management company is the party engaging the appraiser, the appraisal management company is considered the client.

"Continuing education" means education that is creditable toward the education requirements that must be satisfied to renew licensure or certification, as set forth in Section 1455.160.

"Department" means the Department of Financial and Professional Regulation.

~~"Direct supervision" means that an appraiser is directing and overseeing the production of each appraisal assignment pursuant to Section 1455.315.~~

"Director" means the Director of the Department of Financial and Professional Regulation-Division of Professional Regulation.

"Division" means the Department of Financial and Professional Regulation-Division of Professional Regulation.

"Experience/work log" means the form described in Section 1455.190 that verifies an appraiser's experience and work history.

"Jurisdictional exception" means an assignment condition established by applicable law or regulation, which precludes an appraiser from complying with USPAP.

"License" means a certificate of authority, permit or registration issued by the Division.

"Licensee" means a person who has been issued a license under the Act or this Part. Anyone who holds himself or herself out as a licensee or who is accused of unlicensed practice is considered a licensee for purposes of enforcement, investigation, hearings, and the Illinois Administrative Procedure Act.

"Master agreement" means a written service agreement between a traditional client and a real estate appraiser or panel of approved appraisers.

"Non-traditional client" means the Division or an approved practicum course provider.

"Practicum course instructor" means a Certified Residential Appraiser or a Certified General Appraiser in good standing with the Division who is authorized to conduct an approved practicum course.

"Qualifying education" means education that is creditable toward the requirements set forth in Section 1455.150.

"Quantitative experience" means actual time spent on the appraisal process.

"Residential" means composed of 1 to 4 residential units.

"Secretary" means the Secretary of the Department of Financial and Professional Regulation.

~~"Supervising appraiser" means a State Certified General Real Estate Appraiser or a State Certified Residential Real Estate Appraiser in good standing with the Division. A supervising appraiser shall not have been subject to discipline within the last two years. The supervising appraiser shall possess a minimum of 2 years of experience as a practicing certified licensed appraiser. A State Certified General Real Estate Appraiser or a State Certified Residential Real Estate Appraiser may engage in direct supervision of an Associate Real Estate Trainee Appraiser. A State Certified General Real Estate Appraiser may engage in direct supervision of a State Certified Residential Real Estate Appraiser.~~

"Traditional client" means a client who hires an appraiser to complete an assignment by employment or contract for business purposes.

"USPAP" means the Uniform Standards of Professional Appraisal Practice promulgated by the Appraisal Standards Board pursuant Title XI of the Federal Financial Institutions Reform, Recovery and Enforcement Act of 1989 (12 USC 3331 et seq.) published by the Appraisal Standards Board of The Appraisal Foundation, 1155 15th Street, NW, Suite 1111, Washington DC 20005 (effective January 1, 2012, no later amendments or editions)~~and incorporated by reference in Section 1455.240~~.

"Web Form" means a web page that allows a user to enter data that is sent to a server for processing.

"Written Engagement" means a defined relationship between a real estate appraiser or appraisers and the client. It states the terms, conditions and scope of the appraisal service request, including but not limited to compensation.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART B: LICENSING REQUIREMENTS

Section 1455.100 Application for a State Certified General Real Estate Appraiser License and a State Certified Residential Real Estate Appraiser License; Application for an Associate Real Estate Trainee Appraiser License; Application by Non-Resident for Licensure by Endorsement

a) Each applicant for a State Certified General Real Estate Appraiser License and a State Certified Residential Real Estate Appraiser License shall submit to the

Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) The fee as provided by Section 1455.320;

3) Proof of successful completion of the qualifying education requirements as provided by Section 1455.150 of this Part;

4) A score report/application that provides proof of successful completion of the qualifying education and experience requirements as provided by Subparts C and D; and

5) Proof of successful completion of the examination authorized by the Division and endorsed by the Appraiser Qualification Board (AQB).

b) Each applicant for an Associate Real Estate Trainee Appraiser License shall submit to the Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) The fee as provided by Section 1455.320;

3) Proof of successful completion of the qualifying education requirements as provided by Subpart C; and

4) A score report/application that provides proof of successful completion of the examination authorized by the Division.

c) Each non-resident applicant for a State Certified General Real Estate Appraiser license or a State Certified Residential Real Estate Appraiser license applying by endorsement shall submit to the Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) The fee as provided by Section 1455.320; and

3) A certification of good standing from the jurisdiction of the applicant's place of residence or by a search by the Division of the Appraisal Subcommittee's (ASC) National Registry history that may be obtained from the ASC at 1401 H. Street N.W. Washington DC 20005~~2000 K Street, NW, Suite 310, Washington, DC 20006~~ or at its website at www.asc.gov.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.110 Application for Renewal of State Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, and Associate Real Estate Trainee Appraiser License; Late Renewal of State Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, and Associate Real Estate Trainee Appraiser License; Reinstatement of State Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, and Associate Real Estate Trainee Appraiser License; Application for Military Deferral; Expiration Date

a) Each applicant for renewal of a State Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, and Associate Real Estate Trainee Appraiser License shall submit to the Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) The fee as provided by Section 1455.320; and

3) Proof of successful completion of the continuing education requirements as provided by Subpart C.

b) Any person who fails to submit a renewal application and renew his or her license by the expiration date of the license may renew his or her license for a period of 2 years following the expiration date of his or her license by submitting to the Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) The fee and late penalty as provided by Section 1455.320; and

3) Proof of successful completion of the continuing education requirements as provided by Subpart C.

c) For the purposes of this Section, all licenses shall expire on September 30 of odd numbered years.

d) Any person who fails to submit a renewal application pursuant to this Section within 2 years after the expiration date shall not be eligible to renew his or her license, and must meet the requirements of a new applicant as required by the Act and this Part.

e) License renewals shall not be processed until proof of successful completion of continuing education is submitted and awarded credit by the Division. Licensees unable to provide satisfactory evidence of completed continuing education for the prescribed renewal cycle shall have their license automatically suspended.

f) Each applicant for reinstatement of a State Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, and Associate Real Estate Trainee Appraiser License shall submit to the Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) The fee as provided by Section 1455.320; and

3) Proof of successful completion of the continuing education requirements as provided by Subpart C.

g) Licensees with military deferrals, upon returning from active duty, shall submit to the Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) A copy of their DD 214 (Report of Separation);

3) The fee as provided by Section 1455.320; and

4) Proof of successful completion of the continuing education requirements as provided by Subpart C.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.130 Application for Temporary Practice Permit; Term of Permit; Scope of Practice; Regulatory Responsibility; Notice

a) Each non-resident applicant for a temporary practice permit issued pursuant to Section 5-50 of the Act shall submit to the Division:

1) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

2) A certification of good standing from the jurisdiction of the applicant's place of residence or by a search by the Division of the ASC National Registry; and

3) The fee as provided by Section 1455.320.

b) The term for a temporary practice permit shall be 6 months from the date of issuance and may be extended for a period of an additional 6 months by request in writing to the Division.

c) Any person issued a temporary practice permit shall be limited to a specific appraisal assignment. For the purposes of this Section, the term "assignment" shall mean a real estate appraisal and written appraisal report that are covered by a contract to provide an appraisal. A copy of the master agreement must be supplied to the Division in the absence of a specific engagement.

d) Any person issued a temporary practice permit shall be subject to the provisions of the Act and this Part, and the Division shall take regulatory responsibility for any person violating any provisions of the Act and this Part while the person is practicing in the State of Illinois.

e) If the Division takes any disciplinary action against an appraiser practicing in the State of Illinois under a temporary practice permit, it shall notify the jurisdiction of the appraiser's place of residence.

f) Persons issued a temporary practice permit shall affix the temporary practice permit number, issuance date, expiration date of the temporary practice permit, and permit title within the body of the report beneath the licensee's signature, on the certification page and wherever the signature appears.

g) The permit title is "Illinois Temporary Practice Permit". Temporary Practice Permit assignments covered by a master agreement or a written engagement must include, at a minimum, the date of the master agreement, the intended user, the intended use, the property type and the location of the Illinois property that is the subject of the report.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART C: EDUCATION REQUIREMENTS

Section 1455.150 Qualifying Education Requirements; State Certified General Real Estate Appraiser; State Certified Residential Real Estate Appraiser; Associate Real Estate Trainee Appraiser; Non-Resident Qualifying Education; In Lieu of Requirements; Foreign Degrees

a) Residential − No Experience Prior to July 1, 2006 − Application After December 31, 2007
An applicant for licensure as a State Certified Residential Real Estate Appraiser who has not gained appraisal experience prior to July 1, 2006 and files an application after December 31, 2007 shall meet the following criteria.

1) 2500 hours of AQB Appraisal Experience;

2) 200 hours of modular appraisal education as stated in the Guide Notes (GN-1) of the AQB 2008 Criteria;

3) Associates degree or equivalent from an accredited college, junior college, community college or university~~as outlined by AQB~~; and

4) If an individual applicant for licensure submits integrated course credit for approval, the course must have been approved by the Course Approval Program of the AQB~~Appraiser Qualifications Board~~ and a topic matrix revealing the exact number of hours for each section of course content

must be provided for review. Only integrated course credit bundled together to equal a module will be accepted. Partial credit toward a module will not be accepted. It is the applicant's responsibility to demonstrate compliance as part of the application.

b) Any person who makes application for an Associate Real Estate Trainee Appraiser License shall be required, as a pre-requisite to examination, to successfully complete 75 classroom hours of qualifying education in subjects related to real estate appraisal, as outlined by Subpart H ~~of this Part~~, and shall include 15 hours of instruction relative to USPAP that is approved by the AQB and taught by an AQB certified instructor. All qualifying education requirements shall only be accepted from education providers and courses approved by the Division.

c) The Division may accept evidence of successful completion of qualifying education credit from another jurisdiction, if that jurisdiction's requirements are substantially the same as the State of Illinois' and meet the minimum licensing requirements of the AQB 2008 Criteria and may be in modular format for licensure after January 1, 2008. A real estate appraiser who wishes to obtain credit for qualifying education courses not licensed by the Division shall submit to the Division:

1) An application provided by the Division requesting approval for qualifying education credit, signed by the applicant, on which all questions are answered;

2) A certificate of successful completion provided by the education provider, a certification by the jurisdiction of the appraiser's place of residence of successful completion of the requested qualifying education credit, or any other evidence to be considered by the Division; and

3) The fee as provided in Section 1455.320.

d) Non-residential − No Experience Prior to July 1, 2006 − Application after December 31, 2007

An applicant for licensure as a State Certified General Real Estate Appraiser who has not gained appraisal experience prior to July 1, 2006 and files an application after December 31, 2007 shall meet the following criteria:

1) Three thousand hours of experience obtained during no fewer than 30 months is required, of which, 1,500 hours must be in non-residential appraisal work. While the hours may be cumulative, the required number of months must accrue before an individual can be certified;

2) 300 hours of modular appraisal education as stated in the Guide Notes (GN-1) of the AQB 2008 Criteria;

3) Bachelors degree or higher or equivalent, from an accredited college, junior college, community college or university; and

4) If an individual applicant for licensure submits integrated course credit for approval, the course must have been approved by the Course Approval Program of the AQB and a topic matrix revealing the exact number of hours for each section of course content must be provided for review. Only integrated course credit bundled together to equal a module will be accepted. Partial credit toward a module will not be accepted. It is the applicant's responsibility to demonstrate compliance as part of the application.

e) The Division may accept evidence of successful completion of qualifying education credit from another jurisdiction, if that jurisdiction's requirements are substantially the same as the State of Illinois' and meet the minimum licensing requirements of the AQB 2008 Criteria and may be in modular format for licensure after January 1, 2008. A real estate appraiser who wishes to obtain credit for qualifying education courses not licensed by the Division shall submit to the Division:

1) An application provided by the Division requesting approval for qualifying education credit, signed by the applicant, on which all questions are answered;

2) A certificate of successful completion provided by the education provider, a certification by the jurisdiction of the appraiser's place of residence of successful completion of the requested qualifying education credit, or any other evidence to be considered by the Division; and

3) The fee as provided in Section 1455.320.

f) Credit toward qualifying education requirements may also be obtained via the completion of a graduate (masters or doctoral) degree in Real Estate from an accredited college or university approved by The Association to Advance Collegiate Schools of Business, or a regional or national accreditation agency recognized by the U.S. Secretary of Education, provided that the college or university has had its curriculum reviewed and approved by the AQB.

g) Non-degree Course Work Accepted for Licensure – Certified Residential License

1) In lieu of the Associate degree, an applicant for the Certified Residential license shall successfully pass all of the following collegiate subject matter courses from an accredited college, junior college community college, or university:

A) English Composition;

B) Principles of Economics (Micro or Macro);

C) Finance;

D) Algebra, Geometry or higher mathematics;

E) Statistics;

F) Computer Science; and

G) Business or Real Estate Law.

2) Total hours of equivalent college courses in lieu of an Associate degree: 21 semester credit hours or its equivalent for the Certified Residential Appraiser. If an accredited college or university (accredited by the Commission on Colleges, a regional or national accreditation association, or by an accrediting agency that is recognized the U.S. Secretary of Education) accepts the College-Level Examination Program® (CLEP) examinations and issues a transcript for the exam, showing its approval, it will be considered as credit for the college course.

h) Non-degree Course Work Accepted for Certification – Certified General Credential

1) In lieu of the Bachelors degree, an applicant for the Certified General credential shall successfully pass all of the following collegiate level subject matter courses from an accredited college, junior college, community college or university:

A) English Composition;

B) Micro Economics;

C) Macro Economics;

D) Finance;

E) Algebra, Geometry or higher mathematics;

F) Statistics;

G) Computer Science;

H) Business or Real Estate Law; and

I) Two elective courses in accounting, geography, agricultural economics, business management or real estate.

2) Total hours of equivalent college courses in lieu of a Bachelors degree: 30 semester credit hours or its equivalent for the certified general appraiser. If an accredited college or university (accredited by the Commission on Colleges, a regional or national accreditation association, or an accrediting agency that is recognized by the U.S. Secretary of Education) accepts the College-Level Examination Program® (CLEP) examinations and issues a transcript for the exam, showing its approval, it will be considered as credit for the college course.

i) Applicants seeking credit for foreign degrees shall have an evaluation of their education credentials to convert the credentials to American equivalent semester credits and courses. Only vendors and organizations recognized by the Illinois State Board of Education will be permitted to conduct the evaluations.

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NOTICE OF PROPOSED AMENDMENTS

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.160 Continuing Education Requirements for State Certified General Real Estate Appraiser, State Certified Residential Real Estate Appraiser, and Associate Real Estate Trainee Appraiser; Non-Resident Continuing Education Approval

a) CE Credit

1) A State Certified General Real Estate Appraiser, State Certified Residential Real Estate Appraiser, or Associate Real Estate Trainee Appraiser who makes application to renew his or her real estate appraiser license shall successfully complete the equivalent of 14 hours of approved continuing education per year preceding the renewal, e.g., a total of 28 hours of approved continuing education for a 2 year renewal. ~~Continuing education may be obtained anytime during the pre-renewal period.~~ Continuing education credit will only be accepted from education providers and courses approved by the Division.

2) If a real estate appraiser was issued an initial license for less than 185 days prior to the expiration of the license, then no continuing education is required for that renewal. If a real estate appraiser has held a license 185 days or more prior to the expiration, but less than two years, then 14 hours of approved continuing education is required.

3) A real estate appraiser must complete the 7-hour National USPAP Update Course or its equivalent as determined by the AQB or an alternate method established by the AQB taught by an AQB certified instructor who also hold a current appraiser certification by a state during each pre-renewal period prior to renewing or converting his or her real estate appraiser license, unless the real estate appraiser was issued his or her initial license for a period of less than 185 days prior to the expiration date. A real estate appraiser must complete the 7-hour National USPAP Update Course or its equivalent in no less than~~within~~ 6 months after the effective date of USPAP. Those real estate appraisers issued a license more than 6 months after the effective date of USPAP shall complete the 7-hour National USPAP Update Course within 6 months after licensure.

b) CE Credit from Another Jurisdiction
The Division may accept evidence of successful completion of continuing

education credit from another jurisdiction if that jurisdiction's requirements are substantially the same as the State of Illinois' and meet the recommendations of the AQB, and if the credit was earned during the appropriate pre-renewal period. A real estate appraiser who wishes to obtain credit for continuing education courses not licensed by the Division shall submit to the Division:

1) An application provided by the Division requesting approval for continuing education credit, signed by the applicant, on which all questions are answered;

2) A certificate of successful completion provided by the education provider or a certification by the jurisdiction of the appraiser's place of residence of successful completion of the requested continuing education credit; and

3) The fee as provided in Section 1455.320.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART D: EXPERIENCE REQUIREMENTS

Section 1455.180 Experience Requirements for a State Certified Residential Real Estate Appraiser License

Any person who makes application for a State Certified Residential Real Estate Appraiser License shall be required, as a pre-requisite to examination, to provide evidence of obtaining 2,500 hours of appraisal experience during no fewer than 24 months and shall submit such evidence to the Division as required by Section 1455.190. Waiver valuations prepared in accordance with Section 5-5 of the Act shall not be counted toward appraisal experience credit for any credential classification.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.190 Verification of Experience Credit

All applicants shall verify experience credit on forms provided by the Division. Those forms shall include information on the type of property, ~~e.g., residential or non-residential,~~date of report, address of appraised property, description of work performed and number of work hours. The Division may audit such verification and, if requested, the applicant must provide experience documentation in the form of reports or file memoranda and should support the

experience claimed. The Division, at its discretion, will determine the validity of all appraisal experience credit in conformity with criteria recommended by the AQB. All experience must be substantially USPAP compliant. An applicant's experience must be in appraisal work conforming to Standards 1, 2, 3, 4, 5 and/or 6 when the appraiser demonstrates proficiency in appraisal principles, methodology, procedures (development), and reporting conclusions. The Division, at its discretion, will determine the validity of all appraisal experience credit in conformity with criteria recommended by the AQB.

a) For applicants intending to upgrade to a State Certified Residential Real Estate Appraiser License:

1) No more than 30% of the residential experience shall be claimed for appraisal review or appraisal consulting assignments.

2) No more than 30% of the residential experience shall be claimed for the appraisal of vacant land.

3) No more than 30% of the total experience shall be non-residential assignments.

4) No less than 50% of the total experience submitted shall contain signed certifications by the applicant.

b) For applicants intending to upgrade to a State Certified General Real Estate Appraiser License:

1) No more than 30% of the experience shall be claimed for appraisal review or appraisal consulting assignments.

2) No more than 30% of the residential experience shall be claimed for the appraisal of vacant land.

3) No less than 50% of the total experience submitted shall contain signed certifications by the applicant.

c) Real Estate Mass Appraisal/Ad Valorem Experience

1) Each applicant seeking acceptance of experience as an assessment official, or as deputy or employee of an assessment official, in applying for a State

Certified General Real Estate Appraiser License, State Certified Residential Real Estate Appraiser License, or Associate Real Estate Trainee Appraiser License shall submit to the Division:

A) An application, provided by the Division and signed by the applicant, on which all questions have been answered;

B) A notarized Real Estate Mass Appraisal/Ad Valorem Affidavit;

C) The Assessment Experience Certification;

D) A completed work log;

E) The fee required by Section 1455.320.

2) The applicant must demonstrate qualitative experience through no fewer than 5 appraisals for ad valorem tax/assessment purposes utilizing or considering the three approaches to value. If the applicant is intending to upgrade to a State Certified General Real Estate Appraiser License, then 3 of the 5 must be non-residential samples.

d) Practicum Course as Experience
Practicum courses that are approved by the AQB Course Approval Program or by the Division shall satisfy the non-traditional client experience requirement.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.195 Acceptable Experience Credit and Request for Reconsideration

If experience has been approved or disapproved by the Division, and the applicant disagrees with the number of experience credit hours awarded, the applicant may, within 14 days after the Division's written notice, request in writing that the Division reconsider its determination. The request must indicate the number of hours of experience credit that the applicant believes is appropriate and must explain in detail why the applicant disagrees with the Division's decision. Review of any such request for reconsideration will be performed by one or more members of the Real Estate Appraisal Administration and Disciplinary Board. The Board shall then submit to the Division its recommendation for final action.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 1455.200 Acceptable Appraisal Experience Credit

a) Acceptable appraisal experience shall include, but is not limited to, fee and staff appraisal, ad valorem tax appraisal, condemnation appraisal, technical review appraisal, appraisal analysis, real estate consulting, highest and best use analysis, and feasibility analysis/study. All appraisal experience shall conform to USPAP and shall meet the requirements of the AQB. All experience credit must have been obtained after January 30, 1989.

b) Appraisal education may not be substituted for appraisal experience, except for practicum courses approved by the AQB Course Approval Program and/or the Division.

c) A traditional client is not necessary for an appraisal to qualify for appraisal experience. Experience gained for work without a traditional client cannot exceed 50% of the total experience requirement. An hour of appraisal experience is defined as verifiable time spent in performing tasks in accordance with acceptable appraisal experience as identified by AQB 2008 Criteria~~criteria~~.~~There is no time limit during which experience must be obtained.~~

d) Time spent in travel to and from the subject property and to other data sources shall not count toward appraisal experience.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART E: BUSINESS PRACTICES; STANDARDS AND SCOPE OF PRACTICE

Section 1455.205 Record Keeping Requirements

Licensees must retain any communication, including but not limited to written, oral or web form, of an appraisal, appraisal review or appraisal consulting service that is transmitted to the client upon completion of an assignment for a period of at least five years, or at least two years after final disposition of any judicial proceeding in which the appraiser provided testimony related to the assignment, whichever period expires last.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 1455.230 Address Change; Street Address

It is the responsibility of the licensee to notify the Division in writing of a change of address, e-mail address, or website address or addresses within 15 days after the change. The licensee shall provide a street address of the licensee's residence or business location. The licensee's address of record shall not be a Post Office Box or a mailbox located within a retail postal business.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.240 Uniform Standards of Professional Appraisal Practice (USPAP)

a) Pursuant to Section 10-10 of the Act, the 2012 ~~2010 Uniform Standards of Professional Appraisal Practice (~~USPAP~~), effective January 1, 2010, by the Appraisal Standards Board (ASB) of the Appraisal Foundation (The Appraisal Foundation, 1029 Vermont Avenue, NW, Suite 900, Washington, D.C. 20005),~~ are hereby incorporated by reference with no later amendments or editions.

b) All real estate appraisers licensed under the Act shall practice in accordance with USPAP except where the standards are contrary to Illinois law or public policy (USPAP, Jurisdictional Exception).

c) All investigators, board members, auditors and examiners employed or retained by the Division are exempt from the requirements of USPAP Standard 3 while performing an investigation, audit or examination. If the Division files a formal complaint, a USPAP Standard 3 review may~~shall~~ be utilized by the Division, except the Division may limit the scope of Standard 3 to exclude valuation. USPAP Standard 3 review shall be provided in cases in which an existing appraisal report is central to the proceeding.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART F: ENFORCEMENT PROVISIONS

Section 1455.250 Appraiser Responsibilities as Relating to Appraisal Management Companies~~Grounds for Discipline~~

Pursuant to Section 15-10(a) of the Act, failure to comply with any of the following shall be considered a violation and may subject a licensee to discipline as provided for in the Act and this Part:

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a) An appraiser shall identify an appraisal management company as the client if the appraisal management company is engaging the appraiser. ~~If an appraisal management company is acting as an authorized agent for a financial institution, the appraiser shall identify the financial institution as the additional intended user.~~

~~1) An authorized agent is defined as one approved by the board of directors for the financial institution and who has a specified level of authority relating to the appraisal process.~~

~~2) An institution's board of directors is responsible for reviewing and adopting policies and procedures that establish and maintain an effective, independent real estate appraisal and evaluation program for all of its lending functions.~~

b) An appraiser shall not provide appraisal practice service to an appraisal management company unless the appraisal management company is lawfully registered in Illinois pursuant to Section 20 of the Appraisal Management Company Registration Act [225 ILCS 459] and 68 Ill. Adm. Code 1452.~~If a financial institution is identified as an additional intended user, the appraiser shall ascertain the relationship between the client/authorized agent and the financial institution by doing one of the following:~~

~~1) obtain a copy of the agreement between the client/authorized agent and the financial institution. This agreement shall set out the responsibilities and authority of the authorized agent.~~

~~2) obtain a letter written by the client/authorized agent in which the agent sets forth its level of responsibility and authority. If the client/authorized agent cannot provide the appraiser with documentation identifying them as a duly authorized agent for the financial institution, a statement must be included in the appraisal indicating that the report may not comply with the Interagency Appraisal and Evaluation Guidelines, adopted October 27, 1994 by the federal Office of the Controller of Currency (OCC), Federal Reserve Board (FRB), Federal Deposit Insurance Corporation (FDIC) and federal Office of Thrift Supervision (OTS).~~

~~3) directly communicate with the financial institution to determine the scope of the appraisal assignment.~~

c) When an appraisal management company engages:

1) An independent ~~an~~ appraiser by employment or contract for a specific assignment, the appraiser shall prominently display the appraisal fee received from the appraisal management company in the certification as follows: "The compensation for this appraisal assignment is $_____."

2) An employee appraiser for a specific assignment, the appraiser shall prominently display the appraisal fee received from the appraisal management company in the certification as follows: "The compensation for this appraisal assignment is $_____."

3) An employee appraiser who receives a salary and does not receive a fee for the assignment, the employee appraiser shall prominently display the following language: "The appraiser is a salaried employee and received no appraisal fee for the assignment."

4) An appraiser for a specific assignment, the appraiser shall prominently display the appraisal management company's Illinois registration number and expiration date as follows: "The appraisal management company's Illinois registration number is _____ and it expires on (month/day/year)."

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.290 Cooperation Required with the Division

Pursuant to Section 15-10(a)(17) of the Act, all licensees are required to fully cooperate with any audit, investigation, interrogatory, examination or request for information regarding any aspect of the licensee's appraisal practice or application for licensure. Full cooperation includes, but is not necessarily limited to providing to the Division within 30 days after its request:

a) A complete copy of a signed appraisal, appraisal review or appraisal consulting assignment as it was transmitted to the client, including file memoranda, work files, supporting and/or verification documentation that are required to be maintained by the Act and this Part;

b) Continuing education certificates or experience/work log that are required to be maintained by the Act or this Part; or

c) A complete answer to any written interrogatory or request for clarification submitted to a licensee or applicant.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.310 Unprofessional Conduct

Dishonorable, unethical or unprofessional conduct includes, but is not limited to, the commission of any one of the following:

a) Aiding or assisting another in the violation of the Act or this Part;

b) Failing to satisfy a material term of a consent to administrative supervision order or consent order;

c) Aiding, assisting or facilitating another in using or appropriating credentials or a license for the purpose of preparing an appraisal report; ~~or~~

d) Delivering an appraisal report in a manner in which the appraiser knows, or should know, a true copy of the report will not be delivered to all intended users;~~.~~

e) Providing false information with regard to the completion of continuing education;

f) Failure of a supervisor to sign the Associate Real Estate Trainee Appraiser's log, without good cause;

g) Failing to exercise due care to prevent unauthorized use of his or her digital signature;

h) Failing to complete the 7-hour National USPAP Update Course or its equivalent within 6 months after the effective date of USPAP;

i) Denying an employee or contracted appraiser reasonable access to his or her workfile contents and/or reports without good cause;

j) Failing to provide a completed report to a client for which the total agreed compensation has been received by the licensee, without good cause; or

k) Transmitting an unsigned assignment result to a client or end-user client.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.315 Supervisor and Trainee Requirements (Repealed)

~~a) Requirements of a Supervising Appraiser~~

~~1) A supervising appraiser shall provide to the Division in writing the name and address of each Associate Real Estate Trainee Appraiser within 10 days after engagement, and notify the Division in writing immediately upon termination of the engagement.~~

~~2) A supervising appraiser shall instruct and directly supervise an Associate Real Estate Trainee Appraiser for any classification of license or certificate in the entire preparation of each appraisal. A supervising appraiser shall provide direct supervision, being personally and physically present, during the first 500 hours of experience for no fewer than 25 assignments. If a State Certified General Real Estate Appraiser is supervising an Associate Real Estate Trainee Appraiser, all appraisals completed during the first 500 hours of experience shall be non-residential appraisals. The supervising appraiser shall approve and sign all final appraisal documents certifying the appraisals are in compliance with USPAP.~~

~~b) Requirements of an Associate Real Estate Trainee Appraiser~~

~~1) An Associate Real Estate Trainee Appraiser shall provide to the Division in writing the name and address of each supervising appraiser within 10 days after engagement, and notify the Division in writing immediately upon termination of the engagement.~~

~~2) An Associate Real Estate Trainee Appraiser shall maintain an appraisal log for each supervising appraiser and, at a minimum, include the following in the log for each appraisal:~~

~~A) Type of property;~~

~~B) Date of report;~~

~~C) Property description;~~

~~D) Description of work performed by the trainee and scope of review and supervision by the supervising appraiser;~~

~~E) Number of actual work hours by the trainee on the assignment; and~~

~~F) The signature and State license number of the supervising appraiser.~~

(Source: Repealed at 37 Ill. Reg. _____, effective _____)

SUBPART G: ADMINISTRATIVE PROVISIONS

Section 1455.320 Fees

a) Initial application fee for appraiser license~~.~~

1) The application fee for an initial license as a State Certified General Real Estate Appraiser and a State Certified Residential Real Estate Appraiser shall be $315, which shall include the National Registry fee.

2) The application fee for an initial license as an Associate Real Estate Trainee Appraiser shall be $225.

b) Renewal application fee for appraiser license~~.~~

1) The application fee to renew a license as a State Certified General Real Estate Appraiser or a State Certified Residential Real Estate Appraiser shall be calculated at $265 per year, which shall include the National Registry fees.

2) The application to renew an Associate Real Estate Trainee Appraiser License shall be calculated at $150 per year.

3) The application fee to renew a license that has expired, as a State Certified General Real Estate Appraiser, a State Certified Residential Real Estate Appraiser or an Associate Real Estate Trainee Appraiser shall be the sum

of all lapsed renewal fees plus a $50 late fee.

c) Application fee for temporary practice permit~~.~~
The application fee for a temporary practice permit pursuant to the Act and this Part shall be $100~~$150~~. The~~There shall be no~~ additional fee required for an extension granted pursuant to the Act and this Part for a temporary practice permit shall be $50.

d) Initial application fee for a license as an education provider, a qualifying education course, ~~and~~ a continuing education course, and a practicum course~~.~~

1) The application fee for a license as an education provider shall be $550~~$1050~~, plus course application fees.

2) The application fee for a license for a qualifying education course shall be $150.

3) The application fee for a license for a continuing education course shall be $50~~$100~~.

4) The application fee for the 15-Hour National USPAP Course or its equivalent shall be $50.

5) The fee to convert an Illinois licensed qualifying education course, except for the 15-Hour National USPAP Course, to a continuing education course shall be $25.

6) The application fee for the 7-Hour National USPAP Update Course or its equivalent shall be $25.

e) Application fee to renew a license as an education provider, a qualifying education course, and a continuing education course~~.~~

1) The application fee to renew a license as an education provider shall be ~~calculated at~~ $500~~$550~~ per year.

2) The application fee to renew a license that has expired as an education provider shall be the sum of all lapsed renewal fees plus a $50 late fee.

3) The application fee to renew a license as a qualifying education course, except for the 15-Hour National USPAP Course, with no material changes, shall be ~~calculated at~~ $50~~$100~~ per year.

4) The application fee to renew a license that has expired as a qualifying education course, with no material changes, shall be the sum of all lapsed renewal fees plus a $50 late fee.

5) The application fee to renew a license as a continuing education course, except for the 7-Hour National USPAP Update Course, with no material changes, shall be ~~calculated at~~ $25~~$75~~ per year.

6) The application fee to renew a license that has expired as a continuing education course, with no material changes, shall be the sum of all lapsed renewal fees plus a $50 late fee.

f) For the purposes of determining if a license has expired under this Section, Department of Financial and Professional Regulation-Division of Professional Regulation (Division) shall consider the license expired if the postmark on the renewal application is a date later than the expiration date or, if delivered other than by mail, the license shall be considered expired if the renewal application is received by the Division on a date later than the expiration date.

g) General~~.~~

1) All fees paid pursuant to the Act and this Part are non-refundable.

2) The fee for the issuance of a duplicate license certificate or pocket card, for the issuance of a replacement license certificate or pocket card that has been lost or destroyed, or for the issuance of a license certificate or pocket card with a name or address change, other than during the renewal period, shall be $25.

3) The fee for a certification of a licensee's record for any purpose shall be $25.

4) The fee for a decorative wall license showing registration shall be the cost of producing the license.

5) The fee for a roster of persons licensed under the Act shall be the cost of producing the roster.

6) Applicants for an examination as a State Certified General Real Estate Appraiser, a State Certified Residential Real Estate Appraiser, or an Associate Real Estate Trainee Appraiser shall be required to pay a fee covering the cost of providing the examination. If a designated testing service is utilized for the examination, the fee shall be paid directly to the designated testing service. Failure to appear for the examination on the scheduled date, at the time and place specified, after the applicant's application for examination has been received and acknowledged, shall result in the forfeiture of the examination fee.

7) The fee for a copy of the transcript of any proceeding under the Act shall be the cost to produce the copy.

8) The fee for certifying any record, e.g., a copy of a disciplinary order or application, shall be $1 per page.

9) The Division may charge an administrative fee not to exceed $2,000, as a part of a compliance agreement issued with an administrative warning letter pursuant to Section 1455.280 ~~of this Part~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART H: EDUCATION PROVIDER AND COURSE PROVISIONS

Section 1455.350 Education Provider Application; Requirements

a) In accordance with Section 20-5 of the Act, any person or entity seeking approval to provide qualifying education and/or continuing education courses shall submit an application, no later than 45 days in advance of the first course offering date, on forms provided by the Division, along with the appropriate fee required by Section 1455.320. In addition, course applications:

1) May be deferred by the Division for no more than 45 days, pending notification or return to the applicant of an incomplete filing, or cancelled as ineligibility filing, which can be remedied within 14 days after notification. If not remedied within 14 days, the application will be

rejected;

2) That are not approved for use by the Division can be resubmitted once all the deficiencies or objections identified by the Division are addressed and an explanation of how the applicant has satisfied each deficiency or objection is provided, along with the filing fee required by Section 1455.320.

b) If a course has been materially revised during the two-year license period, it must be resubmitted for review and approval along with the appropriate fee required by Section 1455.320. Revised material must be shaded, coded or otherwise designated to enable timely review.

c~~b~~) The program of qualifying education and/or continuing education for a licensed education provider shall:

1) Be approved by the provider's governing and/or supervising body;

2) Utilize qualified instructors as follows:

A) to instruct such courses as, but not limited to:

i)~~A)~~ qualifying education courses for a State Certified General Real Estate Appraiser (the instructor shall be a State Certified General Real Estate Appraiser or its equivalent from another jurisdiction, or a full time faculty member of a college or university);

ii)~~B)~~ qualifying education courses for a State Certified Residential Real Estate Appraiser or an Associate Real Estate Trainee Appraiser (the instructor shall be a State Certified General Real Estate Appraiser, a State Certified Residential Real Estate Appraiser or its equivalent from another jurisdiction, or a full time faculty member of a college or university);

iii)~~C)~~ continuing education courses (the instructor shall~~should~~ have the appropriate education and experience in appraisal or the subject matter being taught); ~~or~~

B)~~D)~~ all instructors teaching USPAP courses shall be, at a minimum, AQB certified instructors who also hold a current appraiser certification from a state; and

C) all AQB Certified USPAP instructors who will be teaching online National USPAP offerings, whether QE or CE, must hold a current Certified Distance Education Instructor (CDEI) designation from the International Distance Education Certification Center (IDECC);

3) Offer courses that are approved and licensed by the Division, and conform to the standards established in this Subpart.

d~~c~~) Records~~Facilities~~

1) An education provider must provide a facility for the maintenance of all records for a minimum of 5 years.~~An education provider must provide an office for the maintenance of all records, office equipment and office space necessary for customer service.~~

2) Course approval by the Division does not apply retroactively.~~The premises, equipment and facilities of the education provider shall comply with applicable community, state or federal fire codes, building codes, and health and safety standards.~~

3) The course applicant must have a written attendance policy that requires student attendance to be verified.~~The education provider is subject to inspection prior to approval or at any time thereafter by authorized representatives of the Division. Inspections shall be conducted during regular business hours, with at least 48 hours advance notice.~~

4) The course applicant must have established a policy on course scheduling that provides for a maximum of 8 classroom hours of instruction in any given day and for appropriate breaks during each class session.~~No education provider shall maintain an office, or conduct education courses, in a private residence.~~

~~5) An education provider shall only conduct education courses in locations~~

~~that are conducive to learning.~~

e~~d~~) Administration

1) No licensed education provider shall advertise that it is endorsed, recommended, or accredited by the Division. The education provider may indicate that it is licensed by, and the course of study has been approved and licensed by, the Division. Applicants may not state in any advertising or other materials that a course is being, or has been, submitted to the Division or to the Board for review.

2) Each education provider shall provide a prospective student prior to enrollment with information specifying the course of study to be offered, the tuition, the provider's policy regarding refunds, any additional fee for supplies, materials or books, and other matters that are material to the relationship between the provider and the student. Education providers are prohibited from sharing course materials on a temporary basis.

3) Each education provider shall maintain for each student a record including the course of study undertaken, dates of attendance, and a transcript of courses satisfactorily completed. All records shall be maintained by the education provider for a period of 5 years and shall be made available to the student or to the Division upon request during regular business hours. An education provider may charge a student the cost of reproducing copies of a transcript.

4) Each education provider shall upon request by the Division, provide evidence of financial resources available to equip and maintain its program, as documented by, e.g., a current balance sheet or an income statement.

5) ~~Any out-of-state education providers shall reimburse the Division for all reasonable expenses incurred by the Division while inspecting their facilities.~~

~~6)~~ Each education provider shall notify the Division, on a form approved by the Division, of all proposed changes in ownership of the education provider at least 30 days prior to the change in ownership. Changes include, but are not limited to, a transfer of ownership, bankruptcy or

dissolution of the entity.

f) Instructors must not have been subject to public disciplinary action in any jurisdiction in the three years prior to submission of a course.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.360 Qualifying Education Course Requirements of Education Providers

a) For the purposes of this Section, a course shall be defined as a course of instruction that meets the curriculum requirements of this Subpart for each license category and that is at least 15 hours in length.

b) Each course shall meet the appropriate course curriculum prescribed in Section 1455.370 of this Subpart.

c) Each course shall include an examination of a minimum of 25 questions for each 15 hours of instruction, e.g., a 15 hour course would require a 25 question examination, a 30 hour course would require a 50 question examination. The questions shall be either multiple choice or true/false or a combination. Open book examinations shall not be accepted. No student shall be deemed to have successfully completed the course unless he or she has scored a minimum of 70% on the course examination.

d) The Division shall only grant approval for courses that are a part of an overall qualifying education program for each license category; e.g., an education provider must have a 75 hour qualifying education program approved for an Associate Real Estate Trainee Appraiser, a 200 hour qualifying education~~pre-license~~ program approved for a State Certified Residential Real Estate Appraiser, and an education provider must have a 300 hour qualifying~~pre-license~~ education program approved for a State Certified General Real Estate Appraiser. The Division will not review or recommend any course to the Board that consists of integrated course content not equaling a full module.

e) Each education provider who seeks approval of a course shall submit to the Division an application on forms provided by the Division, which shall include, but is not limited to, an outline and course description for each course, materials to be used in instruction, an examination with answer key, and the appropriate fee pursuant to Section 1455.320.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.365 Practicum Course Requirements

A practicum course must include the generally applicable methods of appraisal practice for the credential category. Content includes, but is not limited to: requiring the student to produce credible appraisals that utilize an actual subject property; performing market research containing sales analysis; and applying and reporting the applicable appraisal approaches in conformity with USPAP. Assignments must require problem solving skills for a variety of property types for the credential category.

a) The student/instructor ratio for any practicum course shall be limited at the discretion of the Division.

b) The client and intended user for all practicum assignments shall be the course provider.

c) The intended use for all practicum assignments shall be "for experience credit".

d) There must be an identifiable subject property and the student should personally inspect it.

e) All data on comparable properties researched, analyzed and used in the assignment must be actual and identifiable market data.

f) All data on comparable properties utilized should be verified with at least one market participant of the sale/rent (e.g., buyer, seller or broker) and the student must inspect the exterior of each comparable property utilized.

g) The final assignment must be communicated in compliance with either the Self-Contained or Summary Appraisal Report options of Standard 2 of USPAP.

h) Restricted Use Reports will not be accepted for practicum experience.

i) The final reports must be maintained by the student in accordance with the Record Keeping Section of the Ethics Rule of USPAP and with Section 10-20 of the Act.

j) The practicum course shall result in an appraisal and appraisal report completed in accordance with the current version of USPAP.

k) Students may obtain experience hours equal to the classroom instruction and to the verifiable time spent on the assignment or assignments.

l) An instructor conducting a residential experience practicum course should hold either a Certified Residential or Certified General credential in good standing.

m) An instructor conducting a general experience practicum course should hold a Certified General credential in good standing.

n) Any approved practicum instructor is exempt from obtaining a Temporary Practice permit in conjunction with a practicum assignment.

o) The instructor shall grade and correct all assignments and should assure USPAP compliance.

p) The instructor shall meet with the students a minimum of 50% of the course hours during the course.

q) The course may be audited by the Division.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 1455.370 Qualifying Course Curriculum; State Certified General Real Estate Appraiser; State Certified Residential Real Estate Appraiser; Associate Real Estate Trainee Appraiser

a) Qualifying education course work to obtain a license as a State Certified General Real Estate Appraiser shall consist of 300 classroom hours of instruction, which may include the 75 hour requirement for an Associate Real Estate Trainee Appraiser License, or the 200 hour requirement for a State Certified Residential Real Estate Appraiser License. The content for qualifying education courses shall not be repetitive and shall represent a progression of instruction in which the appraiser's knowledge is increased. The core curriculum for qualifying education ~~pre-license instruction~~ courses shall be the core curriculum as approved and ~~as~~ revised by the Appraiser Qualifications Board of The Appraisal Foundation.

b) Qualifying education course work to obtain a license as a State Certified Residential Real Estate Appraiser shall consist of 200 classroom hours of instruction, which may include the 75 hour requirement for an Associate Real Estate Trainee Appraiser License. The content for qualifying educationcourses shall not be repetitive and shall represent a progression of instruction in which the appraiser's knowledge is increased. The core curriculum for qualifying education courses shall be the core curriculum as approved and as revised by the Appraiser Qualifications Board of The Appraisal Foundation.

c) Qualifying education course work to obtain a license as an Associate Real Estate Trainee Appraiser shall consist of 75 classroom hours of instruction and the content of instruction shall include instruction in, but not limited to, the following topics:

1) influences on real estate value;

2) legal considerations in appraisal;

3) types of value;

4) economic principles;

5) real estate markets and analysis;

6) valuation process;

7) property description;

8) highest and best use analysis;

9) appraisal statistical concepts;

10) sales comparison approach;

11) site value;

12) cost approach;

13) income approach;

14) valuation of partial interests;

15) appraisal standards and ethics; and

16) other topics approved by the Division.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.400 Curriculum for Continuing Education Courses; Continuing Education Credit for Participation Other Than as a Student

a) Continuing education courses for a State Certified General Real Estate Appraiser, State Certified Residential Real Estate Appraiser, or Associate Real Estate Trainee Appraiser shall include the 7 hour National USPAP Update Course or its equivalent as determined by the AQB or an alternate method established by the AQB taught by an AQB certified instructor who holds a current appraiser certification by a state during the pre-renewal period prior to renewal or conversion of a license; shall increase his or her skill, knowledge and competency in real estate appraisal; and shall cover other real estate related appraisal topics, such as, but not limited to:

1) Ad valorem taxation;

2) Arbitration;

3) Courses related to practice of real estate appraisal;

4) Development cost estimating;

5) Dispute resolution;

6) Ethics and standards of professional practice;

7) Land use planning, zoning;

8) Management, leasing, timesharing;

9) Property development partial interests;

10) Real estate appraisal;

11) Real estate law, easements, legal interests;

12) Real estate litigation, damages, condemnation;

13) Real estate financing and investment;

14) Real estate appraisal related computer applications; and

15) Real estate securities and syndication.

b) Up to one-half of an individual's continuing education requirement may also be granted by the Division for participation, other than as a student, in appraisal educational processes and programs. Examples of activities for which credit may be granted are teaching, program development, authorship of textbooks, or similar activities that are determined by the Division to be equivalent to obtaining continuing education. AQB Certified USPAP Instructors, who have taught the 7-hour National USPAP Update Course or its equivalent, as qualifying education or continuing education, within the current renewal cycle, are exempt from taking the 7-hour National USPAP Update Course as a student. ~~AQB Certified USPAP Instructors may be granted a maximum of 7 hours of continuing education per renewal cycle for teaching the 7-hour National USPAP Update Course or its equivalent.~~ A real estate appraiser who wishes to obtain continuing education credit for these activities shall submit to the Division:

1) An application to request continuing education credit for participation other than as a student signed by the applicant and on which all questions are answered; and

2) The fee provided by Section 1455.320.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.410 Distance Education

For qualifying education or continuing education, distance education courses are courses in which instruction does not take place in a traditional face to face classroom situation but rather

when instruction takes place through other media. Distance education programs include, but are not limited to, those that are presented through on-line courses, interactive classrooms, video conferencing, audio tape, print media, video tape, compact disks and interactive computer programs. Distance education courses shall be licensed to an approved education provider.

a) Distance education course must meet the curriculum requirements established by the Act, this Part and AQB criteria.~~For qualifying education or continuing education, distance education is defined as any educational process based on the geographical separation of instructor and student, e.g., CD ROM, on-line learning, correspondence courses, video conferencing, etc.~~

b) Distance education courses shall be submitted to the Division for review and approval as provided for in Section 1455.350.~~may be approved and licensed by the Division if:~~

~~1) the course is given by a licensed education provider;~~

~~2) the education provider is approved and licensed by the Division;~~

~~3) the distance education course meets the requirements for qualifying education and continuing education as provided in the Act and this Part and criteria established by the AQB;~~

~~4) the education provider provides a means for a student to contact an instructor to answer questions.~~

c) Approved education providers offering distance education courses shall submit for approval by the Division the general plans for proctoring exams for distance education courses. Each provider shall be responsible for the security and integrity of course final examinations and the suitability of the sites and proctors utilized by the provider.~~If the course given is for continuing education credit, the education provider shall be required to submit to the Division, with the course application, an examination of at least 25 questions with answer key, and the student shall be required to score a minimum of 70% on the examination.~~

d) If the course is taken for continuing education credit, the education provider shall be required to submit to the Division, with the course application, an examination of at least 25 questions with answer key, and the student shall be required to score a minimum of 70% on the examination.~~The education provider will be required to~~

~~submit a policy indicating the manner in which distance education course examinations are to be taken. The policy must be approved by the Division.~~

e) Approved education providers offering distance education courses shall establish written policies and procedures for grading examinations and lessons, which shall include provisions for instructor comments, suggestions and written correction of errors. There shall also be written procedures for the prompt return of materials. Copies of these policies shall be provided to the Division upon request.

f) Approved education providers offering distance education courses shall provide for a valid licensed instructor to be available during normal business hours to answer student questions.

g) Approved education providers offering distance education courses shall establish performance objectives for each course.

h) Approved education providers offering distance education shall provide appropriate technical support throughout the period the courses are offered.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.430 Continuing Education Reporting

a) Each licensed education provider, pursuant to Section 20-5(e) of the Act, that is approved to offer approved continuing education courses shall submit to the Division, on or before the 15th of each month, a report or reports of those licensees ~~successfully~~ completing the continuing education courses offered by the provider during the preceding calendar month.

b) The monthly reports shall include, but are not limited to, the following information for each licensee:

1) the licensee's name, address and license number;

2) the education provider's name and license number;

3) the continuing education course name and license number; and

4) other information as required by the Division.

c) ~~If an education provider during the preceding calendar month gave no continuing education courses, the provider shall report, on forms provided by the Division, that no courses were given.~~ ~~d)~~The monthly reports shall be submitted in a computer readable format provided and specified by the Division.

d) Monthly reports shall be submitted in an electronic or digital format approved by the Division via the internet.

e) ~~There will be no processing fee for a monthly report submitted in the computer readable format provided and specified by the Division. Each monthly report submitted on paper or in a format other than a computer readable format provided and specified by the Division shall be accompanied by a processing fee of $.50 per licensee, per course, listed on the report, payable by check to the Division.~~

~~f)~~ ~~A monthly report received by the Division with a postmark after the day it is due (the 15th day of the month) shall be accompanied by an administrative late fee of $200 in addition to the fees set forth in subsection (a)(4).~~

~~g)~~ If an education provider fails to file monthly reports ~~or a statement that no courses were offered, or fails to pay the required fees for three consecutive months~~, the courses offered by that provider~~school~~ may be disqualified pursuant to the procedures set forth in the Act and this Part (Section 1455.455). ~~until all delinquent reports, processing fees, and administrative fees as set forth in this Section have been submitted to and are received by the Division. The Division shall send notice to the school of an informal conference before the Real Estate Appraisal Board and of pending disqualification pursuant to the Act and this Part, by certified or registered mail, return receipt requested, or by other signature restricted delivery service.~~

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.440 Transcript or Certificate of Completion

Within 21 days after completion of the course, each licensed education provider shall provide to each student who successfully completes an approved qualifying education or continuing education course a certified transcript or certificate of completion. The education provider must retain the certificates for no less than 5 years. The certified transcript or certificate of completion shall include, but is not limited to, the following information:

a) the student's name, address and license number (if applicable);

b) the name, Illinois~~and~~ license number and license expiration date of the education provider;

c) the International Distance Education Certification Center, or AQB equivalent, expiration date, if a distance course;

d) the name, Illinois ~~and~~ license number and expiration date of the course; and

e)~~d)~~ the approved hours completed.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 1455.445 Grounds for Education Provider Discipline

Pursuant to Section 15-10(a) of the Act, the following shall be considered a violation and may subject a licensee to discipline:

a) Dismissal of attendees, without good cause, from any classroom offering that results in approved hours not being met;

b) Failure to adhere to approved course materials;

c) Holding a course while the education provider's license is non-renewed, expired, suspended, revoked or surrendered or is in any other inoperative or inactive status;

d) Plagiarism of course material and/or false advertising;

e) Temporary loss or termination of the International Distance Education Certification Center approval.

f) The course applicant provided to the Division false or misleading information in connection with an application for course approval.

g) A course is not being conducted in the manner represented to the Division at the time approval was requested, or that a course no longer complies with the criteria for approval.

h) The education provider does not enforce policies relating to course prerequisites, instructor qualifications, student attendance or course scheduling.

i) The education provider misrepresents any material fact relating to a course.

j) The education provider has failed to maintain for a period of at least 5 years accurate records of students' course completion or to fill, within 21 days, requests for course completion letters or certificates from former students who satisfactorily completed a course.

(Source: Added at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION

NOTICE OF PROPOSED AMENDMENTS

Section 1455.APPENDIX A Caption for a Case Filed by the Agency (Repealed)

~~STATE OF ILLINOIS~~
~~DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION~~
~~DIVISION OF PROFESSIONAL REGULATION~~
~~REAL ESTATE APPRAISAL ADMINISTRATION~~

~~DIVISION OF PROFESSIONAL REGULATION~~	~~)~~	
~~REAL ESTATE APPRAISAL ADMINISTRATION~~	~~)~~	
~~of the State of Illinois,~~	~~)~~	
	~~)~~	
	~~)~~	
~~Complainant~~	~~)~~	
	~~)~~	
~~v~~	~~)~~	~~No.~~
	~~)~~	
~~(NAME OF RESPONDENT)~~	~~)~~	
~~(License Number),~~	~~)~~	
	~~)~~	
~~Respondent.~~	~~)~~	

~~**COMPLAINT**~~

(Source: Repealed at 37 Ill. Reg. _____, effective _____)

Section 1455.APPENDIX B Caption for a Case Filed by the Petitioner (Repealed)

~~STATE OF ILLINOIS~~
~~DEPARTMENT OF FINANCIAL AND PROFESSIONAL REGULATION~~
~~DIVISION OF PROFESSIONAL REGULATION~~
~~REAL ESTATE APPRAISAL ADMINISTRATION~~

~~In RE the Petition for Restoration of~~	~~)~~	
	~~)~~	~~No.~~
	~~)~~	
~~(NAME OF PETITIONER)~~	~~)~~	
~~(License Number),~~	~~)~~	
	~~)~~	
~~PETITIONER~~	~~)~~	

~~**PETITION FOR HEARING**~~

(Source: Repealed at 37 Ill. Reg. _____, effective _____)

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENT

1) Heading of the Part: Definitions and General Provisions

2) Code Citation: 35 Ill. Adm. Code 211

3) Section Number: 211.7150 — Proposed Action: Amend

4) Statutory Authority: 415 ILCS 5/7.2, 9.1, and 27

5) A Complete Description of the Subjects and Issues Involved: The following briefly describes the subjects and issues involved in this rulemaking. A comprehensive description is contained in the Board's opinion and order of October 18, 2012, proposing amendments in docket R13-1 for public comment, which opinion and order is available from the address below. As is explained in that opinion, the Board will receive public comment on the proposed amendments for 45 days from the date they appear in the Illinois Register before proceeding to adopt amendments based on this proposal.

The R13-1 proceeding relates to the listings of compounds exempted from the State definition of "volatile organic material" (VOM) or "volatile organic compound" (VOC) in 35 Ill. Adm. Code 211.7150 of the Illinois air pollution control rules. These amendments would update the definition of to correspond with amendments to the corresponding definition of VOC in the federal regulations at 40 C.F.R. 51.100(s) that the United States Environmental Protection Agency (USEPA) adopted during the period January 1, 2012 through June 30, 2012. During this period, USEPA amended its definition of VOC as follows:

June 22, 2012 (77 Fed. Reg. 37610)	USEPA added one compound, *trans*-1,3,3,3-tetra-fluoropropene (HFO-1234ze), to the list of chemical species that are exempt from the definition of VOM.

Tables appear in the Board's opinion and order of October 18, 2012 in docket R13-1 that list limited corrections that are not based on current federal amendments. The tables contain a deviation from the literal text of the federal amendments underlying these amendments, as well as a correction and clarification that the Board made in the base text involved. Persons interested in the details of those corrections and amendments should refer to the October 18, 2012 opinion and order in docket R13-1.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENT

Section 9.1(e) of the Environmental Protection Act [415 ILCS 5/9.1(e)] provides that Section 5-35 of the Administrative Procedure Act [5 ILCS 100/5-35] does not apply to this rulemaking. Because this rulemaking is not subject to Section 5-35 of the APA, it is not subject to First Notice or to Second Notice review by the Joint Committee on Administrative Rules (JCAR).

6) Published studies or reports, and sources of underlying data used to compose this rulemaking: None

7) Will this rulemaking replace emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Do this rulemaking contain incorporations by reference? No

10) Statement of statewide policy objectives: These proposed amendments do not create or enlarge a state mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b) (2010)].

11) Are there any other amendments pending on this Part? Yes. Proposed amendments in the general rulemaking, Gasoline Volatility Standards and Motor Vehicle Refinishing; Proposed Amendments to 35 Ill. Adm. Code Parts 211, 215, 218, and 219, 12-24 (April 19, 2012), which appeared in the May 11, 2012 issue of the *Illinois Register*, affect the text of Part 211.

Section Numbers:	Proposed Action:	Illinois Register Citation
211.101	Amendment	36 Ill. Reg. 6913; May 11, 2012
211.2870	Amendment	36 Ill. Reg. 6913; May 11, 2012
211.5510	Amendment	36 Ill. Reg. 6913; May 11, 2012

12) Time, Place and manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R13-1 and be addressed to:

John T. Therriault, Assistant Clerk
Illinois Pollution Control Board
State of Illinois Center, Suite 11-500
100 W. Randolph St.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENT

Chicago, IL 60601

The Board will conduct one public hearing on the proposed amendments because they will ultimately result in submission to the United States Environmental Protection Agency of an amendment to the state implementation plan (SIP). Section 110(a)(2) of the Federal Clean Air Act (42 USC 7410(a)(2) (2006)) requires reasonable notice and hearing before a state undertakes an amendment to the SIP. The public hearing will occur by videoconference at the following time and locations:

10:00 a.m., December 20, 2012

James R. Thompson Center
Illinois Pollution Control Board Hearing Room
100 West Randolph Street, Room 11-512
Chicago

and

Sangamo Building
Illinois Pollution Control Board Hearing Room
1021 North Grand Avenue
Springfield

A separate Notice of Public Information on Proposed Amendment appears in this issue of the *Illinois Register*. That notice describes the public hearing in greater detail.

Please direct inquiries to the following person and reference docket R13-1:

Michael J. McCambridge
Staff Attorney
Illinois Pollution Control Board
100 W. Randolph 11-500
Chicago, IL 60601

Phone: 312-814-6924
E-mail: mccambm@ipcb.state.il.us

Request copies of the Board's opinion and order at (312)814-3620, or download a copy from the Board's Website at http:\\www.ipcb.state.il.us.

13) Initial regulatory flexibility analysis:

A) Types of small businesses, small municipalities, and not-for-profit corporations affected: This rulemaking may affect those small businesses, small municipalities, and not-for-profit corporations that use or emit the affected chemicals that are proposed for deletion from the definition of VOM. These proposed amendments do not create or enlarge a state mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b) (2010)]

B) Reporting, bookkeeping or other procedures required for compliance: The existing rules and proposed amendments require extensive reporting, bookkeeping and other procedures, including emissions monitoring, annual reports, and maintenance of operating records. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b) (2010)].

C) Types of professional skills necessary for compliance: Compliance with the existing rules and proposed amendments may require the services of an attorney, certified public accountant, chemist, and registered professional engineer.

14) Regulatory Agenda on which this rulemaking was summarized: June 2012

The Full Text of the Proposed Amendment Begins on the Next Page:

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENT

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES

PART 211
DEFINITIONS AND GENERAL PROVISIONS

SUBPART A: GENERAL PROVISIONS

Section
211.101 Incorporated and Referenced Materials
211.102 Abbreviations and Conversion Factors

SUBPART B: DEFINITIONS

Section
211.121 Other Definitions
211.122 Definitions (Repealed)
211.130 Accelacota
211.150 Accumulator
211.170 Acid Gases
211.200 Acrylonitrile Butadiene Styrene (ABS) Welding
211.210 Actual Heat Input
211.230 Adhesive
211.233 Adhesion Primer
211.235 Adhesive Primer
211.240 Adhesion Promoter
211.250 Aeration
211.260 Aerosol Adhesive and Adhesive Primer
211.270 Aerosol Can Filling Line
211.290 Afterburner
211.310 Air Contaminant
211.330 Air Dried Coatings
211.350 Air Oxidation Process
211.370 Air Pollutant
211.390 Air Pollution
211.410 Air Pollution Control Equipment

211.430 Air Suspension Coater/Dryer
211.450 Airless Spray
211.470 Air Assisted Airless Spray
211.474 Alcohol
211.479 Allowance
211.481 Ammunition Sealant
211.484 Animal
211.485 Animal Pathological Waste
211.490 Annual Grain Through-Put
211.492 Antifoulant Coating
211.493 Antifouling Sealer/Tie Coat
211.495 Anti-Glare/Safety Coating
211.510 Application Area
211.530 Architectural Coating
211.540 Architectural Structure
211.550 As Applied
211.560 As-Applied Fountain Solution
211.570 Asphalt
211.590 Asphalt Prime Coat
211.610 Automobile
211.630 Automobile or Light-Duty Truck Assembly Source or Automobile or Light-Duty Truck Manufacturing Plant
211.650 Automobile or Light-Duty Truck Refinishing
211.660 Automotive/Transportation Plastic Parts
211.665 Auxiliary Boiler
211.670 Baked Coatings
211.680 Bakery Oven
211.685 Basecoat/Clearcoat System
211.690 Batch Loading
211.695 Batch Operation
211.696 Batch Process Train
211.710 Bead-Dipping
211.715 Bedliner
211.730 Binders
211.735 Black Coating
211.740 Brakehorsepower (rated-bhp)
211.750 British Thermal Unit
211.770 Brush or Wipe Coating
211.790 Bulk Gasoline Plant

211.810	Bulk Gasoline Terminal
211.820	Business Machine Plastic Parts
211.825	Camouflage Coating
211.830	Can
211.850	Can Coating
211.870	Can Coating Line
211.880	Cap Sealant
211.890	Capture
211.910	Capture Device
211.930	Capture Efficiency
211.950	Capture System
211.953	Carbon Adsorber
211.954	Cavity Wax
211.955	Cement
211.960	Cement Kiln
211.965	Ceramic Tile Installation Adhesive
211.970	Certified Investigation
211.980	Chemical Manufacturing Process Unit
211.990	Choke Loading
211.995	Circulating Fluidized Bed Combustor
211.1000	Class II Finish
211.1010	Clean Air Act
211.1050	Cleaning and Separating Operation
211.1070	Cleaning Materials
211.1090	Clear Coating
211.1110	Clear Topcoat
211.1120	Clinker
211.1128	Closed Molding
211.1130	Closed Purge System
211.1150	Closed Vent System
211.1170	Coal Refuse
211.1190	Coating
211.1210	Coating Applicator
211.1230	Coating Line
211.1250	Coating Plant
211.1270	Coil Coating
211.1290	Coil Coating Line
211.1310	Cold Cleaning
211.1312	Combined Cycle System

211.1315 Combustion Tuning
211.1316 Combustion Turbine
211.1320 Commence Commercial Operation
211.1324 Commence Operation
211.1328 Common Stack
211.1330 Complete Combustion
211.1350 Component
211.1370 Concrete Curing Compounds
211.1390 Concentrated Nitric Acid Manufacturing Process
211.1410 Condensate
211.1430 Condensible PM-10
211.1435 Container Glass
211.1455 Contact Adhesive
211.1465 Continuous Automatic Stoking
211.1467 Continuous Coater
211.1470 Continuous Process
211.1490 Control Device
211.1510 Control Device Efficiency
211.1515 Control Period
211.1520 Conventional Air Spray
211.1530 Conventional Soybean Crushing Source
211.1550 Conveyorized Degreasing
211.1560 Cove Base
211.1565 Cove Base Installation Adhesive
211.1570 Crude Oil
211.1590 Crude Oil Gathering
211.1610 Crushing
211.1630 Custody Transfer
211.1650 Cutback Asphalt
211.1655 Cyanoacrylate Adhesive
211.1670 Daily-Weighted Average VOM Content
211.1690 Day
211.1700 Deadener
211.1710 Degreaser
211.1730 Delivery Vessel
211.1740 Diesel Engine
211.1745 Digital Printing
211.1750 Dip Coating
211.1770 Distillate Fuel Oil

211.1780 Distillation Unit
211.1790 Drum
211.1810 Dry Cleaning Operation or Dry Cleaning Facility
211.1830 Dump-Pit Area
211.1850 Effective Grate Area
211.1870 Effluent Water Separator
211.1872 Ejection Cartridge Sealant
211.1875 Elastomeric Materials
211.1876 Electric Dissipating Coating
211.1877 Electric-Insulating Varnish
211.1878 Electrical Apparatus Component
211.1880 Electrical Switchgear Compartment Coating
211.1882 Electrodeposition Primer (EDP)
211.1883 Electromagnetic Interference/Radio Frequency Interference (EMI/RFI) Shielding Coatings
211.1885 Electronic Component
211.1890 Electrostatic Bell or Disc Spray
211.1900 Electrostatic Prep Coat
211.1910 Electrostatic Spray
211.1920 Emergency or Standby Unit
211.1930 Emission Rate
211.1950 Emission Unit
211.1970 Enamel
211.1990 Enclose
211.2010 End Sealing Compound Coat
211.2030 Enhanced Under-the-Cup Fill
211.2040 Etching Filler
211.2050 Ethanol Blend Gasoline
211.2055 Ethylene Propylenediene Monomer (DPDM) Roof Membrane
211.2070 Excess Air
211.2080 Excess Emissions
211.2090 Excessive Release
211.2110 Existing Grain-Drying Operation (Repealed)
211.2130 Existing Grain-Handling Operation (Repealed)
211.2150 Exterior Base Coat
211.2170 Exterior End Coat
211.2190 External Floating Roof
211.2200 Extreme High-Gloss Coating
211.2210 Extreme Performance Coating

211.2230 Fabric Coating
211.2250 Fabric Coating Line
211.2270 Federally Enforceable Limitations and Conditions
211.2285 Feed Mill
211.2290 Fermentation Time
211.2300 Fill
211.2310 Final Repair Coat
211.2320 Finish Primer Surfacer
211.2330 Firebox
211.2350 Fixed-Roof Tank
211.2355 Flare
211.2357 Flat Glass
211.2358 Flat Wood Paneling
211.2359 Flat Wood Paneling Coating Line
211.2360 Flexible Coating
211.2365 Flexible Operation Unit
211.2368 Flexible Packaging
211.2369 Flexible Vinyl
211.2370 Flexographic Printing
211.2390 Flexographic Printing Line
211.2410 Floating Roof
211.2415 Fog Coat
211.2420 Fossil Fuel
211.2425 Fossil Fuel-Fired
211.2430 Fountain Solution
211.2450 Freeboard Height
211.2470 Fuel Combustion Emission Unit or Fuel Combustion Emission Source
211.2490 Fugitive Particulate Matter
211.2510 Full Operating Flowrate
211.2525 Gasket/Gasket Sealing Material
211.2530 Gas Service
211.2550 Gas/Gas Method
211.2570 Gasoline
211.2590 Gasoline Dispensing Operation or Gasoline Dispensing Facility
211.2610 Gel Coat
211.2615 General Work Surface
211.2620 Generator
211.2622 Glass Bonding Primer
211.2625 Glass Melting Furnace

211.2630 Gloss Reducers
211.2650 Grain
211.2670 Grain-Drying Operation
211.2690 Grain-Handling and Conditioning Operation
211.2710 Grain-Handling Operation
211.2730 Green-Tire Spraying
211.2750 Green Tires
211.2770 Gross Heating Value
211.2790 Gross Vehicle Weight Rating
211.2800 Hardwood Plywood
211.2810 Heated Airless Spray
211.2815 Heat Input
211.2820 Heat Input Rate
211.2825 Heat-Resistant Coating
211.2830 Heatset
211.2840 Heatset Web Letterpress Printing Line
211.2850 Heatset Web Offset Lithographic Printing Line
211.2870 Heavy Liquid
211.2890 Heavy Metals
211.2910 Heavy Off-Highway Vehicle Products
211.2930 Heavy Off-Highway Vehicle Products Coating
211.2950 Heavy Off-Highway Vehicle Products Coating Line
211.2955 High Bake Coating
211.2956 High Build Primer Surfacer
211.2958 High Gloss Coating
211.2960 High-Performance Architectural Coating
211.2965 High Precision Optic
211.2970 High Temperature Aluminum Coating
211.2980 High Temperature Coating
211.2990 High Volume Low Pressure (HVLP) Spray
211.3010 Hood
211.3030 Hot Well
211.3050 Housekeeping Practices
211.3070 Incinerator
211.3090 Indirect Heat Transfer
211.3095 Indoor Floor Covering Installation Adhesive
211.3100 Industrial Boiler
211.3110 Ink
211.3120 In-Line Repair

211.3130 In-Process Tank
211.3150 In-Situ Sampling Systems
211.3170 Interior Body Spray Coat
211.3190 Internal-Floating Roof
211.3210 Internal Transferring Area
211.3215 Janitorial Cleaning
211.3230 Lacquers
211.3240 Laminate
211.3250 Large Appliance
211.3270 Large Appliance Coating
211.3290 Large Appliance Coating Line
211.3300 Lean-Burn Engine
211.3305 Letterpress Printing Line
211.3310 Light Liquid
211.3330 Light-Duty Truck
211.3350 Light Oil
211.3355 Lime Kiln
211.3370 Liquid/Gas Method
211.3390 Liquid-Mounted Seal
211.3410 Liquid Service
211.3430 Liquids Dripping
211.3450 Lithographic Printing Line
211.3470 Load-Out Area
211.3475 Load Shaving Unit
211.3480 Loading Event
211.3483 Long Dry Kiln
211.3485 Long Wet Kiln
211.3487 Low-NO_x Burner
211.3490 Low Solvent Coating
211.3500 Lubricating Oil
211.3505 Lubricating Wax/Compound
211.3510 Magnet Wire
211.3530 Magnet Wire Coating
211.3550 Magnet Wire Coating Line
211.3555 Maintenance Cleaning
211.3570 Major Dump Pit
211.3590 Major Metropolitan Area (MMA)
211.3610 Major Population Area (MPA)
211.3620 Manually Operated Equipment

211.3630 Manufacturing Process
211.3650 Marine Terminal
211.3660 Marine Vessel
211.3665 Mask Coating
211.3670 Material Recovery Section
211.3690 Maximum Theoretical Emissions
211.3695 Maximum True Vapor Pressure
211.3705 Medical Device
211.3707 Medical Device and Pharmaceutical Manufacturing
211.3710 Metal Furniture
211.3730 Metal Furniture Coating
211.3750 Metal Furniture Coating Line
211.3760 Metallic Coating
211.3770 Metallic Shoe-Type Seal
211.3775 Metal to Urethane/Rubber Molding or Casting Adhesive
211.3780 Mid-Kiln Firing
211.3785 Military Specification Coating
211.3790 Miscellaneous Fabricated Product Manufacturing Process
211.3810 Miscellaneous Formulation Manufacturing Process
211.3820 Miscellaneous Industrial Adhesive Application Operation
211.3830 Miscellaneous Metal Parts and Products
211.3850 Miscellaneous Metal Parts and Products Coating
211.3870 Miscellaneous Metal Parts or Products Coating Line
211.3890 Miscellaneous Organic Chemical Manufacturing Process
211.3910 Mixing Operation
211.3915 Mobile Equipment
211.3925 Mold Seal Coating
211.3930 Monitor
211.3950 Monomer
211.3960 Motor Vehicles
211.3961 Motor Vehicle Adhesive
211.3965 Motor Vehicle Refinishing
211.3966 Motor Vehicle Weatherstrip Adhesive
211.3967 Mouth Waterproofing Sealant
211.3968 Multi-Colored Coating
211.3969 Multi-Component Coating
211.3970 Multiple Package Coating
211.3975 Multipurpose Construction Adhesive
211.3980 Nameplate Capacity

211.3985	Natural Finish Hardwood Plywood Panel
211.3990	New Grain-Drying Operation (Repealed)
211.4010	New Grain-Handling Operation (Repealed)
211.4030	No Detectable Volatile Organic Material Emissions
211.4050	Non-Contact Process Water Cooling Tower
211.4052	Non-Convertible Coating
211.4055	Non-Flexible Coating
211.4065	Non-Heatset
211.4067	NO_x Trading Program
211.4070	Offset
211.4080	One-Component Coating
211.4090	One Hundred Percent Acid
211.4110	One-Turn Storage Space
211.4130	Opacity
211.4150	Opaque Stains
211.4170	Open Top Vapor Degreasing
211.4190	Open-Ended Valve
211.4210	Operator of a Gasoline Dispensing Operation or Operator of a Gasoline Dispensing Facility
211.4220	Optical Coating
211.4230	Organic Compound
211.4250	Organic Material and Organic Materials
211.4260	Organic Solvent
211.4270	Organic Vapor
211.4280	Other Glass
211.4285	Outdoor Floor Covering Installation Adhesive
211.4290	Oven
211.4310	Overall Control
211.4330	Overvarnish
211.4350	Owner of a Gasoline Dispensing Operation or Owner of a Gasoline Dispensing Facility
211.4370	Owner or Operator
211.4390	Packaging Rotogravure Printing
211.4410	Packaging Rotogravure Printing Line
211.4430	Pail
211.4450	Paint Manufacturing Source or Paint Manufacturing Plant
211.4455	Pan-Backing Coating
211.4460	Panel
211.4470	Paper Coating

211.4490 Paper Coating Line
211.4510 Particulate Matter
211.4530 Parts Per Million (Volume) or PPM (Vol)
211.4540 Perimeter Bonded Sheet Flooring
211.4550 Person
211.4590 Petroleum
211.4610 Petroleum Liquid
211.4630 Petroleum Refinery
211.4650 Pharmaceutical
211.4670 Pharmaceutical Coating Operation
211.4690 Photochemically Reactive Material
211.4710 Pigmented Coatings
211.4730 Plant
211.4735 Plastic
211.4740 Plastic Part
211.4750 Plasticizers
211.4760 Plastic Solvent Welding Adhesive
211.4765 Plastic Solvent Welding Adhesive Primer
211.4768 Pleasure Craft
211.4769 Pleasure Craft Surface Coating
211.4770 PM-10
211.4790 Pneumatic Rubber Tire Manufacture
211.4810 Polybasic Organic Acid Partial Oxidation Manufacturing Process
211.4830 Polyester Resin Material(s)
211.4850 Polyester Resin Products Manufacturing Process
211.4870 Polystyrene Plant
211.4890 Polystyrene Resin
211.4895 Polyvinyl Chloride Plastic (PVC Plastic)
211.4900 Porous Material
211.4910 Portable Grain-Handling Equipment
211.4930 Portland Cement Manufacturing Process Emission Source
211.4950 Portland Cement Process or Portland Cement Manufacturing Plant
211.4960 Potential Electrical Output Capacity
211.4970 Potential to Emit
211.4990 Power Driven Fastener Coating
211.5010 Precoat
211.5012 Prefabricated Architectural Coating
211.5015 Preheater Kiln
211.5020 Preheater/Precalciner Kiln

211.5030 Pressure Release
211.5050 Pressure Tank
211.5060 Pressure/Vacuum Relief Valve
211.5061 Pretreatment Coating
211.5062 Pretreatment Wash Primer
211.5065 Primary Product
211.5070 Prime Coat
211.5075 Primer Sealant
211.5080 Primer Sealer
211.5090 Primer Surfacer Coat
211.5110 Primer Surfacer Operation
211.5130 Primers
211.5140 Printed Interior Panel
211.5150 Printing
211.5170 Printing Line
211.5185 Process Emission Source
211.5190 Process Emission Unit
211.5195 Process Heater
211.5210 Process Unit
211.5230 Process Unit Shutdown
211.5245 Process Vent
211.5250 Process Weight Rate
211.5270 Production Equipment Exhaust System
211.5310 Publication Rotogravure Printing Line
211.5330 Purged Process Fluid
211.5335 Radiation Effect Coating
211.5340 Rated Heat Input Capacity
211.5350 Reactor
211.5370 Reasonably Available Control Technology (RACT)
211.5390 Reclamation System
211.5400 Red Coating
211.5410 Refiner
211.5430 Refinery Fuel Gas
211.5450 Refinery Fuel Gas System
211.5470 Refinery Unit or Refinery Process Unit
211.5480 Reflective Argent Coating
211.5490 Refrigerated Condenser
211.5500 Regulated Air Pollutant
211.5510 Reid Vapor Pressure

211.5520 Reinforced Plastic Composite
211.5530 Repair
211.5535 Repair Cleaning
211.5550 Repair Coat
211.5570 Repaired
211.5580 Repowering
211.5585 Research and Development Operation
211.5590 Residual Fuel Oil
211.5600 Resist Coat
211.5610 Restricted Area
211.5630 Retail Outlet
211.5640 Rich-Burn Engine
211.5650 Ringelmann Chart
211.5670 Roadway
211.5690 Roll Coater
211.5710 Roll Coating
211.5730 Roll Printer
211.5750 Roll Printing
211.5770 Rotogravure Printing
211.5790 Rotogravure Printing Line
211.5800 Rubber
211.5810 Safety Relief Valve
211.5830 Sandblasting
211.5850 Sanding Sealers
211.5860 Scientific Instrument
211.5870 Screening
211.5875 Screen Printing
211.5880 Screen Printing on Paper
211.5885 Screen Reclamation
211.5890 Sealer
211.5910 Semi-Transparent Stains
211.5930 Sensor
211.5950 Set of Safety Relief Valves
211.5970 Sheet Basecoat
211.5980 Sheet-Fed
211.5985 Sheet Rubber Lining Installation
211.5987 Shock-Free Coating
211.5990 Shotblasting
211.6010 Side-Seam Spray Coat

211.6012 Silicone-Release Coating
211.6015 Single-Ply Roof Membrane
211.6017 Single-Ply Roof Membrane Adhesive Primer
211.6020 Single-Ply Roof Membrane Installation and Repair Adhesive
211.6025 Single Unit Operation
211.6030 Smoke
211.6050 Smokeless Flare
211.6060 Soft Coat
211.6063 Solar-Absorbent Coating
211.6065 Solids Turnover Ratio (R_T)
211.6070 Solvent
211.6090 Solvent Cleaning
211.6110 Solvent Recovery System
211.6130 Source
211.6140 Specialty Coatings
211.6145 Specialty Coatings for Motor Vehicles
211.6150 Specialty High Gloss Catalyzed Coating
211.6170 Specialty Leather
211.6190 Specialty Soybean Crushing Source
211.6210 Splash Loading
211.6230 Stack
211.6250 Stain Coating
211.6270 Standard Conditions
211.6290 Standard Cubic Foot (scf)
211.6310 Start-Up
211.6330 Stationary Emission Source
211.6350 Stationary Emission Unit
211.6355 Stationary Gas Turbine
211.6360 Stationary Reciprocating Internal Combustion Engine
211.6370 Stationary Source
211.6390 Stationary Storage Tank
211.6400 Stencil Coat
211.6405 Sterilization Indicating Ink
211.6410 Storage Tank or Storage Vessel
211.6420 Strippable Spray Booth Coating
211.6425 Stripping
211.6427 Structural Glazing
211.6430 Styrene Devolatilizer Unit
211.6450 Styrene Recovery Unit

211.6460 Subfloor
211.6470 Submerged Loading Pipe
211.6490 Substrate
211.6510 Sulfuric Acid Mist
211.6530 Surface Condenser
211.6535 Surface Preparation
211.6540 Surface Preparation Materials
211.6550 Synthetic Organic Chemical or Polymer Manufacturing Plant
211.6570 Tablet Coating Operation
211.6580 Texture Coat
211.6585 Thin Metal Laminating Adhesive
211.6587 Thin Particleboard
211.6590 Thirty-Day Rolling Average
211.6610 Three-Piece Can
211.6620 Three or Four Stage Coating System
211.6630 Through-the-Valve Fill
211.6635 Tileboard
211.6640 Tire Repair
211.6650 Tooling Resin
211.6670 Topcoat
211.6690 Topcoat Operation
211.6695 Topcoat System
211.6710 Touch-Up
211.6720 Touch-Up Coating
211.6730 Transfer Efficiency
211.6740 Translucent Coating
211.6750 Tread End Cementing
211.6770 True Vapor Pressure
211.6780 Trunk Interior Coating
211.6790 Turnaround
211.6810 Two-Piece Can
211.6825 Underbody Coating
211.6830 Under-the-Cup Fill
211.6850 Undertread Cementing
211.6860 Uniform Finish Blender
211.6870 Unregulated Safety Relief Valve
211.6880 Vacuum Metallizing
211.6885 Vacuum Metalizing Coating
211.6890 Vacuum Producing System

211.6910 Vacuum Service
211.6930 Valves Not Externally Regulated
211.6950 Vapor Balance System
211.6970 Vapor Collection System
211.6990 Vapor Control System
211.7010 Vapor-Mounted Primary Seal
211.7030 Vapor Recovery System
211.7050 Vapor-Suppressed Polyester Resin
211.7070 Vinyl Coating
211.7090 Vinyl Coating Line
211.7110 Volatile Organic Liquid (VOL)
211.7130 Volatile Organic Material Content (VOMC)
211.7150 Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)
211.7170 Volatile Petroleum Liquid
211.7190 Wash Coat
211.7200 Washoff Operations
211.7210 Wastewater (Oil/Water) Separator
211.7220 Waterproof Resorcinol Glue
211.7230 Weak Nitric Acid Manufacturing Process
211.7240 Weatherstrip Adhesive
211.7250 Web
211.7270 Wholesale Purchase − Consumer
211.7290 Wood Furniture
211.7310 Wood Furniture Coating
211.7330 Wood Furniture Coating Line
211.7350 Woodworking
211.7400 Yeast Percentage

211.APPENDIX A Rule into Section Table
211.APPENDIX B Section into Rule Table

AUTHORITY: Implementing Sections 9, 9.1, 9.9 and 10 and authorized by Sections 27 of the Environmental Protection Act [415 ILCS 5/9, 9.1, 9.9, 10, and 27].

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 201: Definitions, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R78-3 and 4, 35 PCB 75 and 243, at 3 Ill. Reg. 30, p. 124, effective July 28, 1979; amended in R80-5, at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 Ill. Reg. 13590; amended in R82-1 (Docket A) at 10 Ill. Reg. 12624, effective

July 7, 1986; amended in R85-21(A) at 11 Ill. Reg. 11747, effective June 29, 1987; amended in R86-34 at 11 Ill. Reg. 12267, effective July 10, 1987; amended in R86-39 at 11 Ill. Reg. 20804, effective December 14, 1987; amended in R82-14 and R86-37 at 12 Ill. Reg. 787, effective December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7284, effective April 8, 1988; amended in R86-10 at 12 Ill. Reg. 7621, effective April 11, 1988; amended in R88-23 at 13 Ill. Reg. 10862, effective June 27, 1989; amended in R89-8 at 13 Ill. Reg. 17457, effective January 1, 1990; amended in R89-16(A) at 14 Ill. Reg. 9141, effective May 23, 1990; amended in R88-30(B) at 15 Ill. Reg. 5223, effective March 28, 1991; amended in R88-14 at 15 Ill. Reg. 7901, effective May 14, 1991; amended in R91-10 at 15 Ill. Reg. 15564, effective October 11, 1991; amended in R91-6 at 15 Ill. Reg. 15673, effective October 14, 1991; amended in R91-22 at 16 Ill. Reg. 7656, effective May 1, 1992; amended in R91-24 at 16 Ill. Reg. 13526, effective August 24, 1992; amended in R93-9 at 17 Ill. Reg. 16504, effective September 27, 1993; amended in R93-11 at 17 Ill. Reg. 21471, effective December 7, 1993; amended in R93-14 at 18 Ill. Reg. 1253, effective January 18, 1994; amended in R94-12 at 18 Ill. Reg. 14962, effective September 21, 1994; amended in R94-14 at 18 Ill. Reg. 15744, effective October 17, 1994; amended in R94-15 at 18 Ill. Reg. 16379, effective October 25, 1994; amended in R94-16 at 18 Ill. Reg. 16929, effective November 15, 1994; amended in R94-21, R94-31 and R94-32 at 19 Ill. Reg. 6823, effective May 9, 1995; amended in R94-33 at 19 Ill. Reg. 7344, effective May 22, 1995; amended in R95-2 at 19 Ill. Reg. 11066, effective July 12, 1995; amended in R95-16 at 19 Ill. Reg. 15176, effective October 19, 1995; amended in R96-5 at 20 Ill. Reg. 7590, effective May 22, 1996; amended in R96-16 at 21 Ill. Reg. 2641, effective February 7, 1997; amended in R97-17 at 21 Ill. Reg. 6489, effective May 16, 1997; amended in R97-24 at 21 Ill. Reg. 7695, effective June 9, 1997; amended in R96-17 at 21 Ill. Reg. 7856, effective June 17, 1997; amended in R97-31 at 22 Ill. Reg. 3497, effective February 2, 1998; amended in R98-17 at 22 Ill. Reg. 11405, effective June 22, 1998; amended in R01-9 at 25 Ill. Reg. 108, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4582, effective March 15, 2001; amended in R01-17 at 25 Ill. Reg. 5900, effective April 17, 2001; amended in R05-16 at 29 Ill. Reg. 8181, effective May 23, 2005; amended in R05-11 at 29 Ill. Reg. 8892, effective June 13, 2005; amended in R04-12/20 at 30 Ill. Reg. 9654, effective May 15, 2006; amended in R07-18 at 31 Ill. Reg. 14254, effective September 25, 2007; amended in R08-6 at 32 Ill. Reg. 1387, effective January 16, 2008; amended in R07-19 at 33 Ill. Reg. 11982, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. 13326, effective August 31, 2009; amended in R10-7 at 34 Ill. Reg. 1391, effective January 11, 2010; amended in R10-8 at 34 Ill. Reg. 9069, effective June 25, 2010; amended in R10-20 at 34 Ill. Reg. 14119, effective September 14, 2010; amended in R11-23 at 35 Ill. Reg. 13451, effective July 27, 2011; amended in R13-1 at 37 Ill. Reg. _____, effective _____.

SUBPART B: DEFINITIONS

Section 211.7150 Volatile Organic Material (VOM) or Volatile Organic Compound (VOC)

"Volatile organic material" (also "VOM") or "volatile organic compound" (also "VOC") means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions.

a) This definition of VOM includes any organic compound that participates in atmospheric photochemical reactions, other than the compounds listed in this subsection (a). USEPA has determined that the compounds listed in this subsection (a) have negligible photochemical reactivity. USEPA has excluded the listed negligibly-reactive compounds from the definition of VOM for purposes of VOM limitations or VOM content requirements. However, USEPA has required that certain of these compounds be considered VOM for purposes of recordkeeping, emissions reporting, and inventory requirements, as described in subsection (e) of this Section.

Acetone (2-propanone or dimethylketone)
tertiary-Butyl acetate
1-Chloro-1,1-difluoroethane (HCFC-142b)
Chlorodifluoromethane (CFC-22)
1-Chloro-1-fluoroethane (HCFC-151a)
2-Chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
Chlorofluoromethane (HCFC-31)
Chloropentafluoroethane (CFC-115)
1,1,1,2,2,3,4,5,5,5-Decafluoro-3-methoxy-4-trifluoromethyl-pentane (HFE-7300, L-14787, or $C_2F_5CF(OCH_3)CF(CF_3)_2$)
1,1,1,2,3,4,4,5,5,5-Decafluoropentane (HFC 43-10mee)
Dichlorodifluoromethane (CFC-12)
1,1-Dichloro-1-fluoroethane (HCFC-141b)
3,3-Dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
1,3-Dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC-114)
1,2-Dichloro-1,1,2-trifluoroethane (HCFC-123a)
1,1-Difluoroethane (HFC-152a)
Difluoromethane (HFC-32)
2-(Difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OCH_3$)
Dimethyl carbonate

Ethane
2-(Ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ($(CF_3)_2CFCF_2OC_2H_5$)
Ethylfluoride (HFC-161)
1-Ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane ($C_4F_9OC_2H_5$ or HFE-7200)
3-Ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl)hexane (HFE-7500)
1,1,1,2,2,3,3-Heptafluoro-3-methoxypropane (n-$C_3F_7OCH_3$ or HFE-7000)
1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea)
1,1,1,2,3,3-Hexafluoropropane (HFC-236ea)
1,1,1,3,3,3-Hexafluoropropane (HFC-236fa)
Methane
Methyl acetate
Methylene chloride (dichloromethane)
Methyl formate ($HCOOCH_3$)
1,1,1,2,2,3,3,4,4-Nonafluoro-4-methoxybutane ($C_4F_9OCH_3$ or HFE-7100)
Parachlorobenzotrifluoride (PCBTF)
1,1,1,3,3-Pentafluorobutane (HFC-365mfc)
Pentafluoroethane (HFC-125)
1,1,2,2,3-Pentafluoropropane (HFC-245ca)
1,1,2,3,3-Pentafluoropropane (HFC-245ea)
1,1,1,2,3-Pentafluoropropane (HFC-245eb)
1,1,1,3,3-Pentafluoropropane (HFC-245fa)
Perchloroethylene (tetrachloroethylene)
Perfluorocarbon compounds that fall into the following classes:
- Cyclic, branched, or linear, completely fluorinated alkanes
- Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations
- Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations
- Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine

Propylene carbonate (4-methyl-1,3-dioxolan-2-one)
Siloxanes: cyclic, branched, or linear completely-methylated
1,1,2,2-Tetrafluoroethane (HFC-134)
1,1,1,2-Tetrafluoroethane (HFC-134a)
trans-1,3,3,3-Tetrafluoropropene
1,1,1-Trichloroethane (methyl chloroform)
Trichlorofluoromethane (CFC-11)

1,1,2-Trichloro-1,2,2-trifluoroethane (CFC-113)
1,1,1-Trifluoro-2,2-dichloroethane (HCFC-123)
1,1,1-Trifluoroethane (HFC-143a)
Trifluoromethane (HFC-23)

b) For purposes of determining VOM emissions and compliance with emissions limits, VOM will be measured by the test methods in the approved implementation plan or 40 CFR 60, Appendix A, incorporated by reference at 35 Ill. Adm. Code 215.105, 218.112, and 219.112, as applicable, or by source-specific test methods that have been established pursuant to a permit issued under a program approved or promulgated under Title V of the Clean Air Act; under 40 CFR 51, Subpart I or Appendix S, incorporated by reference at 35 Ill. Adm. Code 218.112 and 219.112; or under 40 CFR 52.21, incorporated by reference at 35 Ill. Adm. Code 218.112 and 219.112, as applicable. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOM if the amount of such compounds is accurately quantified and the exclusion is approved by the Agency.

c) As a precondition to excluding these negligibly-reactive compounds as VOM, or at any time thereafter, the Agency may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of the Agency, the amount of negligibly-reactive compounds in the source's emissions.

d) The USEPA will not be bound by any State determination as to appropriate methods for testing or monitoring negligibly-reactive compounds if such determination is not reflected in any of the test methods in subsection (b) above.

e) The following compound is VOM for the purposes of all recordkeeping, emissions reporting, photochemical dispersion modeling and inventory requirements that apply to VOM, and it must be uniquely identified in emission reports, but it is not VOM for the purposes of VOM emissions limitations or VOM content requirements: t-butyl acetate.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Primary Drinking Water Standards

2) Code Citation: 35 Ill. Adm. Code 611

3)

Section Numbers:	Proposed action:
611.102	Amendment
611.300	Amendment
611.301	Amendment
611.311	Amendment
611.330	Amendment
611.359	Amendment
611.382	Amendment
611.600	Amendment
611.603	Amendment
611.609	Amendment
611.611	Amendment
611.612	Amendment
611.641	Amendment
611.645	Amendment
611.646	Amendment
611.648	Amendment
611.720	Amendment
611.731	Amendment
611.732	Amendment
611.884	Amendment
611.920	Amendment
611.923	Amendment
611.970	Amendment
611.974	Amendment
611.1001	Amendment
611.1004	Amendment
611.1012	Amendment
611.1013	Amendment
611.1014	Amendment
611.APPENDIX A	Amendment
611.APPENDIX B	Amendment
611.APPENDIX C	Amendment
611.APPENDIX D	Amendment
611.APPENDIX E	Amendment

611.APPENDIX G	Amendment
611.APPENDIX H	Amendment
611.APPENDIX I	Amendment
611.TABLE A	Amendment
611.TABLE B	Amendment
611.TABLE C	Amendment
611.TABLE D	Amendment
611.TABLE E	Amendment
611.TABLE F	Amendment
611.TABLE G	Amendment
611.TABLE H	Amendment
611.TABLE I	Amendment
611.TABLE J	Amendment
611.TABLE Z	Amendment

4) Statutory Authority: 415 ILCS 5/7.2, 17, 17.5, and 27

5) A Complete Description of the Subjects and Issues Involved: The following briefly describes the subjects and issues involved in the docket R13-2 rulemaking. A comprehensive description is contained in the Board's opinion and order of October 18, 2012, proposing amendments in docket R13-2, which opinion and order is available from the address below.

This proceeding updates the Illinois Safe Drinking Water Act (SDWA) rules to correspond with amendments adopted by the United States Environmental Protection Agency (USEPA) that appeared in the Federal Register during a single update period. The docket and time period that is involved in this proceeding is the following:

R13-2 Federal SDWA amendments that occurred during the period January 1, 2012 through June 30, 2012.

The docket R13-2 amends rules in Parts 611S. The amendments to the various Parts are inter-related. The following table briefly summarizes the federal actions in the update period:

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May 2, 2012 (77 Fed. Reg. 26072)	USEPA adopted the third installment of the Unregulated Contaminants Monitoring Rule (UCMR 3). Included with the UCMR 3 rule was a series of updates to analytical methods for regulated contaminants, which were not related to the UCMR.
June 28, 2012 (77 Fed. Reg. 38523)	USEPA approved alternative equivalent analytical methods for use in demonstrating compliance with the drinking water standards.

In addition to the federal actions that fall within the timeframe of this docket, the Board included one additional federal action that occurred later. This additional action directly impacted one of the actions that USEPA took within the timeframe that is involved.

July 2, 2012 (77 Fed. Reg. 39182)	USEPA made a minor correction to the May 2
July 25, 2012 (77 Fed. Reg. 43523)	USEPA made a minor correction to the May 2

A comprehensive description is contained in the Board's opinion and order of October 18, 2012, proposing amendments in docket R13-2, which opinion and order is available from the address below. The Board has included a limited number of corrections and clarifying amendments that are not directly derived from the instant federal amendments.

Tables appear in the Board's opinion and order of October 18, 2012 in docket R13-2 that list numerous corrections and amendments that are not based on current federal amendments. The tables contain deviations from the literal text of the federal amendments underlying these amendments, as well as corrections and clarifications that the Board made in the base text involved. Persons interested in the details of those corrections and amendments should refer to the October 18, 2012 opinion and order in docket R13-2.

Section 17.5 of the Environmental Protection Act [415 ILCS 5/17.5] provides that Section 5-35 of the Illinois Administrative Procedure Act [5 ILCS 100/5-35] does not apply to this rulemaking. Because this rulemaking is not subject to Section 5-35 of the IAPA, it is not subject to First Notice or to Second Notice review by the Joint Committee on Administrative Rules (JCAR).

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6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None

7) Will this rulemaking replace any emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? Yes. The updates to analytical methods are accomplished by numerous incorporations by reference of USEPA-approved standards and regulations in Section 611.102.

10) Statement of Statewide Policy Objectives: These proposed amendments do not create or enlarge a State Mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b)].

11) Are there any other proposed rulemakings pending on this Part? No

12) Time, Place and manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R13-2 and be addressed to:

John T. Therriault, Assistant Clerk
Illinois Pollution Control Board
State of Illinois Center, Suite 11-500
100 W. Randolph St.
Chicago, IL 60601

Please direct inquiries to the following person and reference docket R13-2:

Michael J. McCambridge
Staff Attorney
Illinois Pollution Control Board
100 W. Randolph 11-500
Chicago, IL 60601

Phone: 312-814-6924
E-mail: mccambm@ipcb.state.il.us

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Request copies of the Board's opinion and order at 312-814-3620, or download a copy from the Board's Website at http:\\www.ipcb.state.il.us.

13) Initial regulatory flexibility analysis:

A) Types of small businesses, small municipalities, and not-for-profit corporations affected: This rulemaking may affect those small businesses, small municipalities, and not-for-profit corporations that own or operate a public water supply.

B) Reporting, bookkeeping or other procedures required for compliance: The existing rules and proposed amendments require extensive reporting, bookkeeping and other procedures, including the preparation of reports, water analyses, and maintenance of operating records.

C) Types of professional skills necessary for compliance: Compliance with the existing rules and proposed amendments may require the services of an attorney, certified public accountant, chemist, and registered professional engineer.

14) Regulatory agenda on which this rulemaking was summarized: July 2012

The full text of the Proposed Amendments begins on the next page:

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NOTICE OF PROPOSED AMENDMENTS

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE F: PUBLIC WATER SUPPLIES
CHAPTER I: POLLUTION CONTROL BOARD

PART 611
PRIMARY DRINKING WATER STANDARDS

SUBPART A: GENERAL

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611.100 Purpose, Scope, and Applicability
611.101 Definitions
611.102 Incorporations by Reference
611.103 Severability
611.105 Electronic Reporting
611.107 Agency Inspection of PWS Facilities
611.108 Delegation to Local Government
611.109 Enforcement
611.110 Special Exception Permits
611.111 Relief Equivalent to SDWA Section 1415(a) Variances
611.112 Relief Equivalent to SDWA Section 1416 Exemptions
611.113 Alternative Treatment Techniques
611.114 Siting Requirements
611.115 Source Water Quantity
611.120 Effective Dates
611.121 Maximum Contaminant Levels and Finished Water Quality
611.125 Fluoridation Requirement
611.126 Prohibition on Use of Lead
611.130 Special Requirements for Certain Variances and Adjusted Standards
611.131 Relief Equivalent to SDWA Section 1415(e) Small System Variance
611.160 Composite Correction Program
611.161 Case-by-Case Reduced Subpart Y Monitoring for Wholesale and Consecutive Systems

SUBPART B: FILTRATION AND DISINFECTION

Section
611.201 Requiring a Demonstration
611.202 Procedures for Agency Determinations

611.211 Filtration Required
611.212 Groundwater under Direct Influence of Surface Water
611.213 No Method of HPC Analysis
611.220 General Requirements
611.230 Filtration Effective Dates
611.231 Source Water Quality Conditions
611.232 Site-Specific Conditions
611.233 Treatment Technique Violations
611.240 Disinfection
611.241 Unfiltered PWSs
611.242 Filtered PWSs
611.250 Filtration
611.261 Unfiltered PWSs: Reporting and Recordkeeping
611.262 Filtered PWSs: Reporting and Recordkeeping
611.271 Protection during Repair Work
611.272 Disinfection Following Repair
611.276 Recycle Provisions

SUBPART C: USE OF NON-CENTRALIZED TREATMENT DEVICES

Section
611.280 Point-of-Entry Devices
611.290 Use of Point-of-Use Devices or Bottled Water

SUBPART D: TREATMENT TECHNIQUES

Section
611.295 General Requirements
611.296 Acrylamide and Epichlorohydrin
611.297 Corrosion Control

SUBPART F: MAXIMUM CONTAMINANT LEVELS (MCLs) AND MAXIMUM RESIDUAL DISINFECTANT LEVELS (MRDLs)

Section
611.300 Old MCLs for Inorganic Chemical Contaminants
611.301 Revised MCLs for Inorganic Chemical Contaminants
611.310 State-Only Maximum Contaminant Levels (MCLs) for Organic Chemical Contaminants

611.311 Revised MCLs for Organic Chemical Contaminants
611.312 Maximum Contaminant Levels (MCLs) for Disinfection Byproducts (DBPs)
611.313 Maximum Residual Disinfectant Levels (MRDLs)
611.320 Turbidity (Repealed)
611.325 Microbiological Contaminants
611.330 Maximum Contaminant Levels for Radionuclides
611.331 Beta Particle and Photon Radioactivity (Repealed)

SUBPART G: LEAD AND COPPER

Section
611.350 General Requirements
611.351 Applicability of Corrosion Control
611.352 Corrosion Control Treatment
611.353 Source Water Treatment
611.354 Lead Service Line Replacement
611.355 Public Education and Supplemental Monitoring
611.356 Tap Water Monitoring for Lead and Copper
611.357 Monitoring for Water Quality Parameters
611.358 Monitoring for Lead and Copper in Source Water
611.359 Analytical Methods
611.360 Reporting
611.361 Recordkeeping

SUBPART I: DISINFECTANT RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS

Section
611.380 General Requirements
611.381 Analytical Requirements
611.382 Monitoring Requirements
611.383 Compliance Requirements
611.384 Reporting and Recordkeeping Requirements
611.385 Treatment Technique for Control of Disinfection Byproduct (DBP) Precursors

SUBPART K: GENERAL MONITORING AND ANALYTICAL REQUIREMENTS

Section
611.480 Alternative Analytical Techniques

611.490 Certified Laboratories
611.491 Laboratory Testing Equipment
611.500 Consecutive PWSs
611.510 Special Monitoring for Unregulated Contaminants (Repealed)

SUBPART L: MICROBIOLOGICAL MONITORING AND ANALYTICAL REQUIREMENTS

Section
611.521 Routine Coliform Monitoring
611.522 Repeat Coliform Monitoring
611.523 Invalidation of Total Coliform Samples
611.524 Sanitary Surveys
611.525 Fecal Coliform and E. Coli Testing
611.526 Analytical Methodology
611.527 Response to Violation
611.531 Analytical Requirements
611.532 Unfiltered PWSs
611.533 Filtered PWSs

SUBPART M: TURBIDITY MONITORING AND ANALYTICAL REQUIREMENTS

Section
611.560 Turbidity

SUBPART N: INORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section
611.591 Violation of a State MCL
611.592 Frequency of State Monitoring
611.600 Applicability
611.601 Monitoring Frequency
611.602 Asbestos Monitoring Frequency
611.603 Inorganic Monitoring Frequency
611.604 Nitrate Monitoring
611.605 Nitrite Monitoring
611.606 Confirmation Samples
611.607 More Frequent Monitoring and Confirmation Sampling
611.608 Additional Optional Monitoring

611.609 Determining Compliance
611.610 Inorganic Monitoring Times
611.611 Inorganic Analysis
611.612 Monitoring Requirements for Old Inorganic MCLs
611.630 Special Monitoring for Sodium
611.631 Special Monitoring for Inorganic Chemicals (Repealed)

SUBPART O: ORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section
611.640 Definitions
611.641 Old MCLs
611.645 Analytical Methods for Organic Chemical Contaminants
611.646 Phase I, Phase II, and Phase V Volatile Organic Contaminants
611.647 Sampling for Phase I Volatile Organic Contaminants (Repealed)
611.648 Phase II, Phase IIB, and Phase V Synthetic Organic Contaminants
611.650 Monitoring for 36 Contaminants (Repealed)
611.657 Analytical Methods for 36 Contaminants (Repealed)
611.658 Special Monitoring for Organic Chemicals (Repealed)

SUBPART P: THM MONITORING AND ANALYTICAL REQUIREMENTS

Section
611.680 Sampling, Analytical, and other Requirements (Repealed)
611.683 Reduced Monitoring Frequency (Repealed)
611.684 Averaging (Repealed)
611.685 Analytical Methods (Repealed)
611.686 Modification to System (Repealed)
611.687 Sampling for THM Potential (Repealed)
611.688 Applicability Dates (Repealed)

SUBPART Q: RADIOLOGICAL MONITORING AND ANALYTICAL REQUIREMENTS

Section
611.720 Analytical Methods
611.731 Gross Alpha
611.732 Beta Particle and Photon Radioactivity
611.733 General Monitoring and Compliance Requirements

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SUBPART R: ENHANCED FILTRATION AND DISINFECTION: SYSTEMS THAT SERVE 10,000 OR MORE PEOPLE

Section
611.740 General Requirements
611.741 Standards for Avoiding Filtration
611.742 Disinfection Profiling and Benchmarking
611.743 Filtration
611.744 Filtration Sampling Requirements
611.745 Reporting and Recordkeeping Requirements

SUBPART S: GROUNDWATER RULE

Section
611.800 General Requirements and Applicability
611.801 Sanitary Surveys for GWS Suppliers
611.802 Groundwater Source Microbial Monitoring and Analytical Methods
611.803 Treatment Technique Requirements for GWS Suppliers
611.804 Treatment Technique Violations for GWS Suppliers
611.805 Reporting and Recordkeeping for GWS Suppliers

SUBPART T: REPORTING AND RECORDKEEPING

Section
611.830 Applicability
611.831 Monthly Operating Report
611.832 Notice by Agency (Repealed)
611.833 Cross Connection Reporting
611.840 Reporting
611.851 Reporting MCL, MRDL, and other Violations (Repealed)
611.852 Reporting other Violations (Repealed)
611.853 Notice to New Billing Units (Repealed)
611.854 General Content of Public Notice (Repealed)
611.855 Mandatory Health Effects Language (Repealed)
611.856 Fluoride Notice (Repealed)
611.858 Fluoride Secondary Standard (Repealed)
611.860 Record Maintenance
611.870 List of 36 Contaminants (Repealed)

SUBPART U: CONSUMER CONFIDENCE REPORTS

Section
611.881 Purpose and Applicability
611.882 Compliance Dates
611.883 Content of the Reports
611.884 Required Additional Health Information
611.885 Report Delivery and Recordkeeping

SUBPART V: PUBLIC NOTIFICATION OF DRINKING WATER VIOLATIONS

Section
611.901 General Public Notification Requirements
611.902 Tier 1 Public Notice: Form, Manner, and Frequency of Notice
611.903 Tier 2 Public Notice: Form, Manner, and Frequency of Notice
611.904 Tier 3 Public Notice: Form, Manner, and Frequency of Notice
611.905 Content of the Public Notice
611.906 Notice to New Billing Units or New Customers
611.907 Special Notice of the Availability of Unregulated Contaminant Monitoring Results
611.908 Special Notice for Exceedence of the Fluoride Secondary Standard
611.909 Special Notice for Nitrate Exceedences above the MCL by a Non-Community Water System
611.910 Notice by the Agency on Behalf of a PWS
611.911 Special Notice for Cryptosporidium

SUBPART W: INITIAL DISTRIBUTION SYSTEM EVALUATIONS

Section
611.920 General Requirements
611.921 Standard Monitoring
611.922 System-Specific Studies
611.923 40/30 Certification
611.924 Very Small System Waivers
611.925 Subpart Y Compliance Monitoring Location Recommendations

SUBPART X: ENHANCED FILTRATION AND DISINFECTION – SYSTEMS SERVING FEWER THAN 10,000 PEOPLE

Section

611.950 General Requirements
611.951 Finished Water Reservoirs
611.952 Additional Watershed Control Requirements for Unfiltered Systems
611.953 Disinfection Profile
611.954 Disinfection Benchmark
611.955 Combined Filter Effluent Turbidity Limits
611.956 Individual Filter Turbidity Requirements
611.957 Reporting and Recordkeeping Requirements

SUBPART Y: STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS

Section
611.970 General Requirements
611.971 Routine Monitoring
611.972 Subpart Y Monitoring Plan
611.973 Reduced Monitoring
611.974 Additional Requirements for Consecutive Systems
611.975 Conditions Requiring Increased Monitoring
611.976 Operational Evaluation Levels
611.977 Requirements for Remaining on Reduced TTHM and HAA5 Monitoring Based on Subpart I Results
611.978 Requirements for Remaining on Increased TTHM and HAA5 Monitoring Based on Subpart I Results
611.979 Reporting and Recordkeeping Requirements

SUBPART Z: ENHANCED TREATMENT FOR CRYPTOSPORIDIUM

Section
611.1000 General Requirements
611.1001 Source Water Monitoring Requirements: Source Water Monitoring
611.1002 Source Water Monitoring Requirements: Sampling Schedules
611.1003 Source Water Monitoring Requirements: Sampling Locations
611.1004 Source Water Monitoring Requirements: Analytical Methods
611.1005 Source Water Monitoring Requirements: Approved Laboratories
611.1006 Source Water Monitoring Requirements: Reporting Source Water Monitoring Results
611.1007 Source Water Monitoring Requirements: Grandfathering Previously Collected Data
611.1008 Disinfection Profiling and Benchmarking Requirements: Requirements When Making a Significant Change in Disinfection Practice

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611.1009 Disinfection Profiling and Benchmarking Requirements: Developing the Disinfection Profile and Benchmark
611.1010 Treatment Technique Requirements: Bin Classification for Filtered Systems
611.1011 Treatment Technique Requirements: Filtered System Additional Cryptosporidium Treatment Requirements
611.1012 Treatment Technique Requirements: Unfiltered System Cryptosporidium Treatment Requirements
611.1013 Treatment Technique Requirements: Schedule for Compliance with Cryptosporidium Treatment Requirements
611.1014 Treatment Technique Requirements: Requirements for Uncovered Finished Water Storage Facilities
611.1015 Requirements for Microbial Toolbox Components: Microbial Toolbox Options for Meeting Cryptosporidium Treatment Requirements
611.1016 Requirements for Microbial Toolbox Components: Source Toolbox Components
611.1017 Requirements for Microbial Toolbox Components: Pre-Filtration Treatment Toolbox Components
611.1018 Requirements for Microbial Toolbox Components: Treatment Performance Toolbox Components
611.1019 Requirements for Microbial Toolbox Components: Additional Filtration Toolbox Components
611.1020 Requirements for Microbial Toolbox Components: Inactivation Toolbox Components
611.1021 Reporting and Recordkeeping Requirements: Reporting Requirements
611.1022 Reporting and Recordkeeping Requirements: Recordkeeping Requirements
611.1023 Requirements to Respond to Significant Deficiencies Identified in Sanitary Surveys Performed by USEPA or the Agency

611.APPENDIX A Regulated Contaminants
611.APPENDIX B Percent Inactivation of G. Lamblia Cysts
611.APPENDIX C Common Names of Organic Chemicals
611.APPENDIX D Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Eschericia Coli from Drinking Water
611.APPENDIX E Mandatory Lead Public Education Information for Community Water Systems
611.APPENDIX F Mandatory Lead Public Education Information for Non-Transient Non-Community Water Systems
611.APPENDIX G NPDWR Violations and Situations Requiring Public Notice
611.APPENDIX H Standard Health Effects Language for Public Notification
611.APPENDIX I Acronyms Used in Public Notification Regulation

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611.TABLE A	Total Coliform Monitoring Frequency
611.TABLE B	Fecal or Total Coliform Density Measurements
611.TABLE C	Frequency of RDC Measurement
611.TABLE D	Number of Lead and Copper Monitoring Sites
611.TABLE E	Lead and Copper Monitoring Start Dates
611.TABLE F	Number of Water Quality Parameter Sampling Sites
611.TABLE G	Summary of Section 611.357 Monitoring Requirements for Water Quality Parameters
611.TABLE H	CT Values (mg·min/ℓ) for Cryptosporidium Inactivation by Chlorine Dioxide
611.TABLE I	CT Values (mg·min/ℓ) for Cryptosporidium Inactivation by Ozone
611.TABLE J	UV Dose Table for Cryptosporidium, Giardia lamblia, and Virus Inactivation Credit
611.TABLE Z	Federal Effective Dates

AUTHORITY: Implementing Sections 7.2, 17, and 17.5 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 17, 17.5, and 27].

SOURCE: Adopted in R88-26 at 14 Ill. Reg. 16517, effective September 20, 1990; amended in R90-21 at 14 Ill. Reg. 20448, effective December 11, 1990; amended in R90-13 at 15 Ill. Reg. 1562, effective January 22, 1991; amended in R91-3 at 16 Ill. Reg. 19010, effective December 1, 1992; amended in R92-3 at 17 Ill. Reg. 7796, effective May 18, 1993; amended in R93-1 at 17 Ill. Reg. 12650, effective July 23, 1993; amended in R94-4 at 18 Ill. Reg. 12291, effective July 28, 1994; amended in R94-23 at 19 Ill. Reg. 8613, effective June 20, 1995; amended in R95-17 at 20 Ill. Reg. 14493, effective October 22, 1996; amended in R98-2 at 22 Ill. Reg. 5020, effective March 5, 1998; amended in R99-6 at 23 Ill. Reg. 2756, effective February 17, 1999; amended in R99-12 at 23 Ill. Reg. 10348, effective August 11, 1999; amended in R00-8 at 23 Ill. Reg. 14715, effective December 8, 1999; amended in R00-10 at 24 Ill. Reg. 14226, effective September 11, 2000; amended in R01-7 at 25 Ill. Reg. 1329, effective January 11, 2001; amended in R01-20 at 25 Ill. Reg. 13611, effective October 9, 2001; amended in R02-5 at 26 Ill. Reg. 3522, effective February 22, 2002; amended in R03-4 at 27 Ill. Reg. 1183, effective January 10, 2003; amended in R03-15 at 27 Ill. Reg. 16447, effective October 10, 2003; amended in R04-3 at 28 Ill. Reg. 5269, effective March 10, 2004; amended in R04-13 at 28 Ill. Reg. 12666, effective August 26, 2004; amended in R05-6 at 29 Ill. Reg. 2287, effective January 28, 2005; amended in R06-15 at 30 Ill. Reg. 17004, effective October 13, 2006; amended in R07-2/R07-11 at 31 Ill. Reg. 11757, effective July 27, 2007; amended in R08-7/R08-13 at 33 Ill. Reg. 633, effective December 30, 2008; amended in R10-1/R10-17/R11-6 at 34 Ill. Reg. 19848, effective December 7, 2010; amended in R12-4 at 36 Ill. Reg. 7110, effective April 25, 2012; amended in R13-2 at 37 Ill. Reg. _____, effective _____.

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SUBPART A: GENERAL

Section 611.102 Incorporations by Reference

a) Abbreviations and short-name listing of references. The following names and abbreviated names, presented in alphabetical order, are used in this Part to refer to materials incorporated by reference:

"AMI Turbiwell Method" means "Continuous Measurement of Turbidity Using a SWAN AMI Turbiwell Turbidimeter," available from NEMI or from SWAN Analytische Instrumente AG.

"ASTM Method" means a method published by and available from the American Society for Testing and Materials (ASTM).

"Colisure Test" means "Colisure Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia Coli in Drinking Water," available from Millipore Corporation, Technical Services Department.

"Colitag® Test" means "Colitag® Product as a Test for Detection and Identification of Coliforms and E. coli Bacteria in Drinking Water and Source Water as Required in National Primary Drinking Water Regulations," available from CPI International.

"Chromocult® Method" means "Chromocult® Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters," available from EMD Chemicals Inc.

"Determination of Inorganic Oxyhalide" means "Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography with the Addition of a Postcolumn Reagent for Trace Bromate Analysis," available from NTIS.

"Dioxin and Furan Method 1613" means "Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope-Dilution HRGC/HRMS," available from NTIS.

"E*Colite Test" means "Charm E*Colite Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Drinking Water," available from Charm Sciences, Inc. and USEPA, Water Resource Center.

"EC-MUG" means "Method 9221 F: Multiple-Tube Fermentation Technique for Members of the Coliform Group, Escherichia coli Procedure (Proposed)," available from American Public Health Association and American Waterworks Association.

"EML Procedures Manual" means "EML Procedures Manual, HASL 300," available from USDOE, EML.

"Enterolert" means "Evaluation of Enterolert for Enumeration of Enterococci in Recreational Waters," available from American Society for Microbiology.

"Georgia Radium Method" means "The Determination of Radium-226 and Radium-228 in Drinking Water by Gamma-ray Spectrometry Using HPGE or Ge(Li) Detectors," Revision 1.2, December 2004, available from the Georgia Tech Research Institute.

"GLI Method 2" means GLI Method 2, "Turbidity," Nov. 2, 1992, available from Great Lakes Instruments, Inc.

"Guidance Manual for Filtration and Disinfection" means "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources," March 1991, available from USEPA, NSCEP.

"Hach FilterTrak Method 10133" means "Determination of Turbidity by Laser Nephelometry," available from Hach Co.

"Hach SPDANS 2 Method 10225" means "Hach Company SPADNS 2 (Arsenic-free) Fluoride Method 10225 − Spectrophotometric Measurement of Fluoride in Water and Wastewater," available from the Hach Co.

"Hach TNTplus 835/836 Method 10206" means "Hach Company TNTplus 835/836 Nitrate Method 10206 − Spectrophotometric Measurement of Nitrate in Water and Wastewater," available from the Hach Co.

"ITS Method D99-003" means Method D99-003, Revision 3.0, "Free Chlorine Species ($HOCl^-$ and OCl^-) by Test Strip," available from Industrial Test Systems, Inc.

"Kelada 01" means "Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, And Thiocyanate," Revision 1.2, available from NTIS.

"m-ColiBlue24 Test" means "Total Coliforms and E. coli Membrane Filtration Method with m-ColiBlue24® Broth," available from USEPA, Water Resource Center and Hach Company.

"Method ME355.01" means "Determination of Cyanide in Drinking Water by GC/MS Headspace Analysis," available from NEMI or from H&E Testing Laboratory.

"Mitchell Method M5271" means "Determination of Turbidity by Laser Nephelometry," available from NEMI and Leck Mitchell, PhD.

"Mitchell Method M5331" means "Determination of Turbidity by LED Nephelometry," available from NEMI and Leck Mitchell, PhD.

"Modified Colitag™ Method" means "Modified Colitag™ Test Method for Simultaneous Detection of E. coli and other Total Coliforms in Water," available from NEMI and CPI International.

"NA-MUG" means "Method 9222 G: Membrane Filter Technique for Members of the Coliform Group, MF Partition Procedures," available from American Public Health Association and American Waterworks Association.

"NCRP Report Number 22" means "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," available from NCRP.

"New Jersey Radium Method" means "Determination of Radium 228 in Drinking Water," available from the New Jersey Department of Environmental Protection.

"New York Radium Method" means "Determination of Ra-226 and Ra-228 (Ra-02)," available from the New York Department of Public Health.

"OI Analytical Method OIA-1677" means "Method OIA-1677, DW Available Cyanide by Flow Injection, Ligand Exchange, and Amperometry," available from ALPKEM, Division of OI Analytical.

"ONPG-MUG Test" (meaning "minimal medium ortho-nitrophenyl-beta-d-galactopyranoside-4-methyl-umbelliferyl -beta-d-glucuronide test"), also called the "Autoanalysis Colilert System," is Method 9223, available in "Standard Methods for the Examination of Water and Wastewater," 18th, 19th, 20th, or 21st ed., from American Public Health Association and the American Water Works Association.

"Orion Method AQ4500" means "Determination of Turbidity by LED Nephelometry," available from Thermo Scientific.

"Palintest ChloroSense" means "Measurement of Free and Total Chlorine in Drinking Water by Palintest ChloroSense," available from NEMI or Palintest Ltd.

"Palintest Method 1001" means "Method Number 1001," available from Palintest, Ltd. or the Hach Company.

"QuikChem Method 10-204-00-1-X" means "Digestion and distillation of total cyanide in drinking and wastewaters using MICRO DIST and determination of cyanide by flow injection analysis," available from Lachat Instruments.

"Readycult® 2000" means "Readycult Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters," v. 1.0, available from EMD Chemicals Inc.

"Readycult® 2007" means "Readycult® Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters," v. 1.1, available from EMD Chemicals Inc.

"SimPlate Method" means "IDEXX SimPlate TM HPC Test Method for Heterotrophs in Water," available from IDEXX Laboratories, Inc.

"Standard Methods" means "Standard Methods for the Examination of Water and Wastewater," available from the American Public Health Association or the American Waterworks Association.

"Standard Methods Online" means the website maintained by the Standard Methods Organization (at www.standardmethods.org) for purchase of the latest versions of methods in an electronic format.

"Syngenta AG-625" means "Atrazine in Drinking Water by Immunoassay," February 2001 is available from Syngenta Crop Protection, Inc.

"Systea Easy (1-Reagent)" means "Systea Easy (1-Reagent) Nitrate Method," available from NEMI or Systea Scientific LLC.

"Technical Bulletin 601" means "Technical Bulletin 601, Standard Method of Testing for Nitrate in Drinking Water," July 1994, available from Analytical Technology, Inc.

"Technicon Methods" means "Fluoride in Water and Wastewater," available from Bran & Luebbe.

"USEPA Asbestos Method 100.1" means Method 100.1, "Analytical Method for Determination of Asbestos Fibers in Water," September 1983, available from NTIS.

"USEPA Asbestos Method 100.2" means Method 100.2, "Determination of Asbestos Structures over 10-mm in Length in Drinking Water," June 1994, available from NTIS.

"USEPA Environmental Inorganic Methods" means "Methods for the Determination of Inorganic Substances in Environmental Samples,"

August 1993, available from NTIS.

"USEPA Environmental Metals Methods" means "Methods for the Determination of Metals in Environmental Samples," available from NTIS.

"USEPA Inorganic Methods" means "Methods for Chemical Analysis of Water and Wastes," March 1983, available from NTIS.

"USEPA Interim Radiochemical Methods" means "Interim Radiochemical Methodology for Drinking Water," EPA 600/4-75/008 (revised), March 1976. Available from NTIS.

"USEPA Method 1600" means "Method 1600: Enterococci in Water by Membrane Filtration Using Membrane-Enterococcus Indoxyl-b-D-Glucoside Agar (mEI)," available from USEPA, Water Resource Center.

"USEPA Method 1601" means "Method 1601: Male-specific (F^+) and Somatic Coliphage in Water by Two-step Enrichment Procedure," available from USEPA, Water Resource Center.

"USEPA Method 1602" means "Method 1602: Male-specific (F^+) and Somatic Coliphage in Water by Single Agar Layer (SAL) Procedure," available from USEPA, Water Resource Center.

"USEPA Method 1604" means "Method 1604: Total Coliforms and Escherichia coli in Water by Membrane Filtration Using a Simultaneous Detection Technique (MI Medium)," available from USEPA, Water Resource Center.

"USEPA NERL Method 200.5 (rev. 4.2)" means Method 200.5, Revision 4.2, "Determination of Trace Elements in Drinking Water by Axially Viewed Inductively Coupled Plasma − Atomic Emission Spectrometry," October 2003, EPA 600/R-06/115. Available from USEPA, Office of Research and Development.

"USEPA NERL Method 415.3 (rev. 1.1)" means Method 415.3, Revision 1.1, "Determination of Total Organic Carbon and Specific UV Absorbance at 254 nm in Source Water and Drinking Water," USEPA, February 2005,

EPA 600/R-05/055. Available from USEPA, Office of Research and Development.

"USEPA NERL Method 415.3 (rev. 1.2)" means Method 415.3, Revision 1.2, "Determination of Total Organic Carbon and Specific UV Absorbance at 254 nm in Source Water and Drinking Water," USEPA, August 2009, EPA 600/R-09/122. Available from USEPA, Office of Research and Development.

"USEPA NERL Method 525.3 (ver. 1.0)" means Method 525.3, Version 1.0, "Determination of Total Semivolatile Organic Chemicals in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass Spectrometry (GC/MS)," USEPA, February 2012, EPA 600/R-12/010. Available from USEPA, Office of Research and Development.

"USEPA NERL Method 549.2" means Method 549.2, Revision 1.0, "Determination of Diquat and Paraquat in Drinking Water by Liquid-Solid Extraction and High Performance Liquid Chromatography with Ultraviolet Detection," June 1997. Available from USEPA, Office of Research and Development.

"USEPA OGWDW Methods" means the methods listed as available from the USEPA, Office of Ground Water and Drinking Water (Methods 302.0, 317.0 (rev. 2.0), 326.0 (rev. 1.0), 327.0 (rev. 1.1), 334.0, 515.4 (rev. 1.0), 523 (ver. 1.0), 524.3 (rev. 1.0), 531.2 (rev. 1.0), 536 (ver. 1.0), 552.3 (rev. 1.0), 557, 1622 (99), 1622 (01), 1622 (05), 1623 (99), 1623 (01), ~~and~~ 1623 (05), and 1623.1). Available from NTIS; USEPA, NSCEP; or USEPA, OGWDW.

"USEPA Organic Methods" means "Methods for the Determination of Organic Compounds in Drinking Water," December 1988 (revised July 1991) (Methods 508A (rev. 1.0) and 515.1 (rev. 4.0)); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement I," July 1990 (Methods 547, 550, and 550.1); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement II," August 1992 (Methods 548.1 (rev. 1.0), 552.1 (rev. 1.0), and 555 (rev. 1.0)); and "Methods for the Determination of Organic Compounds in Drinking Water − Supplement III," August 1995 (Methods 502.2 (rev.

2.1), 504.1 (rev. 1.1), 505 (rev. 2.1), 506 (rev. 1.1), 507 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 515.2 (rev. 1.1), 524.2 (rev. 4.1), 525.2 (rev. 2.0), 531.1 (rev. 3.1), 551.1 (rev. 1.0), and 552.2 (rev. 1.0)). Available from NTIS; USEPA, NSCEP; or USEPA, EMSL.

"USEPA Organic and Inorganic Methods" means "Methods for the Determination of Organic and Inorganic Compounds in Drinking Water, Volume 1," EPA 815/R-00/014, PB2000-106981, August 2000. Available from NTIS.

"USEPA Radioactivity Methods" means "Prescribed Procedures for Measurement of Radioactivity in Drinking Water," EPA 600/4-80/032, August 1980. Available from NTIS.

"USEPA Radiochemical Analyses" means "Radiochemical Analytical Procedures for Analysis of Environmental Samples," March 1979. Available from NTIS.

"USEPA Radiochemistry Procedures" means "Radiochemistry Procedures Manual," EPA 520/5-84/006, December 1987. Available from NTIS.

"USEPA Technical Notes" means "Technical Notes on Drinking Water Methods," available from NTIS and USEPA, NSCEP.

"USGS Methods" means "Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory − Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments," available from NTIS and USGS.
BOARD NOTE: The USGS Methods are available in three volumes published in 1977, 1989, and 1993, as outlined in subsection (b) of this Section.

"Waters Method B-1011" means "Waters Test Method for the Determination of Nitrite/Nitrate in Water Using Single Column Ion Chromatography," available from Waters Corporation, Technical Services Division.

b) The Board incorporates the following publications by reference:

ALPKEM, Division of OI Analytical, P.O. Box 9010, College Station, TX 77842-9010, telephone: 979-690-1711, Internet: www.oico.com.

"Method OIA-1677 DW, Available Cyanide by Flow Injection, Ligand Exchange, and Amperometry," EPA 821/R-04/001, January 2004 (referred to as "OI Analytical Method OIA-1677"), referenced in Section 611.611.
BOARD NOTE: Also available online for download from www.epa.gov/waterscience/methods/method/cyanide/1677-2004.pdf.

APHA. American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005 202-777-2742.

"Standard Methods for the Examination of Water and Wastewater," 17th Edition, 1989 (referred to as "Standard Methods, 17th ed."). See the methods listed separately for the same references under American Waterworks Association.

"Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992, including "Supplement to the 18th Edition of Standard Methods for the Examination of Water and Wastewater," 1994 (collectively referred to as "Standard Methods, 18th ed."). See the methods listed separately for the same references under American Waterworks Association.

"Standard Methods for the Examination of Water and Wastewater," 19th Edition, 1995 (referred to as "Standard Methods, 19th ed."). See the methods listed separately for the same references under American Waterworks Association.

"Standard Methods for the Examination of Water and Wastewater," 20th Edition, 1998 (referred to as "Standard Methods, 20th ed."). See the methods listed separately for the same references under American Waterworks Association.

"Standard Methods for the Examination of Water and Wastewater," 21st Edition, 2005 (referred to as "Standard Methods,

21st ed."). See the methods listed separately for the same references under American Waterworks Association.

American Society for Microbiology, 1752 N Street N.W., Washington, DC 20036, 202-737-3600:

"Evaluation of Enterolert for Enumeration of Enterococci in Recreational Waters," Applied and Environmental Microbiology, Oct. 1996, vol. 62, no. 10, p. 3881 (referred to as "Enterolert"), referenced in Section 611.802.

BOARD NOTE: At the table to 40 CFR 141.402(c)(2), USEPA approved the method as described in the above literature review. The method itself is embodied in the printed instructions to the proprietary kit available from IDEXX Laboratories, Inc. (accessible on-line and available by download from www.asm.org, as "Enterolert™ Procedure"). ASTM approved the method as "Standard Test Method for Enterococci in Water Using Enterolert™," which is available in two versions from ASTM: ASTM Method D6503-99 (superceded) and ASTM Method D6503-99. While it is more conventional to incorporate the method as presented in the kit instructions or as approved by ASTM by reference, the Board is constrained to incorporate the version that appears in the technical literature by reference, which is the version that USEPA has explicitly approved.

AWWA. American Water Works Association et al., 6666 West Quincy Ave., Denver, CO 80235 (303-794-7711).

"National Field Evaluation of a Defined Substrate Method for the Simultaneous Enumeration of Total Coliforms and Escherichia coli for Drinking Water: Comparison with the Standard Multiple Tube Fermentation Method," S.C. Edberg, M.J. Allen & D.B. Smith, Applied Environmental Microbiology, vol. 54, iss. 6, pp 1595-1601 (1988), referenced in Appendix D to this Part.

"Standard Methods for the Examination of Water and Wastewater," 13th Edition, 1971 (referred to as "Standard Methods, 13th ed.").

Method 302, Gross Alpha and Gross Beta Radioactivity in Water (Total, Suspended, and Dissolved), referenced in Section 611.720.

Method 303, Total Radioactive Strontium and Strontium 90 in Water, referenced in Section 611.720.

Method 304, Radium in Water by Precipitation, referenced in Section 611.720.

Method 305, Radium 226 by Radon in Water (Soluble, Suspended, and Total), referenced in Section 611.720.

Method 306, Tritium in Water, referenced in Section 611.720.

"Standard Methods for the Examination of Water and Wastewater," 17th Edition, 1989 (referred to as "Standard Methods, 17th ed.").

Method 7110 B, Gross Alpha and Gross Beta Radioactivity in Water (Total, Suspended, and Dissolved), referenced in Section 611.720.

Method 7500-Cs B, Radioactive Cesium, Precipitation Method, referenced in Section 611.720.

Method 7500-^{3}H B, Tritium in Water, referenced in Section 611.720.

Method 7500-I B, Radioactive Iodine, Precipitation Method, referenced in Section 611.720.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method, referenced in Section 611.720.

Method 7500-I D, Radioactive Iodine, Distillation Method, referenced in Section 611.720.

Method 7500-Ra B, Radium in Water by Precipitation, referenced in Section 611.720.

Method 7500-Ra C, Radium 226 by Radon in Water (Soluble, Suspended, and Total), referenced in Section 611.720.

Method 7500-Ra D, Radium, Sequential Precipitation Method (Proposed), referenced in Section 611.720.

Method 7500-Sr B, Total Radioactive Strontium and Strontium 90 in Water, referenced in Section 611.720.

Method 7500-U B, Uranium, Radiochemical Method (Proposed), referenced in Section 611.720.

Method 7500-U C, Uranium, Isotopic Method (Proposed), referenced in Section 611.720.

"Standard Methods for the Examination of Water and Wastewater," 18th Edition, 1992 (referred to as "Standard Methods, 18th ed.").

Method 2130 B, Turbidity, Nephelometric Method, referenced in Section 611.531.

Method 2320 B, Alkalinity, Titration Method, referenced in Section 611.611.

Method 2510 B, Conductivity, Laboratory Method, referenced in Section 611.611.

Method 2550, Temperature, Laboratory and Field Methods, referenced in Section 611.611.

Method 3111 B, Metals by Flame Atomic Absorption Spectrometry, Direct Air-Acetylene Flame Method, referenced in Sections 611.611 and 611.612.

Method 3111 D, Metals by Flame Atomic Absorption Spectrometry, Direct Nitrous Oxide-Acetylene Flame Method, referenced in Section 611.611.

Method 3112 B, Metals by Cold-Vapor Atomic Absorption Spectrometry, Cold-Vapor Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 3113 B, Metals by Electrothermal Atomic Absorption Spectrometry, Electrothermal Atomic Absorption Spectrometric Method, referenced in Sections 611.611 and 611.612.

Method 3114 B, Metals by Hydride Generation/Atomic Absorption Spectrometry, Manual Hydride Generation/Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 3120 B, Metals by Plasma Emission Spectroscopy, Inductively Coupled Plasma (ICP) Method, referenced in Sections 611.611 and 611.612.

Method 3500-Ca D, Calcium, EDTA Titrimetric Method, referenced in Section 611.611.

Method 3500-Mg E, Magnesium, Calculation Method, referenced in Section 611.611.

Method 4110 B, Determination of Anions by Ion Chromatography, Ion Chromatography with Chemical Suppression of Eluent Conductivity, referenced in Section 611.611.

Method 4500-CN^- C, Cyanide, Total Cyanide after Distillation, referenced in Section 611.611.

Method 4500-CN^- E, Cyanide, Colorimetric Method, referenced in Section 611.611.

Method 4500-CN^- F, Cyanide, Cyanide-Selective Electrode Method, referenced in Section 611.611.

Method 4500-CN^- G, Cyanide, Cyanides Amenable to Chlorination after Distillation, referenced in Section 611.611.

Method 4500-Cl D, Chlorine, Amperometric Titration Method, referenced in Section 611.531.

Method 4500-Cl E, Chlorine, Low-Level Amperometric Titration Method, referenced in Section 611.531.

Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric Method, referenced in Section 611.531.

Method 4500-Cl G, Chlorine, DPD Colorimetric Method, referenced in Section 611.531.

Method 4500-Cl H, Chlorine, Syringaldazine (FACTS) Method, referenced in Section 611.531.

Method 4500-Cl I, Chlorine, Iodometric Electrode Method, referenced in Section 611.531.

Method 4500-ClO_2 C, Chlorine Dioxide, Amperometric Method I, referenced in Section 611.531.

Method 4500-ClO_2 D, Chlorine Dioxide, DPD Method, referenced in Section 611.531.

Method 4500-ClO_2 E, Chlorine Dioxide, Amperometric Method II (Proposed), referenced in Section 611.531.

Method 4500-F^- B, Fluoride, Preliminary Distillation Step, referenced in Section 611.611.

Method 4500-F^- C, Fluoride, Ion-Selective Electrode

Method, referenced in Section 611.611.

Method 4500-F^- D, Fluoride, SPADNS Method, referenced in Section 611.611.

Method 4500-F^- E, Fluoride, Complexone Method, referenced in Section 611.611.

Method 4500-H^+ B, pH Value, Electrometric Method, referenced in Section 611.611.

Method 4500-NO_2^- B, Nitrogen (Nitrite), Colorimetric Method, referenced in Section 611.611.

Method 4500-NO_3^- D**,** Nitrogen (Nitrate), Nitrate Electrode Method, referenced in Section 611.611.

Method 4500-NO_3^- E, Nitrogen (Nitrate), Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-NO_3^- F, Nitrogen (Nitrate), Automated Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-O_3 B, Ozone (Residual) (Proposed), Indigo Colorimetric Method, referenced in Section 611.531.

Method 4500-P E, Phosphorus, Ascorbic Acid Method, referenced in Section 611.611.

Method 4500-P F, Phosphorus, Automated Ascorbic Acid Reduction Method, referenced in Section 611.611.

Method 4500-Si D, Silica, Molybdosilicate Method, referenced in Section 611.611.

Method 4500-Si E, Silica, Heteropoly Blue Method, referenced in Section 611.611.

Method 4500-Si F, Silica, Automated Method for Molybdate-Reactive Silica, referenced in Section 611.611.

Method 6651, Glyphosate Herbicide (Proposed), referenced in Section 611.645.

Method 7110 B, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Evaporation Method for Gross Alpha-Beta, referenced in Section 611.720.

Method 7110 C, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Coprecipitation Method for Gross Alpha Radioactivity in Drinking Water (Proposed), referenced in Section 611.720.

Method 7500-Cs B, Radioactive Cesium, Precipitation Method, referenced in Section 611.720.

Method 7500-^{3}H B, Tritium, Liquid Scintillation Spectrometric Method, referenced in Section 611.720.

Method 7500-I B, Radioactive Iodine, Precipitation Method, referenced in Section 611.720.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method, referenced in Section 611.720.

Method 7500-I D, Radioactive Iodine, Distillation Method, referenced in Section 611.720.

Method 7500-Ra B, Radium, Precipitation Method, referenced in Section 611.720.

Method 7500-Ra C, Radium, Emanation Method, referenced in Section 611.720.

Method 7500-Ra D, Radium, Sequential Precipitation Method (Proposed), referenced in Section 611.720.

Method 7500-Sr B, Total Radioactive Strontium and Strontium 90, Precipitation Method, referenced in Section 611.720.

Method 7500-U B, Uranium, Radiochemical Method (Proposed), referenced in Section 611.720.

Method 7500-U C, Uranium, Isotopic Method (Proposed), referenced in Section 611.720.

Method 9215 B, Heterotrophic Plate Count, Pour Plate Method, referenced in Section 611.531.

Method 9221 A, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9221 B, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Standard Total Coliform Fermentation Technique, referenced in Sections 611.526 and 611.531.

Method 9221 C, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Estimation of Bacterial Density, referenced in Sections 611.526 and 611.531.

Method 9221 D, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Presence-Absence (P-A) Coliform Test, referenced in Section 611.526.

Method 9221 E, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Fecal Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 A, Membrane Filter Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9222 B, Membrane Filter Technique for Members of the Coliform Group, Standard Total Coliform Membrane Filter Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 C, Membrane Filter Technique for Members of the Coliform Group, Delayed-Incubation Total Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 D, Membrane Filter Technique for Members of the Coliform Group, Fecal Coliform Membrane Filter Procedure, referenced in Section 611.531.

Method 9223, Chromogenic Substrate Coliform Test (Proposed) (also referred to as the variations "Autoanalysis Colilert System" and "Colisure Test"), referenced in Sections 611.526 and 611.531.

Method 9223 B, Chromogenic Substrate Coliform Test (Proposed), referenced in Section 611.1004.

"Supplement to the 18th Edition of Standard Methods for the Examination of Water and Wastewater," American Public Health Association, 1994.

Method 6610, Carbamate Pesticide Method, referenced in Section 611.645.

"Standard Methods for the Examination of Water and Wastewater," 19th Edition, 1995 (referred to as "Standard Methods, 19th ed.").

Method 2130 B, Turbidity, Nephelometric Method, referenced in Section 611.531.

Method 2320 B, Alkalinity, Titration Method, referenced in Section 611.611.

Method 2510 B, Conductivity, Laboratory Method,

referenced in Section 611.611.

Method 2550, Temperature, Laboratory, and Field Methods, referenced in Section 611.611.

Method 3111 B, Metals by Flame Atomic Absorption Spectrometry, Direct Air-Acetylene Flame Method, referenced in Sections 611.611 and 611.612.

Method 3111 D, Metals by Flame Atomic Absorption Spectrometry, Direct Nitrous Oxide-Acetylene Flame Method, referenced in Section 611.611.

Method 3112 B, Metals by Cold-Vapor Atomic Absorption Spectrometry, Cold-Vapor Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 3113 B, Metals by Electrothermal Atomic Absorption Spectrometry, Electrothermal Atomic Absorption Spectrometric Method, referenced in Sections 611.611 and 611.612.

Method 3114 B, Metals by Hydride Generation/Atomic Absorption Spectrometry, Manual Hydride Generation/Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 3120 B, Metals by Plasma Emission Spectroscopy, Inductively Coupled Plasma (ICP) Method, referenced in Sections 611.611 and 611.612.

Method 3500-Ca D, Calcium, EDTA Titrimetric Method, referenced in Section 611.611.

Method 3500-Mg E, Magnesium, Calculation Method, referenced in Section 611.611.

Method 4110 B, Determination of Anions by Ion Chromatography, Ion Chromatography with Chemical

Suppression of Eluent Conductivity, referenced in Section 611.611.

Method 4500-Cl D, Chlorine, Amperometric Titration Method, referenced in Sections 611.381 and 611.531.

Method 4500-Cl E, Chlorine, Low-Level Amperometric Titration Method, referenced in Sections 611.381 and 611.531.

Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric Method, referenced in Sections 611.381 and 611.531.

Method 4500-Cl G, Chlorine, DPD Colorimetric Method, referenced in Sections 611.381 and 611.531.

Method 4500-Cl H, Chlorine, Syringaldazine (FACTS) Method, referenced in Sections 611.381 and 611.531.

Method 4500-Cl I, Chlorine, Iodometric Electrode Method, referenced in Sections 611.381 and 611.531.

Method 4500-ClO_2 C, Chlorine Dioxide, Amperometric Method I, referenced in Section 611.531.

Method 4500-ClO_2 D, Chlorine Dioxide, DPD Method, referenced in Sections 611.381 and 611.531.

Method 4500-ClO_2 E, Chlorine Dioxide, Amperometric Method II, referenced in Sections 611.381 and 611.531.

Method 4500-CN^- C, Cyanide, Total Cyanide after Distillation, referenced in Section 611.611.

Method 4500-CN^- E, Cyanide, Colorimetric Method, referenced in Section 611.611.

Method 4500-CN^- F, Cyanide, Cyanide-Selective Electrode Method, referenced in Section 611.611.

Method 4500-CN^- G, Cyanide, Cyanides Amenable to Chlorination after Distillation, referenced in Section 611.611.

Method 4500-F^- B, Fluoride, Preliminary Distillation Step, referenced in Section 611.611.

Method 4500-F^- C, Fluoride, Ion-Selective Electrode Method, referenced in Section 611.611.

Method 4500-F^- D, Fluoride, SPADNS Method, referenced in Section 611.611.

Method 4500-F^- E, Fluoride, Complexone Method, referenced in Section 611.611.

Method 4500-H^+ B, pH Value, Electrometric Method, referenced in Section 611.611.

Method 4500-NO_2^- B, Nitrogen (Nitrite), Colorimetric Method, referenced in Section 611.611.

Method 4500-NO_3^- D, Nitrogen (Nitrate), Nitrate Electrode Method, referenced in Section 611.611.

Method 4500-NO_3^- E, Nitrogen (Nitrate), Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-NO_3^- F, Nitrogen (Nitrate), Automated Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-O_3 B, Ozone (Residual) (Proposed), Indigo Colorimetric Method, referenced in Section 611.531.

Method 4500-P E, Phosphorus, Ascorbic Acid Method, referenced in Section 611.611.

Method 4500-P F, Phosphorus, Automated Ascorbic Acid Reduction Method, referenced in Section 611.611.

Method 4500-Si D, Silica, Molybdosilicate Method, referenced in Section 611.611.

Method 4500-Si E, Silica, Heteropoly Blue Method, referenced in Section 611.611.

Method 4500-Si F, Silica, Automated Method for Molybdate-Reactive Silica, referenced in Section 611.611.

Method 5310 B, TOC, Combustion-Infrared Method, referenced in Section 611.381.

Method 5310 C, TOC, Persulfate-Ultraviolet Oxidation Method, referenced in Section 611.381.

Method 5310 D, TOC, Wet-Oxidation Method, referenced in Section 611.381.

Method 5910 B, UV Absorbing Organic Constituents, Ultraviolet Absorption Method, referenced in Section 611.381.

Method 6251 B, Disinfection Byproducts: Haloacetic Acids and Trichlorophenol, Micro Liquid-Liquid Extraction Gas Chromatographic Method, referenced in Section 611.381.

Method 6610, Carbamate Pesticide Method, referenced in Section 611.645.

Method 6651, Glyphosate Herbicide (Proposed), referenced in Section 611.645.

Method 7110 B, Gross Alpha and Gross Beta Radioactivity, Evaporation Method for Gross Alpha-Beta, referenced in Section 611.720.

Method 7110 C, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Coprecipitation Method for Gross Alpha Radioactivity in Drinking Water (Proposed), referenced in Section 611.720.

Method 7120 B, Gamma-Emitting Radionuclides, Gamma Spectrometric Method, referenced in Section 611.720.

Method 7500-Cs B, Radioactive Cesium, Precipitation Method, referenced in Section 611.720.

Method 7500-^{3}H B, Tritium, Liquid Scintillation Spectrometric Method, referenced in Section 611.720.

Method 7500-I B, Radioactive Iodine, Precipitation Method, referenced in Section 611.720.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method, referenced in Section 611.720.

Method 7500-I D, Radioactive Iodine, Distillation Method, referenced in Section 611.720.

Method 7500-Ra B, Radium, Precipitation Method, referenced in Section 611.720.

Method 7500-Ra C, Radium, Emanation Method, referenced in Section 611.720.

Method 7500-Ra D, Radium, Sequential Precipitation Method, referenced in Section 611.720.

Method 7500-Sr B, Total Radiactive Strontium and Strontium 90, Precipitation Method, referenced in Section 611.720.

Method 7500-U B, Uranium, Radiochemical Method, referenced in Section 611.720.

Method 7500-U C, Uranium, Isotopic Method, referenced in Section 611.720.

Method 9215 B, Heterotrophic Plate Count, Pour Plate Method, referenced in Section 611.531.

Method 9221 A, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9221 B, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Standard Total Coliform Fermentation Technique, referenced in Sections 611.526 and 611.531.

Method 9221 C, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Estimation of Bacterial Density, referenced in Sections 611.526 and 611.531.

Method 9221 D, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Presence-Absence (P-A) Coliform Test, referenced in Section 611.526.

Method 9221 E, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Fecal Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 A, Membrane Filter Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9222 B, Membrane Filter Technique for Members of the Coliform Group, Standard Total Coliform Membrane Filter Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 C, Membrane Filter Technique for Members of the Coliform Group, Delayed-Incubation Total Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 D, Membrane Filter Technique for Members of the Coliform Group, Fecal Coliform Membrane Filter Procedure, referenced in Section 611.531.

Method 9222 G, Membrane Filter Technique for Members of the Coliform Group, MF Partition Procedures, referenced in Section 611.526.

Method 9223, Chromogenic Substrate Coliform Test (also referred to as the variations "Autoanalysis Colilert System" and "Colisure Test"), referenced in Sections 611.526 and 611.531.

Method 9223 B, Chromogenic Substrate Coliform Test (Proposed), referenced in Section 611.1004.

"Supplement to the 19th Edition of Standard Methods for the Examination of Water and Wastewater," American Public Health Association, 1996.

Method 5310 B, TOC, Combustion-Infrared Method, referenced in Section 611.381.

Method 5310 C, TOC, Persulfate-Ultraviolet Oxidation Method, referenced in Section 611.381.

Method 5310 D, TOC, Wet-Oxidation Method, referenced in Section 611.381.

"Standard Methods for the Examination of Water and Wastewater," 20th Edition, 1998 (referred to as "Standard Methods, 20th ed.").

Method 2130 B, Turbidity, Nephelometric Method, referenced in Section 611.531.

Method 2320 B, Alkalinity, Titration Method, referenced in Section 611.611.

Method 2510 B, Conductivity, Laboratory Method, referenced in Section 611.611.

Method 2550, Temperature, Laboratory, and Field Methods, referenced in Section 611.611.

Method 3120 B, Metals by Plasma Emission Spectroscopy, Inductively Coupled Plasma (ICP) Method, referenced in Sections 611.611 and 611.612.

Method 3125, Metals by Inductively Coupled Plasma/Mass Spectrometry, referenced in Sections 611.720.

Method 3500-Ca B, Calcium, EDTA Titrimetric Method, referenced in Section 611.611.

Method 3500-Mg B, Magnesium, EDTA Titrimetric Method, referenced in Section 611.611.

Method 4110 B, Determination of Anions by Ion Chromatography, Ion Chromatography with Chemical Suppression of Eluent Conductivity, referenced in Section 611.611.

Method 4500-CN^- C, Cyanide, Total Cyanide after Distillation, referenced in Section 611.611.

Method 4500-CN^- E, Cyanide, Colorimetric Method, referenced in Section 611.611.

Method 4500-CN F, Cyanide, Cyanide-Selective Electrode Method, referenced in Section 611.611.

Method 4500-CN^- G, Cyanide, Cyanides Amenable to Chlorination after Distillation, referenced in Section 611.611.

Method 4500-Cl D, Chlorine, Amperometric Titration Method, referenced in Section 611.531.

Method 4500-Cl E, Chlorine, Low-Level Amperometric Titration Method, referenced in Section 611.531.

Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric Method, referenced in Section 611.531.

Method 4500-Cl G, Chlorine, DPD Colorimetric Method, referenced in Section 611.531.

Method 4500-Cl H, Chlorine, Syringaldazine (FACTS) Method, referenced in Section 611.531.

Method 4500-Cl I, Chlorine, Iodometric Electrode Method, referenced in Section 611.531.

Method 4500-ClO_2 C, Chlorine Dioxide, Amperometric Method I, referenced in Section 611.531.

Method 4500-ClO_2 D, Chlorine Dioxide, DPD Method, referenced in Section 611.531.

Method 4500-ClO_2 E, Chlorine Dioxide, Amperometric Method II (Proposed), referenced in Section 611.531.

Method 4500-F^- B, Fluoride, Preliminary Distillation Step, referenced in Section 611.611.

Method 4500-F^- C, Fluoride, Ion-Selective Electrode Method, referenced in Section 611.611.

Method 4500-F^- D, Fluoride, SPADNS Method, referenced in Section 611.611.

Method 4500-F^- E, Fluoride, Complexone Method, referenced in Section 611.611.

Method 4500-H^+ B, pH Value, Electrometric Method, referenced in Section 611.611.

Method 4500-NO_2^- B, Nitrogen (Nitrite), Colorimetric Method, referenced in Section 611.611.

Method 4500-NO_3^- D, Nitrogen (Nitrate), Nitrate Electrode Method, referenced in Section 611.611.

Method 4500-NO_3^- E, Nitrogen (Nitrate), Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-NO_3^- F, Nitrogen (Nitrate), Automated Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-O_3 B, Ozone (Residual) (Proposed), Indigo Colorimetric Method, referenced in Section 611.531.

Method 4500-P E, Phosphorus, Ascorbic Acid Method, referenced in Section 611.611.

Method 4500-P F, Phosphorus, Automated Ascorbic Acid Reduction Method, referenced in Section 611.611.

Method 4500-Si C, Silica, Molybdosilicate Method, referenced in Section 611.611.

Method 4500-Si D, Silica, Heteropoly Blue Method, referenced in Section 611.611.

Method 4500-Si E, Silica, Automated Method for Molybdate-Reactive Silica, referenced in Section 611.611.

Method 5310 B, TOC, Combustion-Infrared Method, referenced in Section 611.381.

Method 5310 C, TOC, Persulfate-Ultraviolet Oxidation Method, referenced in Section 611.381.

Method 5310 D, TOC, Wet-Oxidation Method, referenced in Section 611.381.

Method 5910 B, UV-Absorbing Organic Constituents, Ultraviolet Absorption Method, referenced in Sections 611.381 and 611.382.

Method 6251, Disinfection By-Products: Haloacetic Acids and Trichlorophenol, referenced in Section 611.381.

Method 6610, Carbamate Pesticide Method, referenced in Section 611.645.

Method 6651, Glyphosate Herbicide (Proposed), referenced in Section 611.645.

Method 7110 B, Gross Alpha and Gross Beta Radioactivity, Evaporation Method for Gross Alpha-Beta, referenced in Section 611.720.

Method 7110 C, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Coprecipitation Method for Gross Alpha Radioactivity in Drinking Water (Proposed), referenced in Section 611.720.

Method 7120, Gamma-Emitting Radionuclides, referenced in Section 611.720.

Method 7500-Cs B, Radioactive Cesium, Precipitation Method, referenced in Section 611.720.

Method 7500-^{3}H B, Tritium, Liquid Scintillation Spectrometric Method, referenced in Section 611.720.

Method 7500-I B, Radioactive Iodine, Precipitation Method, referenced in Section 611.720.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method, referenced in Section 611.720.

Method 7500-I D, Radioactive Iodine, Distillation Method, referenced in Section 611.720.

Method 7500-Ra B, Radium, Precipitation Method, referenced in Section 611.720.

Method 7500-Ra C, Radium, Emanation Method, referenced in Section 611.720.

Method 7500-Ra D, Radium, Sequential Precipitation Method, referenced in Section 611.720.

Method 7500-Sr B, Total Radioactive Strontium and Strontium 90, Precipitation Method, referenced in Section 611.720.

Method 7500-U B, Uranium, Radiochemical Method, referenced in Section 611.720.

Method 7500-U C, Uranium, Isotopic Method, referenced in Section 611.720.

Method 9215 B, Heterotrophic Plate Count, Pour Plate Method, referenced in Section 611.531.

Method 9221 A, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9221 B, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Standard Total

Coliform Fermentation Technique, referenced in Sections 611.526 and 611.531.

Method 9221 C, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Estimation of Bacterial Density, referenced in Sections 611.526 and 611.531.

Method 9221 D, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Presence-Absence (P-A) Coliform Test, referenced in Sections 611.526.

Method 9221 E, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Fecal Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9221 F, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Escherichia Coli Procedure (Proposed), referenced in Section 611.802.

Method 9222 A, Membrane Filter Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9222 B, Membrane Filter Technique for Members of the Coliform Group, Standard Total Coliform Membrane Filter Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 C, Membrane Filter Technique for Members of the Coliform Group, Delayed-Incubation Total Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 D, Membrane Filter Technique for Members of the Coliform Group, Fecal Coliform Membrane Filter Procedure, referenced in Section 611.531.

Method 9222 G, Membrane Filter Technique for Members of the Coliform Group, MF Partition Procedures,

referenced in Section 611.526.

Method 9223, Chromogenic Substrate Coliform Test (also referred to as the variations "Autoanalysis Colilert System" and "Colisure Test"), referenced in Sections 611.526 and 611.531.

Method 9223 B, Chromogenic Substrate Coliform Test (also referred to as the variations "Autoanalysis Colilert System" and "Colisure Test"), referenced in Sections 611.526, 611.802, and 611.1004.

Method 9230 B, Fecal Streptococcus and Enterococcus Groups, Multiple Tube Techniques, referenced in Section 611.802.

Method 9230 C, Fecal Streptococcus and Enterococcus Groups, Membrane Filter Techniques, referenced in Section 611.802.

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Method 2130 B, Turbidity, Nephelometric Method, referenced in Section 611.531.

Method 2320 B, Alkalinity, Titration Method, referenced in Section 611.611.

Method 2510 B, Conductivity, Laboratory Method, referenced in Section 611.611.

Method 2550, Temperature, Laboratory, and Field Methods, referenced in Section 611.611.

Method 3111 B, Metals by Flame Atomic Absorption Spectrometry, Direct Air-Acetylene Flame Method, referenced in Sections 611.611 and 611.612.

Method 3111 D, Metals by Flame Atomic Absorption Spectrometry, Direct Nitrous Oxide-Acetylene Flame Method, referenced in Section 611.611.

Method 3112 B, Metals by Cold-Vapor Atomic Absorption Spectrometry, Cold-Vapor Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 3113 B, Metals by Electrothermal Atomic Absorption Spectrometry, Electrothermal Atomic Absorption Spectrometric Method, referenced in Sections 611.611 and 611.612.

Method 3114 B, Metals by Hydride Generation/Atomic Absorption Spectrometry, Manual Hydride Generation/Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 3120 B, Metals by Plasma Emission Spectroscopy, Inductively Coupled Plasma (ICP) Method, referenced in Sections 611.611 and 611.612.

Method 3125, Metals by Inductively Coupled Plasma/Mass Spectrometry, referenced in Section 611.720.

Method 3500-Ca B, Calcium, EDTA Titrimetric Method, referenced in Section 611.611.

Method 3500-Ca D, Calcium, EDTA Titrimetric Method, referenced in Section 611.611.

Method 3500-Mg B, Magnesium, Calculation Method, referenced in Section 611.611.

Method 4110 B, Determination of Anions by Ion Chromatography, Ion Chromatography with Chemical Suppression of Eluent Conductivity, referenced in Section 611.611.

Method 4500-Cl D, Chlorine, Amperometric Titration Method, referenced in Section 611.381.

Method 4500-Cl E, Chlorine, Low-Level Amperometric Titration Method, referenced in Section 611.381.

Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric Method, referenced in Section 611.381.

Method 4500-Cl G, Chlorine, DPD Colorimetric Method, referenced in Section 611.381.

Method 4500-Cl H, Chlorine, Syringaldazine (FACTS) Method, referenced in Section 611.381.

Method 4500-Cl I, Chlorine, Iodometric Electrode Method, referenced in Section 611.381.

Method 4500-ClO_2 C, Chlorine Dioxide, Amperometric Method I, referenced in Section 611.531.

Method 4500-ClO_2 E, Chlorine Dioxide, Amperometric Method II (Proposed), referenced in Section 611.381.

Method 4500-CN^- E, Cyanide, Colorimetric Method, referenced in Section 611.611.

Method 4500-CN^- F, Cyanide, Cyanide-Selective Electrode Method, referenced in Section 611.611.

Method 4500-CN^- G, Cyanide, Cyanides Amenable to Chlorination after Distillation, referenced in Section 611.611.

Method 4500-F^- B, Fluoride, Preliminary Distillation Step, referenced in Section 611.611.

Method 4500-F^- C, Fluoride, Ion-Selective Electrode Method, referenced in Section 611.611.

Method 4500-F^- D, Fluoride, SPADNS Method, referenced in Section 611.611.

Method 4500-F^- E, Fluoride, Complexone Method, referenced in Section 611.611.

Method 4500-H^+ B, pH Value, Electrometric Method, referenced in Section 611.611.

Method 4500-NO_2^- B, Nitrogen (Nitrite), Colorimetric Method, referenced in Section 611.611.

Method 4500-NO_3^- D, Nitrogen (Nitrate), Nitrate Electrode Method, referenced in Section 611.611.

Method 4500-NO_3^- E, Nitrogen (Nitrate), Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-NO_3^- F, Nitrogen (Nitrate), Automated Cadmium Reduction Method, referenced in Section 611.611.

Method 4500-O_3 B, Ozone (Residual) (Proposed), Indigo Colorimetric Method, referenced in Section 611.531.

Method 4500-P E, Phosphorus, Ascorbic Acid Method, referenced in Section 611.611.

Method 4500-P F, Phosphorus, Automated Ascorbic Acid Reduction Method, referenced in Section 611.611.

Method 4500-SiO_2 C, Silica, Molybdosilicate Method, referenced in Section 611.611.

Method 4500-SiO_2 D, Silica, Heteropoly Blue Method, referenced in Section 611.611.

Method 4500-SiO_2 E, Silica, Automated Method for Molybdate-Reactive Silica, referenced in Section 611.611.

Method 5310 B, TOC, Combustion-Infrared Method, referenced in Section 611.381.

Method 5310 C, TOC, Persulfate-Ultraviolet Oxidation Method, referenced in Section 611.381.

Method 5310 D, TOC, Wet-Oxidation Method, referenced in Section 611.381.

Method 5910 B, UV-Absorbing Organic Constituents, Ultraviolet Absorption Method, referenced in Sections 611.381 and 611.382.

Method 6251, Disinfection By-Products: Haloacetic Acids and Trichlorophenol, referenced in Section 611.381.

Method 6610, Method 6610 B, Carbamate Pesticide Method, referenced in Section 611.645.

Method 6640 B, Acidic Herbicide Compounds, Micro Liquid-Liquid Extraction Gas Chromatographic Method, referenced in Section 611.645.

Method 7110 B, Gross Alpha and Gross Beta Radioactivity, Evaporation Method for Gross Alpha-Beta, referenced in Section 611.720.

Method 7110 C, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Coprecipitation Method for Gross Alpha Radioactivity in Drinking Water (Proposed), referenced in Section 611.720.

Method 7120, Gamma-Emitting Radionuclides, referenced in Section 611.720.

Method 7500-Cs B, Radioactive Cesium, Precipitation Method, referenced in Section 611.720.

Method 7500-^{3}H B, Tritium, Liquid Scintillation Spectrometric Method, referenced in Section 611.720.

Method 7500-I B, Radioactive Iodine, Precipitation Method, referenced in Section 611.720.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method, referenced in Section 611.720.

Method 7500-I D, Radioactive Iodine, Distillation Method, referenced in Section 611.720.

Method 7500-Ra B, Radium, Precipitation Method, referenced in Section 611.720.

Method 7500-Ra C, Radium, Emanation Method, referenced in Section 611.720.

Method 7500-Ra D, Radium, Sequential Precipitation Method, referenced in Section 611.720.

Method 7500-Sr B, Total Radioactive Strontium and Strontium 90, Precipitation Method, referenced in Section 611.720.

Method 7500-U B, Uranium, Radiochemical Method, referenced in Section 611.720.

Method 7500-U C, Uranium, Isotopic Method, referenced in Section 611.720.

Method 9221 A, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9221 B, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Standard Total Coliform Fermentation Technique, referenced in Sections 611.526 and 611.531.

Method 9221 C, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Estimation of Bacterial Density, referenced in Sections 611.526 and 611.531.

Method 9221 D, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Presence-Absence (P-A) Coliform Test, referenced in Section 611.526.

Method 9221 E, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Fecal Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9221 F, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Escherichia Coli Procedure (Proposed), referenced in Section 611.802.

Method 9222 A, Membrane Filter Technique for Members of the Coliform Group, Introduction, referenced in Sections 611.526 and 611.531.

Method 9222 B, Membrane Filter Technique for Members of the Coliform Group, Standard Total Coliform Membrane Filter Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 C, Membrane Filter Technique for Members of the Coliform Group, Delayed-Incubation Total Coliform Procedure, referenced in Sections 611.526 and 611.531.

Method 9222 D, Membrane Filter Technique for Members of the Coliform Group, Fecal Coliform Membrane Filter Procedure, referenced in Section 611.531.

Method 9222 G, Membrane Filter Technique for Members of the Coliform Group, MF Partition Procedures, referenced in Section 611.526.

Method 9223, Chromogenic Substrate Coliform Test (also referred to as the variations "Autoanalysis Colilert System" and "Colisure Test"), referenced in Sections 611.526 and 611.531.

Method 9223 B, Chromogenic Substrate Coliform Test (also referred to as the variations "Autoanalysis Colilert System" and "Colisure Test"), referenced in Sections 611.526, 611.802, and 611.1004.

BOARD NOTE: See the Board note appended to Standard Methods Online in this Section about methods that appear in Standard Methods, 21st ed. which USEPA has cited as available from Standard Methods Online.

BOARD NOTE: Individual Methods from Standard Methods are available online from Standard Methods Online.

Analytical Technology, Inc. ATI Orion, 529 Main Street, Boston, MA 02129.

Technical Bulletin 601, "Standard Method of Testing for Nitrate in Drinking Water," July, 1994, PN 221890-001 (referred to as "Technical Bulletin 601"), referenced in Section 611.611.

ASTM. American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 (610-832-9585).

ASTM Method D511-93 A and B, "Standard Test Methods for Calcium and Magnesium in Water," "Test Method A − Complexometric Titration" & "Test Method B − Atomic Absorption Spectrophotometric," approved 1993, referenced in Section 611.611.

ASTM Method D511-03 A and B, "Standard Test Methods for Calcium and Magnesium in Water," "Test Method A − Complexometric Titration" & "Test Method B − Atomic Absorption Spectrophotometric," approved 2003, referenced in Section 611.611.

ASTM Method D511-09 A and B, "Standard Test Methods for Calcium and Magnesium in Water," "Test Method A − Complexometric Titration" & "Test Method B − Atomic Absorption Spectrophotometric," approved 2009, referenced in Section 611.611.

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ASTM Method D859-94, "Standard Test Method for Silica in Water," approved 1994, referenced in Section 611.611.

ASTM Method D859-00, "Standard Test Method for Silica in Water," approved 2000, referenced in Section 611.611.

ASTM Method D859-05, "Standard Test Method for Silica in Water," approved 2005, referenced in Section 611.611.

ASTM Method D859-10, "Standard Test Method for Silica in Water," approved 2010, referenced in Section 611.611.

ASTM Method D1067-92 B, "Standard Test Methods for Acidity or Alkalinity in Water," "Test Method B − Electrometric or Color-Change Titration," approved May 15, 1992, referenced in Section 611.611.

ASTM Method D1067-02 B, "Standard Test Methods for Acidity or Alkalinity in Water," "Test Method B − Electrometric or Color-Change Titration," approved in 2002, referenced in Section 611.611.

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ASTM Method D1125-95 (1999) A, "Standard Test Methods for Electrical Conductivity and Resistivity of Water," "Test Method A − Field and Routine Laboratory Measurement of Static (Non-Flowing) Samples," approved 1995, reapproved 1999, referenced in Section 611.611.

ASTM Method D1179-93 B, "Standard Test Methods for Fluoride in Water," "Test Method B − Ion Selective Electrode," approved 1993, referenced in Section 611.611.

ASTM Method D1179-99 B, "Standard Test Methods for Fluoride in Water," "Test Method B − Ion Selective Electrode," approved 1999, referenced in Section 611.611.

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ASTM Method D1293-95 A or B, "Standard Test Methods for pH of Water," "Test Method A − Precise Laboratory Measurement" & "Test Method B − Routine or Continuous Measurement," approved 1995, referenced in Section 611.611.

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ASTM Method D1688-07 A or C, "Standard Test Methods for Copper in Water," "Test Method A − Atomic Absorption, Direct" & "Test Method C − Atomic Absorption, Graphite Furnace," approved 2007, referenced in Section 611.611.

ASTM Method D2036-98 A or B, "Standard Test Methods for Cyanide in Water," "Test Method A − Total Cyanides after Distillation" & "Test Method B − Cyanides Amenable to Chlorination by Difference," approved 1998, referenced in Section 611.611.

ASTM Method D2036-06 A or B, "Standard Test Methods for Cyanide in Water," "Test Method A − Total Cyanides after Distillation" & "Test Method B − Cyanides Amenable to

Chlorination by Difference," approved 2006, referenced in Section 611.611.

ASTM Method D2459-72, "Standard Test Method for Gamma Spectrometry in Water," approved July 28, 1972, discontinued 1988, referenced in Section 611.720.

ASTM Method D2460-90, "Standard Test Method for Radionuclides of Radium in Water," approved 1990, referenced in Section 611.720.

ASTM Method D2460-07, "Standard Test Method for Radionuclides of Radium in Water," approved 2007, referenced in Section 611.720.

ASTM Method D2907-91, "Standard Test Methods for Microquantities of Uranium in Water by Fluorometry," "Test Method A − Direct Fluorometric" & "Test Method B − Extraction," approved June 15, 1991, referenced in Section 611.720.

ASTM Method D2972-97 B or C, "Standard Test Methods for Arsenic in Water," "Test Method B − Atomic Absorption, Hydride Generation" & "Test Method C − Atomic Absorption, Graphite Furnace," approved 1997, referenced in Section 611.611.

ASTM Method D2972-03 B or C, "Standard Test Methods for Arsenic in Water," "Test Method B − Atomic Absorption, Hydride Generation" & "Test Method C − Atomic Absorption, Graphite Furnace," approved 2003, referenced in Section 611.611.

ASTM Method D2972-08 B or C, "Standard Test Methods for Arsenic in Water," "Test Method B − Atomic Absorption, Hydride Generation" & "Test Method C − Atomic Absorption, Graphite Furnace," approved 2008, referenced in Section 611.611.

ASTM Method D3223-97, "Standard Test Method for Total Mercury in Water," approved 1997, referenced in Section 611.611.

ASTM Method D3223-02, "Standard Test Method for Total Mercury in Water," approved 2002, referenced in Section 611.611.

ASTM Method D3454-97, "Standard Test Method for Radium-226 in Water," approved 1997, referenced in Section 611.720.

ASTM Method D3454-05, "Standard Test Method for Radium-226 in Water," approved 2005, referenced in Section 611.720.

ASTM Method D3559-96 D, "Standard Test Methods for Lead in Water," "Test Method D − Atomic Absorption, Graphite Furnace," approved August 6, 1990, referenced in Section 611.611.

ASTM Method D3559-03 D, "Standard Test Methods for Lead in Water," "Test Method D − Atomic Absorption, Graphite Furnace," approved 2003, referenced in Section 611.611.

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ASTM Method D3645-97 B, "Standard Test Methods for Beryllium in Water," "Method B − Atomic Absorption, Graphite Furnace," approved 1997, referenced in Section 611.611.

ASTM Method D3645-03 B, "Standard Test Methods for Beryllium in Water," "Method B − Atomic Absorption, Graphite Furnace," approved 2003, referenced in Section 611.611.

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ASTM Method D3697-07, "Standard Test Method for Antimony in Water," approved 2007, referenced in Section 611.611.

ASTM Method D3859-98 A, "Standard Test Methods for Selenium in Water," "Method A − Atomic Absorption, Hydride Method," approved 1998, referenced in Section 611.611.

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ASTM Method D4107-08, "Standard Test Method for Tritium in Drinking Water," approved 2008 (reapproved 2002), referenced in Section 611.720.

ASTM Method D4327-97, "Standard Test Method for Anions in Water by Ion Chromatography," approved 1997, referenced in Section 611.611.

ASTM Method D4327-03, "Standard Test Method for Anions in Water by Ion Chromatography," approved 2003, referenced in Section 611.611.

ASTM Method D4785-93, "Standard Test Method for Low-Level Iodine-131 in Water," approved 1993, referenced in Section 611.720.

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ASTM Method D6581-00, "Standard Test Method for Bromate, Bromide, Chlorate, and Chlorite in Drinking Water by Chemically Suppressed Ion Chromatography," approved 2000, referenced in Section 611.381.

ASTM Method D6581-08 A and B, "Standard Test Method for Bromate, Bromide, Chlorate, and Chlorite in Drinking Water by Suppressed Ion Chromatography," "Test Method A − Chemically Suppressed Ion Chromatography" & "Test Method B − Electrolytically Suppressed Ion Chromatography," approved 2008, referenced in Section 611.381.

ASTM Method D6919-03, "Standard Test Method for Determination of Dissolved Alkali and Alkaline Earth Cations and Ammonium in Water and Wastewater by Ion Chromatography," approved 2003, referenced in Section 611.611.

ASTM Method D6919-09, "Standard Test Method for Determination of Dissolved Alkali and Alkaline Earth Cations and Ammonium in Water and Wastewater by Ion Chromatography," approved 2009, referenced in Section 611.611.

ASTM Method D6888-04, "Standard Test Method for Available Cyanide with Ligand Displacement and Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection," approved 2004, referenced in Section 611.611.

BOARD NOTE: The most recent version of ASTM methods are available for paid download from the ASTM at www.astm.org. Note that the most recent version of an ASTM method may not be the version approved for use by USEPA and incorporated by reference in subsection (b) of this Section.

Bran & Luebbe, 1025 Busch Parkway, Buffalo Grove, IL 60089.

"Fluoride in Water and Wastewater," Industrial Method #129-71W, December 1972 (referred to as "Technicon Methods, Method #129-71W"). See 40 CFR 141.23(k)(1), footnote 11 (2012)~~(2011)~~, referenced in Section 611.611.

"Fluoride in Water and Wastewater," #380-75WE, February 1976 (referred to as "Technicon Methods, Method #380-75WE"). See 40 CFR 141.23(k)(1), footnote 11 (2012)~~(2011)~~, referenced in Section 611.611.

Charm Sciences, Inc., 659 Andover St., Lawrence, MA 01843-1032:

"Charm E*Colite Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Drinking Water," January 9, 1998 (referred to as "E*Colite Test"), referenced in Section 611.802 (also available from USEPA, Water Resource Center).

CPI International, Inc., 5580 Skylane Blvd., Santa Rosa, CA 95403 (800-878-7654 /fax: 707-545-7901/Internet address: www.cpiinternational.com).

"Colitag® Product as a Test for Detection and Identification of Coliforms and E. coli Bacteria in Drinking Water and Source Water as Required in National Primary Drinking Water Regulations," August 2001, referenced in Section 611.526.

"Modified Colitag™ Test Method for Simultaneous Detection of E. coli and other Total Coliforms in Water (ATP D05-0035)," August 2009 (referred to as "Modified Colitag™ Method"), referenced in Sections 611.526 and 611.802. See also NEMI.

EMD Chemicals Inc. (an affiliate of Merck KGgA, Darmstadt, Germany), 480 S. Democrat Road, Gibbstown, NJ 08027–1297. (800-222-0342/e-mail:adellenbusch@emscience.com).

"Chromocult® Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters," November 2000 referred to as "Chromocult® Method, Version 1.0, referenced in Sections 611.526 and 611.802.

"Readycult Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters," November 2000 (referred to as Readycult® 2000), Version 1.0, referenced in Section 611.526.

"Readycult Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters," Version 1.1, January 2007 (referred to as Readycult® 2007), referenced in Section 611.802.

Georgia Tech Research Institute, Robert Rosson, 925 Dalney Road, Atlanta, GA 30332 (404-407-6339).

"The Determination of Radium-226 and Radium-228 in Drinking Water by Gamma-ray Spectrometry Using HPGE or Ge(Li) Detectors," Revision 1.2, December 2004 (called "Georgia Radium Method"), referenced in Section 611.720.

Great Lakes Instruments, Inc., 8855 North 55th Street, Milwaukee, WI 53223.

GLI Method 2, "Turbidity," Nov. 2, 1992, referenced in Section 611.531.

H&E Testing Laboratory, 221 State Street, Augusta, ME 04333 (207-287-2727).

Method ME355.01, Revision 1, "Determination of Cyanide in Drinking Water by GC/MS Headspace Analysis," May 2009, referenced in Section 611.611. See also NEMI.

The Hach Company, P.O. Box 389, Loveland, CO 80539-0389 (800-227-4224/Internet address: www.hach.com).

"Lead in Drinking Water by Differential Pulse Anodic Stripping Voltammetry," Method 1001, August 1999, referenced in Section 611.611.

"Determination of Turbidity by Laser Nephelometry," January 2000, Revision 2.0 (referred to as "Hach FilterTrak Method 10133"), referenced in Section 611.531.

"Total Coliforms and E. coli Membrane Filtration Method with m-ColiBlue24® Broth," Method No. 10029, Revision 2, August 17, 1999 (referred to as "m-ColiBlue24 Test"), referenced in Section 611.802 (also available from USEPA, Water Resource Center).

"Fluoride, USEPA SPADNS 2 Method 10225," revision 2.0, January 2011 (referred to as "Hach SPADNS 2 Method 10225"), referenced in Section 611.611.

"Hach Company TNTplus 835/836 Nitrate Method 10206 − Spectrophotometric Measurement of Nitrate in Water and Wastewater," revision 2.0, January 2011 (referred to as "Hach TNTplus 835/836 Method 10206"), referenced in Section 611.611.

IDEXX Laboratories, Inc., One IDEXX Drive, Westbrook, Maine 04092 (800-321-0207).

"IDEXX SimPlate TM HPC Test Method for Heterotrophs in Water," November 2000 (referred to as "SimPlate method"), referenced in Section 611.531.

Industrial Test Systems, Inc., 1875 Langston St., Rock Hill, SC 29730.

Method D99-003, Revision 3.0, "Free Chlorine Species ($HOCl^-$ and OCl^-) by Test Strip," November 21, 2003 (referred to as "ITS Method D99-003"), referenced in Section 611.381.

Lachat Instruments, 6645 W. Mill Rd., Milwaukee, WI 53218 (414-358-4200).

"Digestion and distillation of total cyanide in drinking and wastewaters using MICRO DIST and determination of cyanide by flow injection analysis," Revision 2.1, November 30, 2000 (referred to as "QuikChem Method 10-204-00-1-X"), referenced in Section 611.611.

Leck Mitchell, PhD, PE, 656 Independence Valley Dr., Grand Junction, CO 81507. See also NEMI.

Mitchell Method M5271, "Determination of Turbidity by Laser Nephelometry," March 2009, referenced in Section 611.531.

Mitchell Method M5331, "Determination of Turbidity by LED Nephelometry," March 2009, referenced in Section 611.531.

Millipore Corporation, Technical Services Department, 80 Ashby Road, Milford, MA 01730 (800-654-5476).

Colisure Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia Coli in Drinking Water, February 28, 1994 (referred to as "Colisure Test"), referenced in Section 611.526.

NCRP. National Council on Radiation Protection, 7910 Woodmont Ave., Bethesda, MD (301-657-2652).

NCRP Report Number 22, "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," NCRP Report Number 22, June 5, 1959, referenced in Section 611.101.

NEMI. National Environmental Method Index (on-line at www.nemi.gov).

AMI Turbiwell Method, "Continuous Measurement of Turbidity Using a SWAN AMI Turbiwell Turbidimeter," August 2009. See also SWAN Analytische Instrumente AG.

Method ME355.01, Revision 1, "Determination of Cyanide in Drinking Water by GC/MS Headspace Analysis," May 2009, referenced in Section 611.611. See also H&E Testing Laboratory.

Mitchell Method M5271, "Determination of Turbidity by Laser Nephelometry," March 2009, referenced in Section 611.531. See also Leck Mitchell, PhD, PE.

Mitchell Method M5331, "Determination of Turbidity by LED Nephelometry," March 2009, referenced in Section 611.531. See also Leck Mitchell, PhD, PE

Modified Colitag™ Method, "Modified Colitag™ Test Method for Simultaneous Detection of E. coli and other Total Coliforms in Water (ATP D05-0035)," August 2009, referenced in Sections 611.526 and 611.802. See also CPI International, Inc.

Orion Method AQ4500, "Determination of Turbidity by LED Nephelometry," May 2009, referenced in Section 611.531. See also Thermo Scientific.

Palintest ChloroSense, "Measurement of Free and Total Chlorine in Drinking Water by Palintest ChloroSense," September 2009 (referred to as "Palintest ChloroSense"), referenced in Sections 611.381 and 611.531. See also Palintest.

"Systea Easy (1-Reagent) Nitrate Method," referenced in Section 611.611. See also Systea Scientific, LLC.

NSF. National Sanitation Foundation International, 3475 Plymouth Road, PO Box 130140, Ann Arbor, Michigan 48113-0140 (734-769-8010).

NSF Standard 61, section 9, November 1998, referenced in Sections 611.126 and 611.356.

NTIS. National Technical Information Service, U.S. Department of Commerce, 5301 Shawnee Road, Alexandria, VA 22312 (703-605-6000 or 800-553-6847, www.ntis.gov)~~5285 Port Royal Road, Springfield, VA 22161 (703-487-4600 or 800-553-6847)~~.

Dioxin and Furan Method 1613, Revision B, "Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS," October 1994, Revision B, EPA 821/B-94/005,

Doc. No. 94-104774, referenced in Section 611.645. See also USEPA, NSCEP.

Kelada 01, "Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, and Thiocyanate," Revision 1.2, August 2001, EPA 821/B-01-009, referenced in Section 611.611.

"Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," NBS (National Bureau of Standards) Handbook 69, as amended August 1963, U.S. Department of Commerce, referenced in Section 611.330.

"Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions," H.L. Krieger and S. Gold, EPA-R4-73-014, May 1973, Doc. No. PB222-154/7BA, referenced in Section 611.720.

USEPA Asbestos Method 100.1, "Analytical Method for Determination of Asbestos Fibers in Water," EPA 600/4-83-043, September 1983, Doc. No. PB83-260471, referenced in Section 611.611. See also USEPA, NSCEP.

USEPA Asbestos Method 100.2, "Determination of Asbestos Structures over 10-mm in Length in Drinking Water," EPA 600/R-94-134, June 1994, Doc. No. PB94-201902, referenced in Section 611.611. See also USEPA, NSCEP.

USEPA Environmental Inorganic Methods, "Methods for the Determination of Inorganic Substances in Environmental Samples," August 1993, EPA 600/R-93-100, Doc. No. PB94-121811, referenced in Sections 611.381, 611.531, and 611.611. (Methods 180.1 (rev. 2.0), 300.0 (rev. 2.1), 335.4 (rev. 1.0), 353.2 (rev. 2.0), and 365.1 (rev. 2.0) only.) See also USEPA, NSCEP.

USEPA Environmental Metals Methods, "Methods for the Determination of Metals in Environmental Samples − Supplement I," May 1994, EPA 600/R-94-111, Doc. No. PB95-125472, referenced in Sections 611.611, 611.612, and 611.720. (Methods

200.7 (rev. 4.4), 200.8 (rev. 5.3), 200.9 (rev. 2.2), and 245.1 (rev. 3.0) only.) See also USEPA, NSCEP.

USEPA Inorganic Methods, "Methods for Chemical Analysis of Water and Wastes," March 1983, EPA 600/4-79-020, Doc. No. PB84-128677, referenced in Section 611.611. (Methods 150.1, 150.2, and 245.2 only.) See also USEPA, NSCEP.

USEPA Interim Radiochemical Methods, "Interim Radiochemical Methodology for Drinking Water," EPA 600/4-75-008 (revised), Doc. No. PB253258, March 1976, referenced in Section 611.720.

USEPA OGWDW Methods, Method 326.0, Revision 1.0, "Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography Incorporating the Addition of a Suppressor Acidified Postcolumn Reagent for Trace Bromate Analysis," June 2002, EPA 815/R-03/007, Doc. No. PB2003-107402, referenced in Sections 611.381 and 611.382. See also USEPA, NSCEP and USEPA, OGWDW.

USEPA Organic and Inorganic Methods, "Methods for the Determination of Organic and Inorganic Compounds in Drinking Water, Volume 1," August 2000, EPA 815/R-00/014, Doc. No. PB2000-106981, referenced in Section 611.381. (For methods 300.1 (rev. 1.0) and 321.8 (rev. 1.0).) See also USEPA, NSCEP.

USEPA Organic Methods, "Methods for the Determination of Organic Compounds in Drinking Water," December 1988 (revised July 1991), EPA 600/4-88/039, Doc. No. PB91-231480, referenced in Sections 611.645 and 611.648 (Methods 508A (rev. 1.0) and 515.1 (rev. 4.0) only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement I," July 1990, EPA 600/4-90/020, Doc. No. PB91-146027, referenced in Section 611.645 (Methods 547, 550, and 550.1 only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement II," August 1992, EPA 600/R-92/129, Doc. No. PB92-207703, referenced in Sections 611.381 and 611.645. (Methods 548.1 (rev. 1.0), 552.1 (rev. 1.0), and 555 (rev. 1.0) only); and "Methods for the Determination of Organic Compounds in Drinking

Water − Supplement III," August 1995, EPA 600/R-95/131, Doc. No. PB95-261616, referenced in Sections 611.381, 611.645, and 611.648 (Methods 502.2 (rev. 2.1), 504.1 (rev. 1.1), 505 (rev. 2.1), 506 (rev. 1.1), 507 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 515.2 (rev. 1.1), 524.2 (rev. 4.1), 525.2 (rev. 2.0), 531.1 (rev. 3.1), 551.1 (rev. 1.0), and 552.2 (rev. 1.0) only.) See also USEPA, EMSL and USEPA, NSCEP.

USEPA Radioactivity Methods, "Prescribed Procedures for Measurement of Radioactivity in Drinking Water," EPA 600/4-80/032, August 1980, Doc. No. PB80-224744, referenced in Section 611.720 (Methods 900.0, 901.0, 901.1, 902.0, 903.0, 903.1, 904.0, 905.0, 906.0, 908.0, 908.1). See also USEPA, NSCEP.

USEPA Radiochemical Analyses, "Radiochemical Analytical Procedures for Analysis of Environmental Samples," March 1979, Doc. No. EMSL LV 053917, referenced in Section 611.720. (Pages 1-5, 19-32, 33-48, 65-73, 87-91, and 92-95 only.)

USEPA Radiochemistry Procedures, "Radiochemistry Procedures Manual," EPA 520/5-84-006, August 1984, Doc. No. PB84-215581 (referred to as ""), referenced in Section 611.720. (Methods 00-01, 00-02, 00-07, H-02, Ra-03, Ra-04, Ra-05, Sr-04 only.)

USEPA Technical Notes, "Technical Notes on Drinking Water Methods," EPA 600/R-94/173, October 1994, Doc. No. PB95-104766, referenced in Sections 611.531, 611.611, and 611.645. See also USEPA, NSCEP.

BOARD NOTE: USEPA made the following assertion with regard to this reference at 40 CFR 141.23(k)(1) and 141.24(e) and (n)(11) (2012)~~(2011)~~: "This document contains other analytical test procedures and approved analytical methods that remain available for compliance monitoring until July 1, 1996." Also available online at http://nepis.epa.gov/EPA/html/Pubs/pubtitleORD.htm under the document designation "600R94173."

New Jersey Department of Environment, Division of Environmental Quality, Bureau of Radiation and Inorganic Analytical Services, 9 Ewing Street, Trenton, NJ 08625.

"Determination of Radium 228 in Drinking Water," August 1990 (referred to as "New Jersey Radium Method"), referenced in Section 611.720.

New York Department of Health, Radiological Sciences Institute, Center for Laboratories and Research, Empire State Plaza, Albany, NY 12201.

"Determination of Ra-226 and Ra-228 (Ra-02)," January 1980, Revised June 1982 (referred to as "New York Radium Method"), referenced in Section 611.720.

Palintest, Ltd., 21 Kenton Lands Road, P.O. Box 18395, Erlanger, KY (800-835-9629).

Palintest Method 1001, "Lead in Drinking Water by Differential Pulse Anodic Stripping Voltammetry," Method 1001, August 1999, referenced in Section 611.611.

Palintest ChloroSense, "Measurement of Free and Total Chlorine in Drinking Water by Palintest ChloroSense," September 2009, referenced in Sections 611.381 and 611.531. See also NEMI.

Standard Methods Online, available online from the Standard Methods Organization at www.standardmethods.org.

Method 3112 B-09, Metals by Cold-Vapor Atomic Absorption Spectrometry, Cold-Vapor Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 3113 B-04, Metals by Electrothermal Atomic Absorption Spectrometry, Electrothermal Atomic Absorption Spectrometric Method, referenced in Sections 611.611 and 611.612.

Method 3114 B-04, Metals by Hydride Generation/Atomic Absorption Spectrometry, Manual Hydride Generation/Atomic Absorption Spectrometric Method, referenced in Section 611.611.

Method 6610 B-04, Carbamate Pesticides, High-Performance Liquid Chromatographic Method, referenced in Section 611.645.

Method 9230 B-04, Fecal Streptococcus and Enterococcus Groups, Multiple Tube Techniques, referenced in Section 611.802.

BOARD NOTE: Where, in appendix A to subpart C of 40 CFR 141 (2012)~~(2011)~~, USEPA has authorized use of an approved alternative method from Standard Methods Online, and that version of the method appears also in Standard Methods, 21st ed., the Board cites only to Standard Methods, 21st ed. for that method. The methods that USEPA listed as available from Standard Methods Online, and which are listed above as in Standard Methods, 21st edition, are the following: 4500-P E-99 and 4500-P F-99; (for orthophosphate); 4500-SO_4^{-2} C-97, 4500-SO_4^{-2} D-97, 4500-SO_4^{-2} E-97, and 4500-SO_4^{-2} F-97 (for sulfate); 6640 B-01 (for 2,4-D, 2,4,5-TP (silvex) (dalapon, dinoseb, pentachlorophenol, and picloram); 5561 B-00 (for glyphosate); and 9223 B-97 (for E. coli). Since each method is the same version from both sources, the Board views a copy from Standard Methods Online as equivalent to a copy from Standard Methods Online, even though the Board does not also cite to Standard Methods Online. The Board intends that use of the version of the method that is incorporated by reference is acceptable from either source.

SWAN Analytische Instrumente AG, Studbachstrasse 13, CH-8340, Hinwil, Switzerland.

AMI Turbiwell Method, "Continuous Measurement of Turbidity Using a SWAN AMI Turbiwell Turbidimeter," August 2009, referenced in Section 611.531. See also NEMI.

Syngenta Crop Protection, Inc., 410 Swing Road, Post Office Box 18300, Greensboro, NC 27419 (336-632-6000).

"Atrazine in Drinking Water by Immunoassay," February 2001 (referred to as "Syngenta AG-625"), referenced in Section 611.645.

Systea Scientific LLC, 900 Jorie Blvd., Suite 35, Oak Brook, IL 60523.

Systea Easy (1-Reagent), "Systea Easy (1-Reagent) Nitrate Method," February 2009, referenced in Section 611.611. See also NEMI.

Thermo Scientific, 166 Cummings Center, Beverly, MA 01915 (www.thermo.com).

Orion Method AQ4500, "Determination of Turbidity by LED Nephelometry," May 2009, referenced in Section 611.531. See also NEMI.

USDOE, EML. United States Department of Energy, Environmental Measurements Laboratory, U.S. Department of Energy, 376 Hudson Street, New York, NY 10014-3621.

"EML Procedures Manual," HASL 300, 27th Edition, Volume 1, 1990 (referred to as "EML Procedures Manual (27th ed.)"), referenced in Section 611.720.

"EML Procedures Manual," HASL 300, 28th ed., 1997 (referred to as "EML Procedures Manual (28th ed.)"), referenced in Section 611.720.

USEPA, EMSL. United States Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, OH 45268 (513-569-7586).

USEPA Interim Radiochemical Methods, "Interim Radiochemical Methodology for Drinking Water," EPA 600/4-75/008 (revised), March 1976, referenced in Section 611.720. See also NTIS.

USEPA Organic Methods, "Methods for the Determination of Organic Compounds in Drinking Water," December 1988 (revised

July 1991), EPA 600/4-88/039, referenced in Sections 611.645 and 611.648 (Methods 508A (rev. 1.0) and 515.1 (rev. 4.0) only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement I," July 1990, EPA 600/4-90/020, referenced in Sections 611.645 and 611.648 (Methods 547, 550, and 550.1 only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement II," August 1992, EPA 600/R-92/129, referenced in Sections 611.381 and 611.645 (Methods 548.1 (rev. 1.0), 552.1 (rev. 1.0), and 555 (rev. 1.0) only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement III," August 1995, EPA 600/R-95/131, referenced in Sections 611.381, 611.645, and 611.648 (Methods 502.2 (rev. 2.1), 504.1 (rev. 1.1), 505 (rev. 2.1), 506 (rev. 1.1), 507 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 515.2 (rev. 4.1), 524.2 (rev. 4.1), 525.2 (rev. 2.0), 551.1 (rev. 1.0), and 552.2 (rev. 1.0) only). See also NTIS and USEPA, NSCEP.

"Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions," referenced in Section 611.720. See also NTIS.

USEPA, NSCEP. United States Environmental Protection Agency, National Service Center for Environmental Publications, P.O. Box 42419, Cincinnati, OH 45242-0419 (accessible on-line and available by download from http://www.epa.gov/nscep/).

Dioxin and Furan Method 1613, Revision B, "Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS," October 1994, EPA 821/B-94/005, referenced in Section 611.645. See also NTIS.

Guidance Manual for Filtration and Disinfection, "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources," March 1991, EPA 570/3-91-001, referenced in Section 611.111.

USEPA Asbestos Method 100.1, "Analytical Method for Determination of Asbestos Fibers in Water," September 1983, EPA 600/4-83-043, referenced in Section 611.611. See also NTIS.

USEPA Asbestos Method 100.2, "Determination of Asbestos Structures over 10-mm in Length in Drinking Water," June 1994, EPA 600/R-94-134, referenced in Section 611.611. See also NTIS.

USEPA Environmental Inorganic Methods, "Methods for the Determination of Inorganic Substances in Environmental Samples," August 1993, EPA 600/R-93-100, referenced in Sections 611.381, 611.531, and 611.611. (Methods 180.1 (rev. 2.0), 300.0 (rev. 2.1), 335.4 (rev. 1.0), 353.2 (rev. 2.0), and 365.1 (rev. 2.0) only.) See also NTIS.

USEPA Environmental Metals Methods, "Methods for the Determination of Metals in Environmental Samples − Supplement I," May 1994, EPA 600/R-94-111, referenced in Sections 611.611, 611.612, and 611.720. (Methods 200.7 (rev. 4.4), 200.8 (rev. 5.3), 200.9 (rev. 2.2), and 245.1 (rev. 3.0) only.) See also NTIS.

USEPA Inorganic Methods, "Methods for Chemical Analysis of Water and Wastes," March 1983, EPA 600/4-79-020, referenced in Section 611.611. (Methods 150.1, 150.2, and 245.2 only.) See also NTIS.

USEPA OGWDW Methods, Method 302.0, "Determination of Bromate in Drinking Water Using Two-Dimensional Ion Chromatography with Suppressed Conductivity Detection," September 2009, EPA 815/B-09/014, referenced in Sections 611.381 and 611.382. See also USEPA, OGWDW.

USEPA OGWDW Methods, Method 317.0, rev. 2.0, "Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography with the Addition of a Postcolumn Reagent for Trace Bromate Analysis," July 2001, EPA 815/B-01/001, referenced in Sections 611.381 and 611.382. See also USEPA, OGWDW.

USEPA OGWDW Methods, Method 326.0, rev. 1.0, "Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography Incorporating the Addition of a Suppressor Acidified Postcolumn Reagent for Trace Bromate Analysis," June 2002, EPA 815/R-03/007, referenced in Sections 611.381 and 611.382. See also NTIS and USEPA, OGWDW.

USEPA OGWDW Methods, Method 327.0, rev. 1.1, "Determination of Chlorine Dioxide and Chlorite Ion in Drinking Water Using Lissamine Green B and Horseradish Peroxidase with Detection by Visible Spectrophotometry," May 2005, EPA 815/R-05/008, referenced in Sections 611.381 and 611.531. See also USEPA, OGWDW.

USEPA OGWDW Methods, Method 334.0, "Determination of Residual in Drinking Water Using an On-line Chlorine Analyzer," August 2009, EPA 815/B-09/013, referenced in Section 611.531. See also USEPA, OGWDW.

USEPA OGWDW Methods, Method 523, ver. 1.0, "Determination of Triazine Pesticides and Other Degradates in Drinking Water by Gas Chromatography/Mass Spectrometry (GC/MS)," February 2011, EPA 815/R-11/002, referenced in Section 611.645. See also USEPA, OGWDW.

USEPA OGWDW Methods, Method 531.2, rev. 1.0, "Measurement of N-methylcarbamoyloximes and N-methylcarbamates in Water by Direct Aqueous Injection HPLC with Postcolumn Derivatization," September 2001, EPA 815/B-01/002 (document file name "met531_2.pdf"), referenced in Section 611.645. See also USEPA, OGWDW.

USEPA OGWDW Methods, Method 552.3, rev. 1.0, "Determination of Haloacetic Acids and Dalapon in Drinking Water by Liquid-Liquid Microextraction, Derivatization, and Gas Chromatography with Electron Capture Detection," July 2003, EPA 815/B-03/002, referenced in Sections 611.381 and 611.645.

USEPA OGWDW Methods, Method 557, "Determination of Haloacetic Acids, Bromate, and Dalapon in Drinking Water by Ion Chromatography Electrospray Ionization Tandem Mass Spectrometry," July 2003, EPA 815/B-03/002, referenced in Sections 611.381, 611.382, and 611.645. See also USEPA, OGWDW.

USEPA OGWDW Methods, Method 1622 (01), "Cryptosporidium in Water by Filtration/IMS/FA," April 2001, EPA 821/R-01/026, referenced in Section 611.1007. See also USEPA, OGWDW.

USEPA Organic and Inorganic Methods, "Methods for the Determination of Organic and Inorganic Compounds in Drinking Water, Volume 1," August 2000, EPA 815/R-00/014, referenced in Section 611.381. (Methods 300.1 (rev. 1.0) and 321.8 (rev. 1.0) only.) See also NTIS.

USEPA Organic Methods, "Methods for the Determination of Organic Compounds in Drinking Water," December 1988, revised July 1991, EPA 600/4-88/039, referenced in Sections 611.645 and 611.648 (Methods 508A (rev. 1.0) and 515.1 (rev. 4.0) only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement I," July 1990, EPA 600/4-90/020, referenced in Section 611.645 and 611.648 (Methods 547, 550, and 550.1 only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement II," August 1992, EPA 600/R-92/129, referenced in Sections 611.381 and 611.645 (Methods 548.1 (rev. 1.0), 552.1 (rev. 1.0), and 555 (rev. 1.0) only); "Methods for the Determination of Organic Compounds in Drinking Water − Supplement III," August 1995, EPA 600/R-95/131, referenced in Sections 611.381, 611.645, and 611.648 (Methods 502.2 (rev. 2.1), 504.1 (rev. 1.1), 505 (rev. 2.1), 506 (rev. 1.1), 507 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 515.2 (rev. 4.1), 524.2 (rev. 4.1), 525.2 (rev. 2.0), 531.1 (rev. 3.1), 551.1 (rev. 1.0), and 552.2 (rev. 1.0) only). See also NTIS and USEPA, EMSL.

USEPA Radioactivity Methods, "Prescribed Procedures for Measurement of Radioactivity in Drinking Water," August 1980, EPA 600/4-80/032, referenced in Section 611.720. (For methods 900.0, 901, 901.1, 902, 903, 903.1, 904, 905, 906, 908, 908.1 only.) See also NTIS.

USEPA Technical Notes, "Technical Notes on Drinking Water Methods," October 1994, EPA 600/R-94/173, referenced in Sections 611.531, 611.611, and 611.645. See also NTIS.

BOARD NOTE: USEPA made the following assertion with regard to this reference at 40 CFR 141.23(k)(1) and 141.24(e) and (n)(11) (2012)~~(2011)~~: "This document contains other analytical test procedures and approved analytical methods that remain available for compliance monitoring until July 1, 1996." Also available online at http://nepis.epa.gov/EPA/html/Pubs/pubtitleORD.htm under the document designation "600R94173."

USEPA, OGWDW. United States Environmental Protection Agency, Office of Ground Water and Drinking Water (accessible on-line and available by download from http://www.epa.gov/safewater/methods/).

USEPA OGWDW Methods, Method 302.0, "Determination of Bromate in Drinking Water Using Two-Dimensional Ion Chromatography with Suppressed Conductivity Detection," September 2009, EPA 815/B-09/014, referenced in Section 611.381. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 317.0, rev. 2.0, "Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography with the Addition of a Postcolumn Reagent for Trace Bromate Analysis," USEPA, July 2001, EPA 815/B-01/001, referenced in Section 611.381. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 326.0, rev. 1.0, "Determination of Inorganic Oxyhalide Disinfection By-Products in Drinking Water Using Ion Chromatography Incorporating the

Addition of a Suppressor Acidified Postcolumn Reagent for Trace Bromate Analysis," USEPA, June 2002, EPA 815/R-03/007, referenced in Section 611.381. See also NTIS and USEPA, NSCEP.

USEPA OGWDW Methods, Method 327.0, rev. 1.1, "Determination of Chlorine Dioxide and Chlorite Ion in Drinking Water Using Lissamine Green B and Horseradish Peroxidase with Detection by Visible Spectrophotometry," USEPA, May 2005, EPA 815/R-05/008, referenced in Sections 611.381 and 611.531. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 334.0, "Determination of Residual in Drinking Water Using an On-line Chlorine Analyzer," USEPA, August 2009, EPA 815/B-09/013, referenced in Section 611.531. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 515.4, rev. 1.0, "Determination of Chlorinated Acids in Drinking Water by Liquid-Liquid Microextraction, Derivatization and Fast Gas Chromatography with Electron Capture Detection," April 2000, EPA 815/B-00/001 (document file name "met515_4.pdf"), referenced in Section 611.645.

USEPA OGWDW Methods, Method 523, ver. 1.0, "Determination of Triazine Pesticides and Other Degradates in Drinking Water by Gas Chromatography/Mass Spectrometry (GC/MS)," February 2011, EPA 815/R-11/002, referenced in Section 611.645. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 524.3, rev. 1.0, "Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry," June 2009, EPA 815/B-09/009 (referred to as "Method 524.3 (rev. 1.0)"), referenced in Sections 611.381 and 611.645.

USEPA OGWDW Methods, Method 531.2, rev. 1.0, "Measurement of N-methylcarbamoyloximes and N-methylcarbamates in Water by Direct Aqueous Injection HPLC

with Postcolumn Derivatization," September 2001, EPA 815/B-01/002 (document file name "met531_2.pdf"), referenced in Section 611.645. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 536, ver. 1.0, "Determination of Triazine Pesticides and Other Degradates in Drinking Water by Liquid Chromatography Electrospray Ionization Tandem Mass Spectrometry (LC/ESI-MS/MS)," October 2007, EPA 815/R-07/002, referenced in Section 611.645.

USEPA OGWDW Methods, Method 552.3, rev. 1.0, "Determination of Haloacetic Acids and Dalapon in Drinking Water by Liquid-liquid Microextraction, Derivatization, and Gas Chromatography with Electron Capture Detection," USEPA, July 2003, EPA 815/B-03/002, referenced in Sections 611.381 and 611.645.

USEPA OGWDW Methods, Method 557, "Determination of Haloacetic Acids, Bromate, and Dalapon in Drinking Water by Ion Chromatography Electrospray Ionization Tandem Mass Spectrometry," July 2003, EPA 815/B-03/002, referenced in Sections 611.381 and 611.645. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 1622 (05), "Method 1622: Cryptosporidium in Water by Filtration/IMS/FA," December 2005, EPA 815/R-05/001, referenced in Sections 611.1004 and 611.1007.

USEPA OGWDW Methods, Method 1622 (01), "Method 1622: Cryptosporidium in Water by Filtration/IMS/FA," April 2001, EPA 821/R-01/026, referenced in Section 611.1007. See also USEPA, NSCEP.

USEPA OGWDW Methods, Method 1622 (99), "Method 1622: Cryptosporidium in Water by Filtration/IMS/FA," April 1999, EPA 821/R-99/001, referenced in Section 611.1007.

USEPA OGWDW Methods, Method 1623 (05), "Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA,"

December 2005, EPA 815/R-05/002, referenced in Sections 611.1004 and 611.1007.

USEPA OGWDW Methods, Method 1623 (01), "Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA," April 2001, EPA 821/R-01/025, referenced in Section 611.1007.

USEPA OGWDW Methods, Method 1623 (99), "Method 1623: Cryptosporidium and Giardia in Water by Filtration/IMS/FA," January 1999, EPA 821/R-99/006, referenced in Section~~Sections~~ 611.1007.

USEPA OGWDW Methods, Method 1623.1, "Method 1623.1: Cryptosporidium and Giardia in Water by Filtration/IMS/FA," January 2012, EPA 8161/R-12/001, referenced in Section 611.1004.

BOARD NOTE: Many of the above-listed documents available from the USEPA, Office of Ground Water and Drinking Water are also listed as available from NTIS.

USEPA, ORD. USEPA, Office of Research and Development, National Exposure Research Laboratory, Microbiological & Chemical Exposure Assessment Research Division (accessible on-line and available by download from http://www.epa.gov/nerlcwww/ordmeth.htm).

USEPA NERL Method 200.5, rev. 4.2, "Determination of Trace Elements in Drinking Water by Axially Viewed Inductively Coupled Plasma − Atomic Emission Spectrometry," October 2003, EPA 600/R-06/115, referenced in Sections 611.611 and 611.612.

USEPA NERL Method 415.3, rev. 1.1, "Determination of Total Organic Carbon and Specific UV Absorbance at 254 nm in Source Water and Drinking Water," February 2005, EPA 600/R-05/055, referenced in Section 611.381.

USEPA NERL Method 415.3, rev. 1.2, "Determination of Total Organic Carbon and Specific UV Absorbance at 254 nm in Source

Water and Drinking Water," February 2005, EPA 600/R-09/122, referenced in Section 611.381.

USEPA NERL Method 525.3, ver. 1.0, "Determination of Total Semivolatile Organic Chemicals in Drinking Water by Solid Phase Extraction and Capillary Column Gas Chromatography/Mass Spectrometry (GC/MS)," February 2012, EPA 600/R-12/010, referenced in Section 611.645.

USEPA NERL Method 549.2, rev. 1.0, "Determination of Diquat and Paraquat in Drinking Water by Liquid-Solid Extraction and High Performance Liquid Chromatography with Ultraviolet Detection," June 1997.

USEPA Water Resource Center (RC-4100T), 1200 Pennsylvania Avenue, NW, Washington, DC 20460:

E*Colite Test, "Charm E*Colite Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Drinking Water," January 9, 1998, referenced in Section 611.802. See also Charm Sciences, Inc.

m-ColiBlue24 Test, "Total Coliforms and E. coli Membrane Filtration Method with m-ColiBlue24® Broth," Method No. 10029, rev. 2, August 17, 1999, referenced in Section 611.802. See also The Hach Company.

USEPA Method 1600, "EPA Method 1600: Enterococci in Water by Membrane Filtration Using Membrane-Enterococcus Indoxyl-b-D-Glucoside Agar (mEI)," September 2002, EPA 821/R-02/022 is an approved variation of Standard Methods, Method 9230 C, "Fecal Streptococcus and Enterococcus Groups, Membrane Filter Techniques" (which has not itself been approved for use by USEPA) (accessible on-line and available by download from http://www.epa.gov/nerlcwww/1600sp02.pdf), referenced in Section 611.802.

USEPA Method 1601, "Method 1601: Male-specific (F^+) and Somatic Coliphage in Water by Two-step Enrichment Procedure,"

April 2001, EPA 821/R-01/030 (accessible on-line and available by download from http://www.epa.gov/nerlcwww/1601ap01.pdf), referenced in Section 611.802.

USEPA Method 1602, "Method 1602: Male-specific (F^+) and Somatic Coliphage in Water by Single Agar Layer (SAL) Procedure," April 2001, EPA 821/R-01/029 (accessible on-line and available by download from http://www.epa.gov/nerlcwww/1602ap01.pdf), referenced in Section 611.802.

USEPA Method 1604, "Method 1604: Total Coliforms and Escherichia coli in Water by Membrane Filtration Using a Simultaneous Detection Technique (MI Medium)," September 2002, EPA 821/R-02/024 (accessible on-line and available by download from http://www.epa.gov/nerlcwww/1604sp02.pdf), referenced in Section 611.802.

USGS. ~~Books and Open-File Reports Section,~~ United States Geological Survey, Federal Center, Box 25286, Denver, CO 80225-0425.

Method~~Methods~~ available upon request by method number from "Methods for Analysis by the U.S. Geological Survey National Water Quality Laboratory − Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments," Open File Report 93-125, 1993~~, or Book 5, Chapter A-1, "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," 3rd ed., Open-File Report 85-495, 1989, as appropriate~~ (referred to as "USGS Methods").

~~I-1030-85, referenced in Section 611.611.~~

~~I-1601-85, referenced in Section 611.611.~~

~~I-1700-85, referenced in Section 611.611.~~

~~I-2598-85, referenced in Section 611.611.~~

I-2601-90, referenced in Section 611.611.

~~I-2700-85, referenced in Section 611.611.~~

~~I-3300-85, referenced in Section 611.611.~~

Methods available upon request by method number from Book 5, Chapter A-1, "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments," 3rd ed., USGS Techniques of Water-Resource Investigation: 05-A1, 1989 (referred to as "USGS Methods").

I-1030-85, referenced in Section 611.611.

I-1601-85, referenced in Section 611.611.

I-1700-85, referenced in Section 611.611.

I-2598-85, referenced in Section 611.611.

I-2700-85, referenced in Section 611.611.

I-3300-85, referenced in Section 611.611.

Methods available upon request by method number from "Methods for Determination of Radioactive Substances in Water and Fluvial Sediments," Chapter A5 in Book 5 of "Techniques of Water-Resources Investigations of the United States Geological Survey," 1977~~1997~~.

R-1110-76, referenced in Section 611.720.

R-1111-76, referenced in Section 611.720.

R-1120-76, referenced in Section 611.720.

R-1140-76, referenced in Section 611.720.

R-1141-76, referenced in Section 611.720.

R-1142-76, referenced in Section 611.720.

R-1160-76, referenced in Section 611.720.

R-1171-76, referenced in Section 611.720.

R-1180-76, referenced in Section 611.720.

R-1181-76, referenced in Section 611.720.

R-1182-76, referenced in Section 611.720.

BOARD NOTE: USGS methods are freely available for download in an electronic format from the USGS Publications Warehouse at pubs.er.usgs.gov/. Sections 611.611 and 611.720 do not distinguish the volume in which each USGS method appears. The distinction as to which volume where a particular method appears is made in this incorporation by reference.

Waters Corporation, Technical Services Division, 34 Maple St., Milford, MA 01757 (800-252-4752 or 508-478-2000, www.waters.com~~508-482-2131, fax: 508-482-3625~~).

"Waters Test Method for Determination of Nitrite/Nitrate in Water Using Single Column Ion Chromatography," Method B-1011, August 1987 (referred to as "Waters Method B-1011"), referenced in Section 611.611.

c) The Board incorporates the following federal regulations by reference:

40 CFR 3.2 (2012)~~(2011)~~ (How Does This Part Provide for Electronic Reporting?), referenced in Section 611.105.

40 CFR 3.3 (2012)~~(2011)~~ (What Definitions Are Applicable to This Part?), referenced in Section 611.105.

40 CFR 3.10 (2012)~~(2011)~~ (What Are the Requirements for Electronic Reporting to EPA?), referenced in Section 611.105.

40 CFR 3.2000 (2012)~~(2011)~~ (What Are the Requirements Authorized State, Tribe, and Local Programs' Reporting Systems Must Meet?), referenced in Section 611.105.

40 CFR 136.3(a) (2012)~~(2011)~~, referenced in Section 611.1004.

Appendix B to 40 CFR 136 (2012)~~(2011)~~, referenced in Sections 611.359, 611.609, and 611.646.

40 CFR 142.20(b)(1) (2012)~~(2011)~~, referenced in Section 611.112.

d) This Part incorporates no later amendments or editions.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART F: MAXIMUM CONTAMINANT LEVELS (MCLs)
AND MAXIMUM RESIDUAL DISINFECTANT LEVELS (MRDLs)

Section 611.300 Old MCLs for Inorganic Chemical Contaminants

a) The old MCLs listed in subsection (b) of this Section for inorganic chemical contaminants (IOCs) apply only to CWS suppliers. Compliance with old MCLs for inorganic chemicals is calculated pursuant to Section 611.612~~, except that analyses and determination of compliance with the 0.05 mg/ℓ MCL for arsenic are to be performed pursuant to Sections 611.600 through 611.611~~.

BOARD NOTE: Formerly derived~~Derived~~ from 40 CFR 141.11(a), this subsection (a) has become an additional State requirement. ~~(2002).~~

b) The following are the old MCLs for IOCs:

Contaminant	Level, mg/ℓ	Additional State Requirement (*)
~~Arsenic, until January 23, 2006~~	0.05	
Iron	1.0	*
Manganese	0.15	*
Zinc	5.	*

BOARD NOTE: Formerly derived~~Derived~~ from 40 CFR 141.11(b), this ~~(2002).~~

~~This~~ subsection (b) ~~will~~ has become an additional State requirement ~~after expiration of the old arsenic MCL on the January 23, 2006 effective date of the federal amendments that instituted a new MCL for Arsenic~~.

c) This subsection corresponds with 40 CFR 141.11(c), marked as reserved by USEPA. This statement maintains structural parity with the federal rules.

d) Nitrate.
Non-CWSs may exceed the MCL for nitrate under the following circumstances:

1) The nitrate level must not exceed 20 mg/ℓ,

2) The water must not be available to children under six months of age,

3) The NCWS supplier is meeting the public notification requirements under Section 611.909, including continuous posting of the fact that the nitrate level exceeds 10 mg/ℓ together with the potential health effects of exposure,

4) The supplier will annually notify local public health authorities and the Department of Public Health of the nitrate levels that exceed 10 mg/ℓ, and

5) No adverse public health effects result.

BOARD NOTE: Derived from 40 CFR 141.11(d) (2012)~~(2002)~~. The Department of Public Health regulations may impose a nitrate limitation requirement. Those regulations are at 77 Ill. Adm. Code 900.50.

e) The following supplementary condition applies to the MCLs listed in subsection (b) of this Section for iron and manganese:

1) CWS suppliers that serve a population of 1000 or fewer, or 300 service connections or fewer, are exempt from the standards for iron and manganese.

2) The Agency may, by a SEP issued pursuant to Section 611.110, allow iron and manganese in excess of the MCL if sequestration tried on an experimental basis proves to be effective. If sequestration is not effective, positive iron or manganese reduction treatment as applicable must be

provided. Experimental use of a sequestering agent may be tried only if approved by a SEP issued pursuant to Section 611.110.

BOARD NOTE: This~~The requirements of this~~ subsection (e) is~~are~~ an additional State requirement.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.301 Revised MCLs for Inorganic Chemical Contaminants

a) This subsection corresponds with 40 CFR 141.62(a), reserved by USEPA. This statement maintains structural consistency with USEPA rules.

b) The MCLs in the following table apply to CWSs. Except for fluoride, the MCLs also apply to NTNCWSs. The MCLs for nitrate, nitrite, and total nitrate and nitrite also apply to transient non-CWSs.

Contaminant	MCL	Units
Antimony	0.006	mg/ℓ
Arsenic ~~(effective January 23, 2006)~~	0.010	mg/ℓ
Asbestos	7	MFL
Barium	2	mg/ℓ
Beryllium	0.004	mg/ℓ
Cadmium	0.005	mg/ℓ
Chromium	0.1	mg/ℓ
Cyanide (as free CN^-)	0.2	mg/ℓ
Fluoride	4.0	mg/ℓ
Mercury	0.002	mg/ℓ
Nitrate (as N)	10	mg/ℓ
Nitrite (as N)	1	mg/ℓ
Total Nitrate and Nitrite (as N)	10	mg/ℓ
Selenium	0.05	mg/ℓ
Thallium	0.002	mg/ℓ

BOARD NOTE: See Section 611.300(d) for an elevated nitrate level for non-CWSs. USEPA removed and reserved the MCL for nickel on June 29, 1995, at 60 Fed. Reg. 33932, as a result of a judicial order in Nickel

Development Institute v. EPA, No. 92-1407, and Specialty Steel Industry of the U.S. v. Browner, No. 92-1410 (D.C. Cir. Feb. 23 & Mar. 6, 1995), while retaining the contaminant, analytical methodology, and detection limit listings for this contaminant.

c) USEPA has identified the following as BAT for achieving compliance with the MCL for the IOCs identified in subsection (b) of this Section, except for fluoride:

Contaminant	BATs
Antimony	C/F RO
Arsenic (BATs for As^{V}. Pre-oxidation may be required to convert As^{III} to As^{V}.)	AAL C/F IX LIME RO ED O/F (To obtain high removals, the iron to arsenic ratio must be at least 20:1)
Asbestos	C/F DDF CC
Barium	IX LIME RO ED
Beryllium	AA C/F IX LIME RO
Cadmium	C/F IX

	LIME RO
Chromium	C/F IX LIME, BAT for Cr^{III} only RO
Cyanide	IX RO ALK Cl_2
Mercury	C/F, BAT only if influent Hg concentrations less than or equal to 10 µg/ℓ GAC LIME, BAT only if influent Hg concentrations less than or equal to 10 µg/ℓ RO, BAT only if influent Hg concentrations less than or equal to 10 µg/ℓ
Nickel	IX LIME RO
Nitrate	IX RO ED
Nitrite	IX RO
Selenium	AAL C/F, BAT for Se^{IV} only LIME RO ED

Thallium	AAL IX

Abbreviations

AAL	Activated alumina
ALK $C1_2$	Alkaline chlorination (pH ≥ 8.5)
C/F	Coagulation/filtration (not BAT for a system that has fewer than 500 service connections)
CC	Corrosion control
$C1_2$	Oxidation (chlorine)
DDF	Direct and diatomite filtration
ED	Electrodialysis
GAC	Granular activated carbon
IX	Ion exchange
LIME	Lime softening
O/F	Oxidation/filtration
RO	Reverse osmosis
UV	Ultraviolet irradiation

d) At 40 CFR 141.62(d) (2012)~~(2003)~~, USEPA identified the following as the affordable technology, treatment technique, or other means available to systems serving 10,000 persons or fewer for achieving compliance with the maximum contaminant level for arsenic:

Small System Compliance Technologies (SSCTs)[1] for Arsenic[2]

Small system compliance technology	Affordable for listed small system categories[3]
Activated alumina (centralized)	All size categories
Activated alumina (point-of-use)[4]	All size categories
Coagulation/filtration[5]	501-3,300 persons, 3,301-10,000 persons
Coagulation-assisted microfiltration	501-3,300 persons, 3,301-10,000 persons
Electrodialysis reversal[6]	501-3,300 persons, 3,301-10,000 persons
Enhanced coagulation/filtration	All size categories
Enhanced lime softening (pH >10.5)	All size categories
Ion exchange	All size categories

Lime softening[5]	501-3,300 persons, 3,301-10,000 persons
Oxidation/filtration[7]	All size categories
Reverse osmosis (centralized)[6]	501-3,300 persons, 3,301-10,000 persons
Reverse osmosis (point-of-use)[4]	All size categories

1 Section 1412(b)(4)(E)(ii) of the federal SDWA (42 USC 300g-1(b)(4)(E)(ii)) specifies that SSCTs must be affordable and technically feasible for a small system supplier.
2 SSCTs for As^{V}. Pre-oxidation may be required to convert As^{III} to As^{V}.
3 The federal SDWA specifies three categories of small system suppliers: (1) those serving 25 or more, but fewer than 501 persons, (2) those serving more than 500 but fewer than 3,301 persons, and (3) those serving more than 3,300 but fewer than 10,001 persons.
4 When POU or POE devices are used for compliance, programs to ensure proper long-term operation, maintenance, and monitoring must be provided by the water supplier to ensure adequate performance.
5 Unlikely to be installed solely for arsenic removal. May require pH adjustment to optimal range if high removals are needed.
6 Technologies reject a large volume of water – may not be appropriate for areas where water quantity may be an issue.
7 To obtain high removals, iron to arsenic ratio must be at least 20:1.

BOARD NOTE: Derived from 40 CFR 141.62 (2012)~~(2003)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.311 Revised MCLs for Organic Chemical Contaminants

a) Volatile organic chemical contaminants. The following MCLs for volatile organic chemical contaminants (VOCs) apply to CWS suppliers and NTNCWS suppliers.

CAS No.	Contaminant	MCL (mg/ℓ)
71-43-2	Benzene	0.005
56-23-5	Carbon tetrachloride	0.005
95-50-1	o-Dichlorobenzene	0.6
106-46-7	p-Dichlorobenzene	0.075

107-06-2	1,2-Dichloroethane	0.005
75-35-4	1,1-Dichloroethylene	0.007
156-59-2	cis-1,2-Dichloroethylene	0.07
156-60-5	trans-1,2-Dichloroethylene	0.1
75-09-2	Dichloromethane (methylene chloride)~~0.005~~	0.005
78-87-5	1,2-Dichloropropane	0.005
100-41-4	Ethylbenzene	0.7
108-90-7	Monochlorobenzene	0.1
100-42-5	Styrene	0.1
127-18-4	Tetrachloroethylene	0.005
108-88-3	Toluene	1
120-82-1	1,2,4-Trichlorobenzene	0.07
71-55-6	1,1,1-Trichloroethane	0.2
79-00-5	1,1,2-Trichloroethane	0.005
79-01-6	Trichloroethylene	0.005
75-01-4	Vinyl chloride	0.002
1330-20-7	Xylenes (total)	10

BOARD NOTE: See the definition of "initial compliance period" at Section 611.101.

b) USEPA has identified, as indicated below, granular activated carbon (GAC), packed tower aeration (PTA), or oxidation (OX) as BAT for achieving compliance with the MCLs for volatile organic chemical contaminants (VOCs) and synthetic organic chemical contaminants (SOCs) in subsections (a) and (c) of this Section.

15972-60-8	Alachlor	GAC
116-06-3	Aldicarb*	GAC
1646-87-4	Aldicarb sulfone*	GAC
1646-87-3	Aldicarb sulfoxide*	GAC
1912-24-9	Atrazine	GAC
71-43-2	Benzene	GAC, PTA
50-32-8	Benzo(a)pyrene	GAC
1563-66-2	Carbofuran	GAC
56-23-5	Carbon tetrachloride	GAC, PTA
57-74-9	Chlordane	GAC
94-75-7	2,4-D	GAC
75-99-0	Dalapon	GAC

96-12-8	Dibromochloropropane	GAC, PTA
95-50-1	o-Dichlorobenzene	GAC, PTA
106-46-7	p-Dichlorobenzene	GAC, PTA
107-06-2	1,2-Dichloroethane	GAC, PTA
156-59-2	cis-1,2-Dichloroethylene	GAC, PTA
156-60-5	trans-1,2-Dichoroethylene	GAC, PTA
75-35-4	1,1-Dichloroethylene	GAC, PTA
75-09-2	Dichloromethane	PTA
78-87-5	1,2-Dichloropropane	GAC, PTA
103-23-1	Di(2-ethylhexyl)adipate	GAC, PTA
117-81-7	Di(2-ethylhexyl)phthalate	GAC
88-85-7	Dinoseb	GAC
85-00-7	Diquat	GAC
145-73-3	Endothall	GAC
72-20-8	Endrin	GAC
106-93-4	Ethylene dibromide (EDB)	GAC, PTA
100-41-4	Ethylbenzene	GAC, PTA
1071-53-6	Glyphosate	OX
76-44-8	Heptachlor	GAC
1024-57-3	Heptachlor epoxide	GAC
118-74-1	Hexachlorobenzene	GAC
77-47-3	Hexachlorocyclopentadiene	GAC, PTA
58-89-9	Lindane	GAC
72-43-5	Methoxychlor	GAC
108-90-7	Monochlorobenzene	GAC, PTA
23135-22-0	Oxamyl	GAC
87-86-5	Pentachlorophenol	GAC
1918-02-1	Picloram	GAC
1336-36-3	Polychlorinated biphenyls (PCB)	GAC
122-34-9	Simazine	GAC
100-42-5	Styrene	GAC, PTA
1746-01-6	2,3,7,8-TCDD	GAC
127-18-4	Tetrachloroethylene	GAC, PTA
108-88-3	Toluene	GAC
8001-35-2	Toxaphene	GAC
120-82-1	1,2,4-trichlorobenzene	GAC, PTA
71-55-6	1,1,1-Trichloroethane	GAC, PTA
79-00-5	1,1,2-trichloroethane	GAC, PTA
79-01-6	Trichloroethylene	GAC, PTA

93-72-1	2,4,5-TP	GAC
75-01-4	Vinyl chloride	PTA
1330-20-7	Xylene	GAC, PTA

*See the Board note appended to the end of this Section.

c) Synthetic organic chemical contaminants. The following MCLs for SOCs apply to CWS and NTNCWS suppliers.

CAS Number	Contaminant	MCL (mg/ℓ)
15972-60-8	Alachlor	0.002
116-06-3	Aldicarb*	0.002
1646-87-4	Aldicarb sulfone*	0.002
1646-87-3	Aldicarb sulfoxide*	0.004
1912-24-9	Atrazine	0.003
50-32-8	Benzo(a)pyrene	0.0002
1563-66-2	Carbofuran	0.04
57-74-9	Chlordane	0.002
94-75-7	2,4-D	0.07
75-99-0	Dalapon	0.2
96-12-8	Dibromochloropropane	0.0002
103-23-1	Di(2-ethylhexyl)adipate	0.4
117-81-7	Di(2-ethylhexyl)phthalate	0.006
88-85-7	Dinoseb	0.007
85-00-7	Diquat	0.02
145-73-3	Endothall	0.1
72-20-8	Endrin	0.002
106-93-4	Ethylene dibromide	0.00005
1071-53-6	Glyphosate	0.7
76-44-8	Heptachlor	0.0004
1024-57-3	Heptachlor epoxide	0.0002
118-74-1	Hexachlorobenzene	0.001
77-47-4	Hexachlorocyclopentadiene	0.05
58-89-9	Lindane	0.0002
72-43-5	Methoxychlor	0.04
23135-22-0	Oxamyl (Vydate)	0.2
87-86-5	Pentachlorophenol	0.001
1918-02-1	Picloram	0.5
1336-36-3	Polychlorinated biphenyls (PCBs)	0.0005

122-34-9	Simazine	0.004
1746-01-6	2,3,7,8-TCDD (Dioxin)	0.00000003
8001-35-2	Toxaphene	0.003
93-72-1	2,4,5-TP	0.05

* See the Board note appended to the end of this Section.

BOARD NOTE: Derived from 40 CFR 141.61 (2012)~~(2003)~~. See the definition of "initial compliance period" at Section 611.101. More stringent state MCLs for 2,4-D, heptachlor, and heptachlor epoxide appear at Section 611.310. See the Board Note at that provision. In 40 CFR141.6(g), USEPA postponed the effectiveness of the MCLs for aldicarb, aldicarb sulfone, and aldicarb sulfoxide until it took further action on those MCLs. See 40 CFR 141.6(g) and 57 Fed. Reg. 22178 (May 27, 1992). USEPA has since stated that it anticipates taking no action until 2005 on a federal national primary drinking water regulation (NPDWR) applicable to the aldicarbs. 68 Fed. Reg. 31108 (May 27, 2003). An entry for the aldicarbs last appeared in USEPA's Spring 2007 semiannual regulatory agenda, indicating no projected dates for further action. (See 72 Fed. Reg. 23156, 97 (Apr. 30, 2007); see also 72 Fed. Reg. 70118, 23 (Dec. 10, 2007) (the first USEPA regulatory agenda that included no entry for the aldicarbs).) While the Board must maintain entries for aldicarb, aldicarb sulfoxide, and aldicarb sulfone to maintain consistency with the letter of the federal regulations (see 415 ILCS 5/7.2 and 17.5 (2010); 42 USC 300g-2 (2010); 40 CFR 142.10 (2012)), the Board intends that no ~~No~~ aldicarb requirements apply in Illinois until after USEPA adopts such requirements~~,~~ and the Board has removed~~removes~~ this statement.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.330 Maximum Contaminant Levels for Radionuclides

a) This subsection corresponds with 40 CFR 141.66(a), marked reserved by USEPA. This statement maintains structural consistency with USEPA rules.

b) MCL for combined radium-226 and -228. The maximum contaminant level for combined radium-226 and radium-228 is 5 pCi/ℓ. The combined radium-226 and radium-228 value is determined by the addition of the results of the analysis for radium-226 and the analysis for radium-228.

c) MCL for gross alpha particle activity (excluding radon and uranium). The

maximum contaminant level for gross alpha particle activity (including radium-226 but excluding radon and uranium) is 15 pCi/ℓ.

d) ~~Effective December 8, 2003,~~ MCL for beta particle and photon radioactivity.

1) The average annual concentration of beta particle and photon radioactivity from man-made radionuclides in drinking water must not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year (mrem/year).

2) Except for the radionuclides listed in the following table, the concentration of man-made radionuclides causing 4 mrem total body or organ dose equivalents must be calculated on the basis of two liters per day drinking water intake, using the 168-hour data list set forth in "Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure," incorporated by reference in Section 611.102, available from the NTIS. If two or more radionuclides are present, the sum of their annual dose equivalent to the total body or to any organ must not exceed 4 mrem/year.

Average Annual Concentrations Assumed to Produce
a Total Body or Organ Dose of 4 mrem/yr

Radionuclide	Critical organ	pCi per liter
1. Tritium	Total body	20,000
2. Strontium-90	Bone Marrow	8

e) MCL for uranium. The~~Effective December 8, 2003, the~~ maximum contaminant level for uranium is 30 µg/ℓ.

f) Compliance dates for combined radium-226 and -228, gross alpha particle activity, gross beta particle and photon radioactivity, and uranium.~~:~~ A~~Effective December 8, 2003,~~ CWS supplier must comply with the MCLs listed in subsections (b) through (e) of this Section, and compliance must be determined in accordance with the requirements of Subpart Q of this Part.

g) Best available technologies (BATs) for radionuclides. USEPA has identified the technologies indicated in the following table as the BAT for achieving compliance with the MCLs for combined radium-226 and -228, uranium, gross alpha particle activity, and beta particle and photon radioactivity.

BAT for Combined Radium-226 and Radium-228, Uranium, Gross Alpha Particle Activity, and Beta Particle and Photon Radioactivity

Contaminant	BAT
1. Combined radium-226 and radium-228	Ion exchange, reverse osmosis, lime softening.
2. Uranium	Ion exchange, reverse osmosis, lime softening, coagulation/ filtration.
3. Gross alpha particle activity (excluding Radon and Uranium)	Reverse osmosis.
4. Beta particle and photon radioactivity	Ion exchange, reverse osmosis.

h) Small systems compliance technologies list for radionuclides.

List of Small Systems Compliance Technologies for Radionuclides and Limitations to Use

Unit technologies	Limitations (see footnotes)	Operator skill level required [1]	Raw water quality range and considerations[1]
1. Ion exchange (IE)	(a)	Intermediate	All ground waters.
2. Point of use (POU[2]) IE	(b)	Basic	All ground waters.
3. Reverse osmosis (RO)	(c)	Advanced	Surface waters usually require pre-filtration.
4. POU[2] RO	(b)	Basic	Surface waters usually require pre-filtration.
5. Lime softening	(d)	Advanced	All waters.
6. Green sand filtration	(e)	Basic	
7. Co-precipitation with Barium sulfate	(f)	Intermediate to Advanced	Ground waters with suitable water quality.

8. Electrodialysis/ electrodialysis reversal		Basic to Intermediate	All ground waters.
9. Pre-formed hydrous Manganese oxide filtration	(g)	Intermediate	All ground waters.
10. Activated alumina	(a), (h)	Advanced	All ground waters; competing anion concentrations may affect regeneration frequency.
11. Enhanced coagulation/ filtration	(i)	Advanced	Can treat a wide range of water qualities.

[1] National Research Council (NRC). "Safe Water from Every Tap: Improving Water Service to Small Communities," National Academy Press, Washington, D.C. 1997.

[2] A POU, or "point-of-use" technology is a treatment device installed at a single tap used for the purpose of reducing contaminants in drinking water at that one tap. POU devices are typically installed at the kitchen tap. BOARD NOTE: USEPA refers the reader to the notice of data availability (NODA) at 66 Fed. Reg. 21576 (April 21, 2000) for more details.

Limitations Footnotes: Technologies for Radionuclides:

(a) The regeneration solution contains high concentrations of the contaminant ions. Disposal options should be carefully considered before choosing this technology.

(b) When POU devices are used for compliance, programs for long-term operation, maintenance, and monitoring must be provided by water utility to ensure proper performance.

(c) Reject water disposal options should be carefully considered before choosing this technology.

BOARD NOTE: In corresponding 40 CFR 141.66, Table C, footnote c

states in part as follows: "See other RO limitations described in the SWTR Compliance Technologies Table." Table C was based in significant part on "Table 13. − Technologies for Radionuclides" that appears at 63 Fed. Reg. 42032 at 42043 (August 6, 1998), which refers to "Table 2. − SWTR Compliance Technology Table: Filtration." That Table 2 lists the limitations on RO as follows:

[d] Blending (combining treated water with untreated raw water) cannot be practiced at risk of increasing microbial concentrations in finished water.

[e] Post-disinfection recommended as a safety measure and for residual maintenance.

[f] Post-treatment corrosion control will be needed prior to distribution.

63 Fed. Reg. at 42036.

(d) The combination of variable source water quality and the complexity of the water chemistry involved may make this technology too complex for small surface water systems.

(e) Removal efficiencies can vary depending on water quality.

(f) This technology may be very limited in application to small systems. Since the process requires static mixing, detention basins, and filtration, it is most applicable to systems with sufficiently high sulfate levels that already have a suitable filtration treatment train in place.

(g) This technology is most applicable to small systems that already have filtration in place.

(h) Handling of chemicals required during regeneration and pH adjustment may be too difficult for small systems without an adequately trained operator.

(i) Assumes modification to a coagulation/filtration process already in place.

Compliance Technologies by System Size Category
for Radionuclide NPDWRs

Contaminant	Compliance technologies[1] for system size categories (population served)		
	25-500	501-3,300	3,300-10,000
1. Combined radium-226 and radium-228	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5, 6, 7, 8, 9	1, 2, 3, 4, 5, 6, 7, 8, 9
2. Gross alpha particle activity	3, 4	3, 4	3, 4
3. Beta particle activity and photon activity	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4
4. Uranium	1, 2, 4, 10, 11	1, 2, 3, 4, 5, 10, 11	1, 2, 3, 4, 5, 10, 11

Note:

[1] Numbers correspond to those technologies found listed in the table, "List of Small Systems Compliance Technologies for Radionuclides and Limitations to Use," set forth above.

BOARD NOTE: Derived from 40 CFR 141.66 (2012)~~(2003)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART G: LEAD AND COPPER

Section 611.359 Analytical Methods

Analyses for lead, copper, pH, conductivity, calcium, alkalinity, orthophosphate, silica, and temperature must be conducted using the methods set forth in Section 611.611(a).

a) Analyses for lead and copper performed for the purposes of compliance with this Subpart G must only be conducted by laboratories that have been certified by USEPA or the Agency. To obtain certification to conduct analyses for lead and copper, laboratories must do the following:

1) Analyze performance evaluation samples that include lead and copper provided by USEPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the Agency; ~~and~~

2) Achieve quantitative acceptance limits as follows:

A) For lead: ±30 percent of the actual amount in the performance evaluation sample when the actual amount is greater than or equal to 0.005 mg/ℓ (the PQL for lead is 0.005 mg/ℓ);

B) For copper: ±10 percent of the actual amount in the performance evaluation sample when the actual amount is greater than or equal to 0.050 mg/ℓ (the PQL for copper is 0.050 mg/ℓ);

~~C) Achieve the method detection limit (MDL) for lead (0.001 mg/ℓ, as defined in Section 611.350(a)) according to the procedures in 35 Ill. Adm. Code 186 and appendix B to 40 CFR 136: "Definition and Procedure for the Determination of the Method Detection Limit – Revision 1.11", incorporated by reference in Section 611.102(c). This need only be accomplished if the laboratory will be processing source water composite samples under Section 611.358(a)(1)(D); and~~

~~D) Be currently certified by USEPA or the Agency to perform analyses to the specifications described in subsection (a)(1) of this Section.~~

3) Achieve the method detection limit (MDL) for lead (0.001 mg/ℓ, as defined in Section 611.350(a)) according to the procedures in 35 Ill. Adm. Code 186 and appendix B to 40 CFR 136: "Definition and Procedure for the Determination of the Method Detection Limit − Revision 1.11", incorporated by reference in Section 611.102(c). This need only be accomplished if the laboratory will be processing source water composite samples under Section 611.358(a)(1)(D); and

4) Be currently certified by USEPA or the Agency to perform analyses to the specifications described in subsection (a)(1) of this Section.

BOARD NOTE: Subsection (a) is derived from 40 CFR 141.89(a) and (a)(1) (2012)~~(2007), as amended at 72 Fed. Reg. 57782 (October 10, 2007)~~.

b) The Agency must, by a SEP issued pursuant to Section 611.110, allow a supplier

to use previously collected monitoring data for the purposes of monitoring under this Subpart G if the data were collected and analyzed in accordance with the requirements of this Subpart G.

BOARD NOTE: Subsection (b) is derived from 40 CFR 141.89(a)(2) (2012)~~(2007)~~.

c) Reporting lead and copper levels.

1) All lead and copper levels greater than or equal to the lead and copper PQL (Pb ≥ 0.005 mg/ℓ and Cu ≥ 0.050 mg/ℓ) must be reported as measured.

2) All lead and copper levels measured less than the PQL and greater than the MDL (0.005 mg/ℓ > Pb > MDL and 0.050 mg/ℓ > Cu > MDL) must be either reported as measured or as one-half the PQL set forth in subsection (a) of this Section (i.e., reported as 0.0025 mg/ℓ for lead or 0.025 mg/ℓ for copper).

3) All lead and copper levels below the lead and copper MDL (MDL > Pb) must be reported as zero.

BOARD NOTE: Subsection (c) is derived from 40 CFR 141.89(a)(3) and (a)(4) (2012)~~(2007)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART I: DISINFECTANT RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS

Section 611.382 Monitoring Requirements

a) General requirements.

1) A supplier must take all samples during normal operating conditions.

2) A supplier may consider multiple wells drawing water from a single aquifer as one treatment plant for determining the minimum number of TTHM and HAA5 samples required with Agency approval.

3) Failure to monitor in accordance with the monitoring plan required under subsection (f) of this Section is a monitoring violation.

4) Where compliance is based on a running annual average of monthly or quarterly samples or averages and the supplier's failure to monitor makes it impossible to determine compliance with MCLs or MRDLs, this failure to monitor will be treated as a violation for the entire period covered by the annual average.

5) A supplier must use only data collected under the provisions of this Subpart I to qualify for reduced monitoring.

b) Monitoring requirements for disinfection byproducts (DBPs).

1) TTHMs and HAA5.

A) Routine monitoring. A supplier must monitor at the following frequency:

i) A Subpart B system supplier that serves 10,000 or more persons must collect four water samples per quarter per treatment plant. At least 25 percent of all samples collected each quarter must be collected at locations representing maximum residence time. The remaining samples may be taken at locations representative of at least average residence time in the distribution system and representing the entire distribution system, taking into account the number of persons served, the different sources of water, and the different treatment methods.

ii) A Subpart B system supplier that serves from 500 to 9,999 persons must collect one water sample per quarter per treatment plant. The samples must be collected from locations representing maximum residence time.

iii) A Subpart B system supplier that serves fewer than 500 persons must collect one sample per year per treatment plant during month of warmest water temperature. The

samples must be collected from locations representing maximum residence time. If the sample (or average of annual samples, if more than one sample is taken) exceeds the MCL, the supplier must increase the monitoring frequency to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the supplier meets the standards in subsection (b)(1)(D) of this Section.

iv) A supplier that uses only groundwater not under direct influence of surface water, which uses chemical disinfectant, and which serves 10,000 or more persons must collect one water sample per quarter per treatment plant. The samples must be collected from locations representing maximum residence time.

v) A supplier that uses only groundwater not under direct influence of surface water, which uses chemical disinfectant, and which serves fewer than 10,000 persons must collect one sample per year per treatment plant during month of warmest water temperature. The samples must be collected from locations representing maximum residence time. If the sample (or average of annual samples, if more than one sample is taken) exceeds MCL, the supplier must increase monitoring to one sample per treatment plant per quarter, taken at a point reflecting the maximum residence time in the distribution system, until the supplier meets standards in subsection (b)(1)(D) of this Section.

BOARD NOTE: If a supplier elects to sample more frequently than the minimum required, at least 25 percent of all samples collected each quarter (including those taken in excess of the required frequency) must be taken at locations that represent the maximum residence time of the water in the distribution system. The remaining samples must be taken at locations representative of at least average residence time in the distribution system. For a supplier using groundwater not under the direct influence of surface water, multiple wells drawing water from a single aquifer may be considered one treatment plant for determining the

minimum number of samples required, with Agency approval.

B) A supplier may reduce monitoring, except as otherwise provided, in accordance with the following:

i) A Subpart B system supplier that serves 10,000 or more persons and which has a source water annual average TOC level, before any treatment, of less than or equal to 4.0 mg/ℓ may reduce monitoring if it has monitored for at least one year and its TTHM annual average is less than or equal to 0.040 mg/ℓ and HAA5 annual average is less than or equal to 0.030 mg/ℓ. The reduced monitoring allowed is a minimum of one sample per treatment plant per quarter at a distribution system location reflecting maximum residence time.

ii) A Subpart B system supplier that serves from 500 to 9,999 persons and which has a source water annual average TOC level, before any treatment, of less than or equal to 4.0 mg/ℓ may reduce monitoring if it has monitored at least one year and its TTHM annual average is less than or equal to 0.040 mg/ℓ and HAA5 annual average is less than or equal to 0.030 mg/ℓ. The reduced monitoring allowed is a minimum of one sample per treatment plant per year at a distribution system location reflecting maximum residence time during month of warmest water temperature.

BOARD NOTE: Any Subpart B system supplier that serves fewer than 500 persons may not reduce its monitoring to less than one sample per treatment plant per year.

iii) A supplier using only groundwater not under direct influence of surface water using chemical disinfectant and that serves 10,000 or more persons may reduce monitoring if it has monitored at least one year and its TTHM annual average is less than or equal to 0.040 mg/ℓ and HAA5 annual average is less than or equal to 0.030 mg/ℓ. The reduced monitoring allowed is a minimum of one sample

per treatment plant per year at a distribution system location reflecting maximum residence time during month of warmest water temperature.

iv) A supplier using only groundwater not under direct influence of surface water that uses chemical disinfectant and which serves fewer than 10,000 persons may reduce monitoring if it has monitored at least one year and its TTHM annual average is less than or equal to 0.040 mg/ℓ and HAA5 annual average is less than or equal to 0.030 mg/ℓ for two consecutive years or TTHM annual average is less than or equal to 0.020 mg/ℓ and HAA5 annual average is less than or equal to 0.015 mg/ℓ for one year. The reduced monitoring allowed is a minimum of one sample per treatment plant per three year monitoring cycle at a distribution system location reflecting maximum residence time during month of warmest water temperature, with the three-year cycle beginning on January 1 following the quarter in which the supplier qualifies for reduced monitoring.

C) Monitoring requirements for source water TOC. In order to qualify for reduced monitoring for TTHM and HAA5 under subsection (b)(1)(B) of this Section, a Subpart B system supplier not monitoring under the provisions of subsection (d) of this Section must take monthly TOC samples every 30 days at a location prior to any treatment~~, beginning no later than April 1, 2008~~. In addition to meeting other criteria for reduced monitoring in subsection (b)(1)(B) of this Section, the source water TOC running annual average must be ≤ 4.0 mg/ℓ (based on the most recent four quarters of monitoring) on a continuing basis at each treatment plant to reduce or remain on reduced monitoring for TTHM and HAA5. Once qualified for reduced monitoring for TTHM and HAA5 under subsection (b)(1)(B) of this Section, a system may reduce source water TOC monitoring to quarterly TOC samples taken every 90 days at a location prior to any treatment.

D) A Subpart B system supplier on a reduced monitoring schedule

may remain on that reduced schedule as long as the average of all samples taken in the year (for a supplier that must monitor quarterly) or the result of the sample (for a supplier that must monitor no more frequently than annually) is no more than 0.060 mg/ℓ and 0.045 mg/ℓ for TTHMs and HAA5, respectively. A supplier that does not meet these levels must resume monitoring at the frequency identified in subsection (b)(1)(A) of this Section in the quarter immediately following the monitoring period in which the supplier exceeds 0.060 mg/ℓ for TTHMs or 0.045 mg/ℓ for HAA5. For a supplier that uses only groundwater not under the direct influence of surface water and which serves fewer than 10,000 persons, if either the TTHM annual average is greater than 0.080 mg/ℓ or the HAA5 annual average is greater than 0.060 mg/ℓ, the supplier must go to increased monitoring identified in subsection (b)(1)(A) of this Section in the quarter immediately following the monitoring period in which the supplier exceeds 0.080 mg/ℓ for TTHMs or 0.060 mg/ℓ for HAA5.

E) The Agency may return a supplier to routine monitoring.

2) Chlorite. A CWS or NTNCWS supplier using chlorine dioxide, for disinfection or oxidation, must conduct monitoring for chlorite.

A) Routine monitoring.

i) Daily monitoring. A supplier must take daily samples at the entrance to the distribution system. For any daily sample that exceeds the chlorite MCL, the supplier must take additional samples in the distribution system the following day at the locations required by subsection (b)(2)(B) of this Section, in addition to the sample required at the entrance to the distribution system.

ii) Monthly monitoring. A supplier must take a three-sample set each month in the distribution system. The supplier must take one sample at each of the following locations: near the first customer, at a location representative of average residence time, and at a location reflecting maximum residence time in the distribution system. Any

additional routine sampling must be conducted in the same manner (as three-sample sets, at the specified locations). The supplier may use the results of additional monitoring conducted under subsection (b)(2)(B) of this Section to meet the requirement for monitoring in this subsection (b)(2)(A)(ii).

B) Additional monitoring. On each day following a routine sample monitoring result that exceeds the chlorite MCL at the entrance to the distribution system, the supplier must take three chlorite distribution system samples at the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the end of the distribution system as possible (reflecting maximum residence time in the distribution system).

C) Reduced monitoring.

i) Chlorite monitoring at the entrance to the distribution system required by subsection (b)(2)(A)(i) of this Section may not be reduced.

ii) Chlorite monitoring in the distribution system required by subsection (b)(2)(A)(ii) of this Section may be reduced to one three-sample set per quarter after one year of monitoring where no individual chlorite sample taken in the distribution system under subsection (b)(2)(A)(ii) of this Section has exceeded the chlorite MCL and the supplier has not been required to conduct monitoring under subsection (b)(2)(B) of this Section. The supplier may remain on the reduced monitoring schedule until either any of the three individual chlorite samples taken quarterly in the distribution system under subsection (b)(2)(A)(ii) of this Section exceeds the chlorite MCL or the supplier is required to conduct monitoring under subsection (b)(2)(B) of this Section, at which time the supplier must revert to routine monitoring.

3) Bromate.

A) Routine monitoring. A CWS or NTNCWS supplier using ozone, for disinfection or oxidation, must take one sample per month for each treatment plant in the system using ozone. A supplier must take samples monthly at the entrance to the distribution system while the ozonation system is operating under normal conditions.

B) Reduced monitoring. A supplier required to analyze for bromate may reduce monitoring from monthly to quarterly if the supplier's running annual average bromate concentration is not greater than 0.0025 mg/ℓ based on monthly bromate measurements under subsection (b)(3)(A) of this Section for the most recent four quarters, with samples analyzed using USEPA OGWDW Methods, Method 302.0, Method 317.0 (rev. 2.0), Method 326.0 (rev. 1.0), or Method 557 or USEPA Organic and Inorganic Methods, Method 321.8. If a supplier has qualified for reduced bromate monitoring under subsection (b)(3)(B)(i) of this Section, that supplier may remain on reduced monitoring as long as the running annual average of quarterly bromate samples not greater than 0.0025 mg/ℓ based on samples analyzed using USEPA OGWDW Methods, Method 302.0, Method 317.0, Method 326.0, or Method 557 or USEPA Organic and Inorganic Methods, Method 321.8. If the running annual average bromate concentration is greater than 0.0025 mg/ℓ, the supplier must resume routine monitoring required by subsection (b)(3)(A) of this Section.

~~i) Until March 31, 2009, a supplier required to analyze for bromate may reduce monitoring from monthly to quarterly, if the supplier demonstrates that the average source water bromide concentration is less than 0.05 mg/ℓ based on representative monthly bromide measurements for one year. The supplier may remain on reduced bromate monitoring until the running annual average source water bromide concentration, computed quarterly, is equal to or greater than 0.05 mg/ℓ based on representative monthly measurements. If the running annual average source water bromide concentration is equal to or greater than 0.05 mg/ℓ, the supplier must resume routine monitoring required by subsection (b)(3)(A) of this Section in the following month.~~

~~ii) Beginning April 1, 2009, a Subpart B system supplier may no longer use the provisions of subsection (b)(3)(B)(i) of this Section to qualify for reduced monitoring. A supplier required to analyze for bromate may reduce monitoring from monthly to quarterly, if the supplier's running annual average bromate concentration is not greater than 0.0025 mg/ℓ based on monthly bromate measurements under subsection (b)(3)(A) of this Section for the most recent four quarters, with samples analyzed using USEPA OGWDW Methods, Method 302.0, Method 317.0 (rev. 2.0), Method 326.0 (rev. 1.0), or Method 557 or USEPA Organic and Inorganic Methods, Method 321.8. If a supplier has qualified for reduced bromate monitoring under subsection (b)(3)(B)(i) of this Section, that supplier may remain on reduced monitoring as long as the running annual average of quarterly bromate samples not greater than 0.0025 mg/ℓ based on samples analyzed using USEPA OGWDW Methods, Method 302.0, Method 317.0, Method 326.0, or Method 557 or USEPA Organic and Inorganic Methods, Method 321.8. If the running annual average bromate concentration is greater than 0.0025 mg/ℓ, the supplier must resume routine monitoring required by subsection (b)(3)(A) of this Section.~~

c) Monitoring requirements for disinfectant residuals.

1) Chlorine and chloramines.

A) Routine monitoring. A CWS or NTNCWS supplier that uses chlorine or chloramines must measure the residual disinfectant level in the distribution system at the same point in the distribution system and at the same time as total coliforms are sampled, as specified in Section 611.521. A Subpart B system supplier may use the results of residual disinfectant concentration sampling conducted under Section 611.532 for unfiltered systems or Section 611.533 for systems that filter, in lieu of taking separate samples.

B) Reduced monitoring. Monitoring may not be reduced.

2) Chlorine dioxide.

A) Routine monitoring. A CWS, an NTNCWS, or a transient non-CWS supplier that uses chlorine dioxide for disinfection or oxidation must take daily samples at the entrance to the distribution system. For any daily sample that exceeds the MRDL, the supplier must take samples in the distribution system the following day at the locations required by subsection (c)(2)(B) of this Section, in addition to the sample required at the entrance to the distribution system.

B) Additional monitoring. On each day following a routine sample monitoring result that exceeds the MRDL, the supplier must take three chlorine dioxide distribution system samples. If chlorine dioxide or chloramines are used to maintain a disinfectant residual in the distribution system, or if chlorine is used to maintain a disinfectant residual in the distribution system and there are no disinfection addition points after the entrance to the distribution system (i.e., no booster chlorination), the supplier must take three samples as close to the first customer as possible, at intervals of at least six hours. If chlorine is used to maintain a disinfectant residual in the distribution system and there are one or more disinfection addition points after the entrance to the distribution system (i.e., booster chlorination), the supplier must take one sample at each of the following locations: as close to the first customer as possible, in a location representative of average residence time, and as close to the end of the distribution system as possible (reflecting maximum residence time in the distribution system).

C) Reduced monitoring. Monitoring may not be reduced.

d) Monitoring requirements for disinfection byproduct (DBP) precursors.

1) Routine monitoring. A Subpart B system supplier that uses conventional filtration treatment (as defined in Section 611.101) must monitor each treatment plant for TOC not past the point of combined filter effluent turbidity monitoring and representative of the treated water. A supplier

required to monitor under this subsection (d)(1) must also monitor for TOC in the source water prior to any treatment at the same time as monitoring for TOC in the treated water. These samples (source water and treated water) are referred to as paired samples. At the same time as the source water sample is taken, a system must monitor for alkalinity in the source water prior to any treatment. A supplier must take one paired sample and one source water alkalinity sample per month per plant at a time representative of normal operating conditions and influent water quality.

2) Reduced monitoring. A Subpart B system supplier with an average treated water TOC of less than 2.0 mg/ℓ for two consecutive years, or less than 1.0 mg/ℓ for one year, may reduce monitoring for both TOC and alkalinity to one paired sample and one source water alkalinity sample per plant per quarter. The supplier must revert to routine monitoring in the month following the quarter when the annual average treated water TOC greater than or equal to 2.0 mg/ℓ.

e) Bromide. A supplier required to analyze for bromate may reduce bromate monitoring from monthly to once per quarter, if the supplier demonstrates that the average source water bromide concentration is less than 0.05 mg/ℓ based upon representative monthly measurements for one year. The supplier must continue bromide monitoring to remain on reduced bromate monitoring.

f) Monitoring plans. Each supplier required to monitor under this Subpart I must develop and implement a monitoring plan. The supplier must maintain the plan and make it available for inspection by the Agency and the general public no later than 30 days following the applicable compliance dates in Section 611.380(b). A Subpart B system supplier that serves more than 3,300 persons must submit a copy of the monitoring plan to the Agency no later than the date of the first report required under Section 611.384. After review, the Agency may require changes in any plan elements. The plan must include at least the following elements:

1) Specific locations and schedules for collecting samples for any parameters included in this Subpart I;

2) How the supplier will calculate compliance with MCLs, MRDLs, and treatment techniques; and

3) If approved for monitoring as a consecutive system, or if providing water to a consecutive system, under the provisions of Section 611.500, the sampling plan must reflect the entire distribution system.

BOARD NOTE: Derived from 40 CFR 141.132 (2012)~~(2010)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART N: INORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section 611.600 Applicability

The following types of suppliers must conduct monitoring to determine compliance with the old MCLs in Section 611.300 and the revised MCLs in 611.301, as appropriate, in accordance with this Subpart N:

a) CWS suppliers.

b) NTNCWS suppliers.

c) Transient non-CWS suppliers to determine compliance with the nitrate and nitrite MCLs.

d) Detection limits. The following are detection limits for purposes of this Subpart N (MCLs from Section 611.301 are set forth for information purposes only):

Contaminant	MCL (mg/ℓ, except asbestos)	Method	Detection Limit (mg/ℓ)
Antimony	0.006	Atomic absorption − furnace technique	0.003
		Atomic absorption − furnace technique (stabilized temperature)	0.0008[5]
		Inductively coupled plasma-mass spectrometry	0.0004

		Atomic absorption − gaseous hydride technique	0.001
Arsenic	0.010[6]	Atomic absorption − furnace technique	0.001
		Atomic absorption − furnace technique (stabilized temperature)	0.00005[6~~7~~]
		Atomic absorption − gaseous hydride technique	0.001
		Inductively coupled plasma-mass spectrometry	0.0014[7~~8~~]
Asbestos	7 MFL[1]	Transmission electron microscopy	0.01 MFL
Barium	2	Atomic absorption − furnace technique	0.002
		Atomic absorption − direct aspiration technique	0.1
		Inductively coupled plasma arc furnace	0.002
		Inductively coupled plasma	0.001
Beryllium	0.004	Atomic absorption − furnace technique	0.0002
		Atomic absorption − furnace technique (stabilized temperature)	0.00002[5]
		Inductively coupled plasma[2]	0.0003

		Inductively coupled plasma-mass spectrometry	0.0003
Cadmium	0.005	Atomic absorption − furnace technique	0.0001
		Inductively coupled plasma	0.001
Chromium	0.1	Atomic absorption − furnace technique	0.001
		Inductively coupled plasma	0.007
		Inductively coupled plasma	0.001
Cyanide	0.2	Distillation, spectrophotometric[3]	0.02
		Automated distillation, spectrophotometric[3]	0.005
		Distillation, selective electrode[3]	0.05
		Distillation, amenable, spectrophotometric[4]	0.02
		UV, distillation, spectrophotometric[8~~9~~]	0.0005
		Micro distillation, flow injection, spectrophotometric[3]	0.0006
		Ligand exchange with amperometry[4]	0.0005
Mercury	0.002	Manual cold vapor technique	0.0002

		Automated cold vapor technique	0.0002
Nickel	No MCL	Atomic absorption − furnace technique	0.001
		Atomic absorption − furnace technique (stabilized temperature)	0.0006[5]
		Inductively coupled plasma[2]	0.005
		Inductively coupled plasma-mass spectrometry	0.0005
Nitrate (as N)	10	Manual cadmium reduction	0.01
		Automated hydrazine reduction	0.01
		Automated cadmium reduction	0.05
		Ion-selective electrode	1
		Ion chromatography	0.01
		Capillary ion electrophoresis	0.076
Nitrite (as N)	1	Spectrophotometric	0.01
		Automated cadmium reduction	0.05
		Manual cadmium reduction	0.01
		Ion chromatography	0.004
		Capillary ion electrophoresis	0.103

Selenium	0.05	Atomic absorption − furnace technique	0.002
		Atomic absorption − gaseous hydride technique	0.002
Thallium	0.002	Atomic absorption − furnace technique	0.001
		Atomic absorption − furnace technique (stabilized temperature)	0.0007[5]
		Inductively coupled plasma-mass spectrometry	0.0003

Footnotes.

[1] "MFL" means millions of fibers per liter less than 10 µm.

[2] Using a 2x preconcentration step as noted in Method 200.7. Lower MDLs may be achieved when using a 4x preconcentration.

[3] Screening method for total cyanides.

[4] Measures "free" cyanides when distillation, digestion, or ligand exchange is omitted.

[5] Lower MDLs are reported using stabilized temperature graphite furnace atomic absorbtion.

[~~6~~] ~~The value for arsenic is effective January 23, 2006. Until then, the MCL is 0.05 mg/ℓ.~~

[6~~7~~] The MDL reported for USEPA Method 200.9 (atomic absorption-platform furnace (stabilized temperature)) was determined using a 2x concentration step during sample digestion. The MDL determined for samples analyzed using direct analyses (i.e., no sample digestion) will be higher. Using multiple depositions, USEPA Method 200.9 is capable of obtaining an MDL of 0.0001 mg/ℓ.

[7~~8~~] Using selective ion monitoring, USEPA Method 200.8 (ICP-MS) is capable of obtaining an MDL of 0.0001 mg/ℓ.

[8~~9~~] Measures total cyanides when UV-digestor is used, and "free" cyanides when UV-digestor is bypassed.

BOARD NOTE: Subsections (a) through (c) of this Section are derived from 40 CFR 141.23 preamble (2012)~~(2007)~~ and subsection (d) of this Section is derived from 40 CFR 141.23

(a)(4)(i) ~~(2007)~~ and appendix A to 40 CFR 141 (2012)~~, as added at 73 Fed. Reg. 31616 (June 3, 2008)~~. See the Board Note at Section 611.301(b) relating to the MCL for nickel.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.603 Inorganic Monitoring Frequency

The frequency of monitoring conducted to determine compliance with the revised MCLs in Section 611.301 for antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium is as follows:

a) Suppliers must take samples at each sampling point, beginning in the initial compliance period, as follows:

1) For a GWS supplier: at least one sample during each compliance period;

2) For an SWS or a mixed system supplier: at least one sample each year.

BOARD NOTE: Derived from 40 CFR 141.23(c)(1) (2012)~~(2002)~~.

b) SEP Application.

1) The supplier may apply to the Agency for a SEP that allows reduction from the monitoring frequencies specified in subsection (a) of this Section pursuant to subsections (d) through (f) of this Section and Section 611.110.

2) The supplier may apply to the Agency for a SEP that relieves it of the requirement for monitoring cyanide pursuant to subsections (d) through (f) of this Section and Section 611.110 if it can demonstrate that its system is not vulnerable due to a lack of any industrial source of cyanide.

BOARD NOTE: Drawn from 40 CFR 141.23(c)(2) and (c)(6) (2012)~~(2002)~~.

c) SEP Procedures. The Agency must review the request pursuant to the SEP procedures of Section 611.110 based on consideration of the factors in subsection (e) of this Section.

BOARD NOTE: Drawn from 40 CFR 141.23(c)(6) (2012)~~(2002)~~.

d) Standard for SEP reduction in monitoring. The Agency must grant a SEP that allows a reduction in the monitoring frequency if the supplier demonstrates that all previous analytical results were less than the MCL, provided the supplier meets the following minimum data requirements:

1) For GWS suppliers: a minimum of three rounds of monitoring.

2) For an SWS or mixed system supplier: annual monitoring for at least three years.

3) At least one sample must have been taken since January 1, 1990.

4) A supplier that uses a new water source is not eligible for a SEP until it completes three rounds of monitoring from the new source.

BOARD NOTE: Drawn from 40 CFR 141.23(c)(4) (2012)~~(2002)~~.

e) Standard for SEP monitoring conditions. As a condition of any SEP, the Agency must require that the supplier take a minimum of one sample during the term of the SEP. In determining the appropriate reduced monitoring frequency, the Agency must consider the following:

1) Reported concentrations from all previous monitoring;

2) The degree of variation in reported concentrations; and

3) Other factors that may affect contaminant concentrations, such as changes in groundwater pumping rates, changes in the CWS's configuration, the CWS's operating procedures, or changes in stream flows or characteristics.

BOARD NOTE: Drawn from 40 CFR 141.23(c)(3) and (c)(5) (2012)~~(2002)~~.

f) SEP Conditions and Revision.

1) A SEP will expire at the end of the compliance cycle for which it was issued.

BOARD NOTE: Drawn from 40 CFR 141.23(c)(3) (2012)~~(2002)~~.

2) In issuing a SEP, the Agency must specify the level of the contaminant upon which the "reliably and consistently" determination was based. A SEP must provide that the Agency will review and, where appropriate, revise its determination of the appropriate monitoring frequency when the supplier submits new monitoring data or when other data relevant to the supplier's appropriate monitoring frequency become available.

BOARD NOTE: Drawn from 40 CFR 141.23(c)(6) (2012)~~(2002)~~.

g) A supplier that exceeds the MCL as determined in Section 611.609, must monitor quarterly for that contaminant, beginning in the next quarter after the violation occurred.

BOARD NOTE: Derived from 40 CFR 141.23(c)(7) (2012)~~(2002)~~.

h) Reduction of quarterly monitoring.

1) The Agency must grant a SEP pursuant to Section 611.110 that reduces the monitoring frequency to that specified by subsection (a) of this Section if it determines that the sampling point is reliably and consistently below the MCL.

2) A request for a SEP must include the following minimal information:

A) For a GWS: two quarterly samples.

B) For an SWS or mixed system supplier: four quarterly samples.

3) In issuing the SEP, the Agency must specify the level of the contaminant upon which the "reliably and consistently" determination was based. Any SEP that allows less frequent monitoring based on an Agency "reliably and consistently" determination must include a condition requiring the supplier to resume quarterly monitoring for any contaminant pursuant to subsection (g) of this Section if it violates the MCL specified by Section 611.609 for that contaminant.

BOARD NOTE: Derived from 40 CFR 141.23(c)(8) (2012)~~(2002)~~.

i) A new system supplier ~~that begins operation after January 22, 2004~~ or a supplier whose system uses a new source of water ~~beginning after January 22, 2004~~ must demonstrate compliance with the MCL within a period of time specified by a permit issued the Agency. The supplier must also comply with the initial sampling frequencies specified by the Agency to ensure a system can demonstrate compliance with the MCL. Routine and increased monitoring frequencies must be conducted in accordance with the requirements in this Section.

BOARD NOTE: Derived from 40 CFR 141.23(c)(9) (2012)~~(2002)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.609 Determining Compliance

Compliance with the MCLs of Section 611.300 or 611.301 (as appropriate) must be determined based on the analytical results obtained at each sampling point.

a) For suppliers that monitor at a frequency greater than annual, compliance with the MCLs for antimony, arsenic ~~(effective January 22, 2004)~~, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is determined by a running annual average at each sampling point. ~~Effective January 22, 2004, if a system fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.~~

1) If the average at any sampling point is greater than the MCL, then the supplier is out of compliance.

2) If any one sample would cause the annual average to be exceeded, then the supplier is out of compliance immediately.

3) Any sample below the method detection limit must be calculated at zero for the purpose of determining the annual average.

BOARD NOTE: The "method detection limit" is different from the "detection limit," as set forth in Section 611.600. The "method detection limit" is the level of contaminant that can be determined by a particular method with a 95 percent degree of confidence, as determined by the method outlined in appendix B to 40 CFR 136, incorporated by reference

at Section 611.102.

4) If a system fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.

b) For suppliers that monitor annually or less frequently, compliance with the MCLs for antimony, arsenic ~~(effective January 22, 2004)~~, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is determined by the level of the contaminant at any sampling point. If confirmation samples are required by the Agency, the determination of compliance will be based on the average of the annual average of the initial MCL exceedence and any Agency-required confirmation samples. If a~~Effective January 22, 2004, if a~~ supplier fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.

c) Compliance with the MCLs for nitrate and nitrite is determined based on one sample if the levels of these contaminants are below the MCLs. If the levels of nitrate or nitrite in the initial sample exceed the MCLs, Section 611.606 requires confirmation sampling, and compliance is determined based on the average of the initial and confirmation samples.

d) Arsenic sampling results must be reported to the nearest 0.001 mg/ℓ.

BOARD NOTE: Derived from 40 CFR 141.23(i) (2012)~~(2005)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.611 Inorganic Analysis

Analytical methods are from documents incorporated by reference in Section 611.102. These are mostly referenced by a short name defined by Section 611.102(a). Other abbreviations are defined in Section 611.101.

a) Analysis for the following contaminants must be conducted using the following methods or an alternative method approved pursuant to Section 611.480. Criteria for analyzing arsenic, chromium, copper, lead, nickel, selenium, sodium, and thallium with digestion or directly without digestion, and other analytical procedures, are contained in USEPA Technical Notes, incorporated by reference in Section 611.102.

BOARD NOTE: Because MDLs reported in USEPA Environmental Metals Methods 200.7 and 200.9 were determined using a 2× preconcentration step during sample digestion, MDLs determined when samples are analyzed by direct analysis (i.e., no sample digestion) will be higher. For direct analysis of cadmium and arsenic by USEPA Environmental Metals Method 200.7, and arsenic by Standard Methods, Method 3120 B, sample preconcentration using pneumatic nebulization may be required to achieve lower detection limits. Preconcentration may also be required for direct analysis of antimony, lead, and thallium by USEPA Environmental Metals Method 200.9; antimony and lead by Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; and lead by ASTM Method D3559-96 D or D3559-03 D unless multiple in-furnace depositions are made.

1) Alkalinity.

A) Titrimetric.

i) ASTM Method D1067-92 B, D1067-02 B, or D1067-06 B;r

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 2320 B; or

iii) Standard Methods Online, Method 3113 B-04.

B) Electrometric titration: USGS Methods, Method I-1030-85.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 2320 B as an approved alternative method for alkalinity in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D1067-06 B and Standard Methods Online, Method 3113 B-04 as approved alternative methods for alkalinity in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

2) Antimony.

A) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

B) Atomic absorption, hydride technique: ASTM Method D3697-92, D3697-02, or D3697-07.

C) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev.2.2).

D) Atomic absorption, furnace technique:

i) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

ii) Standard Methods Online, Method 3113 B-04.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 3113B and USEPA NERL Method 200.5 as approved alternative methods for antimony in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D3697-07 as an approved alternative method for antimony in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908. USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for antimony in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

3) Arsenic.

BOARD NOTE: If ultrasonic nebulization is used in the determination of arsenic by Method 200.8, the arsenic must be in the pentavalent state to provide uniform signal response. For direct analysis of arsenic with Method 200.8 using ultrasonic nebulization, samples and standards must contain one mg/ℓ of sodium hypochlorite.

A) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

B) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

C) Atomic absorption, furnace technique.

i) ASTM Method D2972-97 C, D2972-03 C, or D2972-08 C;

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

iii) Standard Methods Online, Method 3113 B-04.

D) Atomic absorption, hydride technique.

i) ASTM Method D2972-97 B, D2972-03 C, or D2972-08 B;

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3114 B; or

iii) Standard Methods Online, Method 3114 B-04.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3113 B and 3114 B and USEPA NERL Method 200.5 as approved alternative methods for arsenic in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D2972-08 B and C as approved alternative methods for arsenic in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908). USEPA added Standard Methods Online, Method 3113 B-04 and Method 3114 B-04 as approved alternative methods for arsenic in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

4) Asbestos: Transmission electron microscopy: USEPA Asbestos Method-100.1 or USEPA Asbestos Method-100.2.

5) Barium.

A) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

B) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

C) Atomic absorption, direct aspiration technique: Standard Methods, 18th, 19th, or 21st ed., Method 3111 D.

D) Atomic absorption, furnace technique:

i) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

ii) Standard Methods Online, Method 3113 B-04.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3111 D, 3113 B, and 3120 B and USEPA NERL Method 200.5 as approved alternative methods for barium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for barium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

6) Beryllium.

A) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

B) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

C) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

D) Atomic absorption, furnace technique.

i) ASTM Method D3645-97 B, D3645-03 B, or D3645-08 B;

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

iii) Standard Methods Online, Method 3113 B-04.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3113 B and 3120 B and USEPA NERL Method 200.5 as approved alternative methods for beryllium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D3645-08 B as an approved alternative method for beryllium in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for beryllium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

7) Cadmium.

A) Inductively coupled plasma arc furnace: USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4).

B) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

C) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

D) Atomic absorption, furnace technique:

i) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

ii) Standard Methods Online, Method 3113 B-04.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 3113 B and USEPA NERL Method 200.5 as approved alternative methods for cadmium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for cadmium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

8) Calcium.

A) EDTA titrimetric.

i) ASTM Method D511-93 A, D511-03 A, or D511-09 A; or

ii) Standard Methods, 18th or 19th ed., Method 3500-Ca D or Standard Methods, 20th or 21st ed., Method 3500-Ca B.

B) Atomic absorption, direct aspiration.

i) ASTM Method D511-93 B, D511-03 B, or D511-09 B; or

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3111 B.

C) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

D) Ion chromatography: ASTM Method D6919-03 or D6919-09.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3111 B, 3120 B, and 3500-Ca B and USEPA NERL Method 200.5 as approved alternative methods for calcium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D511-09 A and B as approved alternative methods for calcium in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908). USEPA added ASTM Method D6919-09 as an approved alternative method for calcium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

9) Chromium.

A) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

B) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

C) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

D) Atomic absorption, furnace technique:

i) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

ii) Standard Methods Online, Method 3113 B-04.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3113 B and 3120 B and USEPA NERL Method 200.5 as approved alternative methods for chromium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for chromium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

10) Copper.

A) Atomic absorption, furnace technique.

i) ASTM Method D1688-95 C, D1688-02 C, or D1688-07 C;

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

iii) Standard Methods Online, Method 3113 B-04.

B) Atomic absorption, direct aspiration.

i) ASTM Method D1688-95 A, D1688-02 A, or D1688-07 A; or

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3111 B.

C) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

D) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

E) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

F) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3111 B, 3113 B, and 3120 B and USEPA NERL Method 200.5 as an approved alternative method for copper in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D1688-07 A and C as approved alternative methods for copper in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for copper in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

11) Conductivity; Conductance.

A) ASTM Method D1125-95(1999) A; or

B) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 2510 B.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 2510 B as an approved alternative method for conductivity in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

12) Cyanide.

A) Manual distillation (ASTM Method D2036-98 A or Standard Methods, 18th, 19th, or 20th ed., Method 4500-CN^- C), followed by spectrophotometric, amenable.

i) ASTM Method D2036-98 B or 2036-06 B; or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-CN^- G.

B) Manual distillation (ASTM Method D2036-98 A or Standard Methods, 18th, 19th, or 20th ed., Method 4500-CN^- C), followed by spectrophotometric, manual.

i) ASTM Method D2036-98 A or D2036-06 A;

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-CN^- E; or

iii) USGS Methods, Method I-3300-85.

C) Spectrophotometric, semiautomated: USEPA Environmental Inorganic Methods, Method 335.4 (rev. 1.0).

D) Selective electrode: Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-CN^- F.

E) UV/Distillation/Spectrophotometric: Kelada 01.

F) Microdistillation/Flow Injection/Spectrophotometric: QuickChem 10-204-00-1-X.

G) Ligand exchange and amperometry.

i) ASTM Method D6888-03.

ii) OI Analytical Method OIA-1677 DW.

H) Gas chromatography-mass spectrometry headspace: Method ME355.01.

BOARD NOTE: USEPA added ASTM Method D2036-06 A and Standard Methods, 21st ed., Methods 4500-CN^-E, F, and G as approved alternative methods for cyanide in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Method ME355.01 as an approved alternative method for cyanide in appendix A to subpart C of 40 CFR 141 on August 3, 2009 (at 74 Fed. Reg. 38348).

13) Fluoride.

A) Ion Chromatography.

i) USEPA Environmental Inorganic Methods, Method 300.0 (rev. 2.1) or USEPA Organic and Inorganic Methods, Method 300.1 (rev. 1.0);

ii) ASTM Method D4327-97 or D4327-03;

iii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4110 B; or

iv) Hach SPADNS 2 Method 10225.

B) Manual distillation, colorimetric SPADNS: Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-F^- B and D.

C) Manual electrode.

i) ASTM Method D1179-93 B, D1179-99 B, ~~or~~ D1179-04 B, or D1179-10 B; or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-F^- C.

D) Automated electrode: Technicon Methods, Method 380-75WE.

E) Automated alizarin.

i) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-F^- E; or

ii) Technicon Methods, Method 129-71W.

F) Capillary ion electrophoresis: ASTM Method D6508-00(2005).

BOARD NOTE: On March 12, 2007 (at 72 Fed. Reg. 11200), USEPA amended the entry for fluoride to add capillary ion electrophoresis in the table at corresponding 40 CFR 141.23(k)(1) to allow the use of "Waters Method D6508, Rev. 2." The Board attempt to locate a copy of the method disclosed that it is an ASTM method originally approved in 2000 and reapproved in

2005. The Board has cited to the ASTM Method D6508-00 (2005).

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 4110 B and 4500-F^- B, C, D, and E and ASTM Method D1179-04 B as approved alternative methods for fluoride in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Hach SPADNS 2 Method 10225 as an approved alternative method for fluoride in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014). USEPA added ASTM Method D1179-10 B as an approved alternative method for fluoride in appendix A to subpart C of 40 CFR 141 on June 28, 2012 (at 77 Fed. Reg. 38528).

14) Lead.

A) Atomic absorption, furnace technique.

i) ASTM Method D3559-96 D, D3559-03 D, or D3559-08 D;

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

iii) Standard Methods Online, Method 3113 B-04.

B) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

C) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

D) Differential Pulse Anodic Stripping Voltammetry: Palintest Method 1001.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 3113 B and USEPA NERL Method 200.5 as approved alternative methods for lead in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D3559-08 D as an

approved alternative method for lead in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for lead in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

15) Magnesium.

A) Atomic absorption.

i) ASTM Method D511-93 B, D511-03 B, or D511-09 B; or

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3111 B.

B) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

C) Complexation titrimetric.

i) ASTM Method D511-93 A, D511-03 A, or D511-09 A; or

ii) Standard Methods, 18th or 19th ed., Method 3500-Mg E or Standard Methods, 20th or 21st ed., Method 3500-Mg B.

D) Ion chromatography: ASTM Method D6919-03 or D6919-09.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3111 B, 3120 B, and 3500-Mg B and USEPA NERL Method 200.5 as approved alternative methods for magnesium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D511-09 A and B as approved alternative methods for

magnesium in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908). USEPA added ASTM Method D6919-09 as an approved alternative method for magnesium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

16) Mercury.

A) Manual cold vapor technique.

i) USEPA Environmental Metals Methods, Method 245.1 (rev. 3.0);

ii) ASTM Method D3223-97 or D3223-02; ~~or~~

iii) Standard Methods, 18th, 19th, or 21st ed., Method 3112 B; ~~.~~

iv) Standard Methods Online, Method 3112 B-09.

B) Automated cold vapor technique: USEPA Inorganic Methods, Method 245.2.

C) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 3112 B as an approved alternative method for mercury in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Standard Methods Online, Method 3112 B-09 as an approved alternative method for mercury in appendix A to subpart C of 40 CFR 141 on June 28, 2012 (at 77 Fed. Reg. 38528).

17) Nickel.

A) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

B) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

C) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

D) Atomic absorption, direct aspiration technique: Standard Methods, 18th, 19th, or 21st ed., Method 3111 B.

E) Atomic absorption, furnace technique:

i) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

ii) Standard Methods Online, Method 3113 B-04.

F) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3111 B, 3113 B, and 3120 B and USEPA NERL Method 200.5 as approved alternative methods for nickel in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for nickel in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

18) Nitrate.

A) Ion chromatography.

i) USEPA Environmental Inorganic Methods, Method 300.0 (rev. 2.1) or USEPA Organic and Inorganic Methods, Method 300.1 (rev. 1.0);

ii) ASTM Method D4327-97 or D4327-03;

iii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4110 B; or

iv) Waters Test Method B-1011, available from Millipore Corporation.

B) Automated cadmium reduction.

i) USEPA Environmental Inorganic Methods, Method 353.2 (rev. 2.0);

ii) ASTM Method D3867-90 A; or

iii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-NO_3^- F.

C) Ion selective electrode.

i) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-NO_3^- D; or

ii) Technical Bulletin 601.

D) Manual cadmium reduction.

i) ASTM Method D3867-90 B; or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-NO_3^- E.

E) Capillary ion electrophoresis: ASTM Method D6508-00(2005).

~~BOARD NOTE: On March 12, 2007 (at 72 Fed. Reg. 11200), USEPA amended the entry for nitrate to add capillary ion electrophoresis in the table at corresponding 40 CFR 141.23(k)(1) to allow the use of "Waters Method D6508, Rev. 2." The Board attempt to locate a copy of the method disclosed that it is an ASTM method originally approved in 2000 and reapproved in 2005. The Board has cited to the ASTM Method D6508-00(2005).~~

F) Reduction-colorimetric: Systea Easy (1-Reagent).

G) Direct colorimetric: Hach TNTplus 835/836 Method 10206.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 4110 B and 4500-NO_3^- D, E, and F as approved alternative methods for nitrate in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Systea Easy (1-Reagent) as an approved alternative method for nitrate in appendix A to subpart C of 40 CFR 141 on August 3, 2009 (at 73 Fed. Reg. 38348). USEPA added Hach TNTplus 835/836 Method 10206 as an approved alternative method for nitrate in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

19) Nitrite.

A) Ion chromatography.

i) USEPA Environmental Inorganic Methods, Method 300.0 (rev. 2.1) or USEPA Organic and Inorganic Methods, Method 300.1 (rev. 1.0);

ii) ASTM Method D4327-97 or D4327-03;

iii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4110 B; or

iv) Waters Test Method B-1011, available from Millipore Corporation.

B) Automated cadmium reduction.

i) USEPA Environmental Inorganic Methods, Method 353.2 (rev. 2.0);

ii) ASTM Method D3867-90 A; or

iii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-NO_3^- F.

C) Manual cadmium reduction.

i) ASTM Method D3867-90 B; or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-NO_3^- E.

D) Spectrophotometric: Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-NO_2^- B.

E) Capillary ion electrophoresis: ASTM Method D6508-00(2005).

~~BOARD NOTE: On March 12, 2007 (at 72 Fed. Reg. 11200), USEPA amended the entry for nitrite to add capillary ion electrophoresis in the table at corresponding 40 CFR 141.23(k)(1) to allow the use of "Waters Method D6508, Rev. 2." The Board attempt to locate a copy of the method disclosed that it is an ASTM method originally approved in 2000 and reapproved in 2005. The Board has cited to the ASTM Method D6508-00(2005).~~

F) Reduction-colorimetric: Systea Easy (1-Reagent).

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 4110 B, 4500-NO_3^- E and F; and 4500-NO_2^- B as approved alternative methods for nitrite in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Systea Easy (1-Reagent) as an approved alternative method for nitrite in appendix A to subpart C of 40 CFR 141 on August 3, 2009 (at 73 Fed. Reg. 38348).

20) Orthophosphate (unfiltered, without digestion or hydrolysis).

A) Automated colorimetric, ascorbic acid.

i) USEPA Environmental Inorganic Methods, Method 365.1 (rev. 2.0); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-P F.

B) Single reagent colorimetric, ascorbic acid.

i) ASTM Method D515-88 A; or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-P E.

C) Colorimetric, phosphomolybdate: USGS Methods, Method I-1601-85.

D) Colorimetric, phosphomolybdate, automated-segmented flow: USGS Methods, Method I-2601-90.

E) Colorimetric, phosphomolybdate, automated discrete: USGS Methods, Method I-2598-85.

F) Ion Chromatography.

i) USEPA Environmental Inorganic Methods, Method 300.0 (rev. 2.1) or USEPA Organic and Inorganic Methods, Method 300.1 (rev. 1.0);

ii) ASTM Method D4327-97 or D4327-03; or

iii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4110 B.

G) Capillary ion electrophoresis: ASTM Method D6508-00(2005).

~~BOARD NOTE: On March 12, 2007 (at 72 Fed. Reg. 11200), USEPA amended the entry for orthophosphate to add capillary ion electrophoresis in the table at corresponding 40 CFR 141.23(k)(1) to allow the use of "Waters Method D6508, Rev. 2." The Board attempt to locate a copy of the method disclosed that it is an ASTM method originally approved in 2000 and reapproved in 2005. The Board has cited to the ASTM Method D6508-00(2005).~~

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 4110 B, 4500-P E and F as approved alternative methods for orthophosphate in

appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

21) pH: electrometric.

A) USEPA Inorganic Methods, Method 150.1 or Method 150.2;

B) ASTM Method D1293-95 or D1293-99; or

C) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 4500-H^+ B.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 4500-H^+ B as an approved alternative method for pH in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

22) Selenium.

A) Atomic absorption, hydride.

i) ASTM Method D3859-98 A, D3859-03 A, or D3859-08 A;

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3114 B; or

iii) Standard Methods Online, Method 3114 B-09.

B) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

C) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

D) Atomic absorption, furnace technique.

i) ASTM Method D3859-98 B, D3859-03 B, or D3859-08 B;

ii) Standard Methods, 18th, 19th, or 21st ed., Method 3113 B; or

iii) Standard Methods Online, Method 3113 B-04.

E) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 3113 B and 3114 B and USEPA NERL Method 200.5 as approved alternative methods for selenium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D3859-08 A and B as approved alternative methods for selenium in appendix A to subpart C of 40 CFR 141 on November 10, 2009 (at 74 Fed. Reg. 57908). USEPA added Standard Methods Online, Method 3113 B-04 and Method 3114 B-09 as approved alternative methods for selenium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

23) Silica.

A) Colorimetric, molybdate blue: USGS Methods, Method I-1700-85.

B) Colorimetric, molybdate blue, automated-segmented flow: USGS Methods, Method I-2700-85.

C) Colorimetric: ASTM Method D859-94, D859-00, ~~or~~ D859-05, or D859-10.

D) Molybdosilicate: Standard Methods, 18th or 19th ed., Method 4500-Si D or Standard Methods, 20th or 21st ed., Method 4500-SiO_2 C.

E) Heteropoly blue: Standard Methods, 18th or 19th ed., Method 4500-Si E or Standard Methods, 20th or 21st ed., Method 4500-SiO_2 D.

F) Automated method for molybdate-reactive silica: Standard Methods, 18th or 19th ed., Method 4500-Si F or Standard Methods, 20th or 21st ed., Method 4500-SiO_2 E.

G) Inductively coupled plasma.

i) USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4); or

ii) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 3120 B.

H) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added ASTM Method D859-05, Standard Methods, 21st ed.; Methods 3120 B and 4500-SiO_2 C, D, and E; and USEPA NERL Method 200.5 as approved alternative methods for silica in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D859-10 as an approved alternative method for silica in appendix A to subpart C of 40 CFR 141 on June 28, 2012 (at 77 Fed. Reg. 38528).

24) Sodium.

A) Inductively coupled plasma: USEPA Environmental Metals Methods, Method 200.7 (rev. 4.4).

B) Atomic absorption, direct aspiration: Standard Methods, 18th, 19th, or 21st ed., Method 3111 B.

C) Ion chromatography: ASTM Method D6919-03 or D6919-09.

D) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 3113 B and USEPA NERL Method 200.5 as approved alternative methods for sodium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D6919-09 as an approved alternative method for sodium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

25) Temperature; thermometric: Standard Methods, 18th, 19th, 20th, or 21st ed., Method 2550.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 2550 as an approved alternative method for temperature in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

26) Thallium.

A) Inductively coupled plasma-mass spectrometry: USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3).

B) Atomic absorption, platform furnace technique: USEPA Environmental Metals Methods, Method 200.9 (rev. 2.2).

b) Sample collection for antimony, arsenic ~~(effective January 22, 2004)~~, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, nitrate, nitrite, selenium, and thallium pursuant to Sections 611.600 through 611.604 must be conducted using the following sample preservation, container, and maximum holding time procedures:

BOARD NOTE: For cyanide determinations samples must be adjusted with sodium hydroxide to pH 12 at the time of collection. When chilling is indicated the sample must be shipped and stored at 4° C or less. Acidification of nitrate or metals samples may be with a concentrated acid or a dilute (50% by volume) solution of the applicable concentrated acid. Acidification of samples for metals analysis is encouraged and allowed at the laboratory rather than at the time of sampling provided the shipping time and other instructions in Section 8.3 of USEPA Environmental Metals Method 200.7, 200.8, or 200.9 are followed.

1) Antimony.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

2) Arsenic.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

3) Asbestos.

A) Preservative: Cool to 4° C.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within 48 hours.

4) Barium.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

5) Beryllium.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

6) Cadmium.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

7) Chromium.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

8) Cyanide.

A) Preservative: Cool to 4° C. Add sodium hydroxide to pH greater than 12. See the analytical methods for information on sample preservation.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within 14 days.

9) Fluoride.

A) Preservative: None.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within one month.

10) Mercury.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within 28 days.

11) Nickel.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

12) Nitrate, chlorinated.

A) Preservative: Cool to 4° C.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within 14 days.

13) Nitrate, non-chlorinated.

A) Preservative: Concentrated sulfuric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within 14 days.

14) Nitrite.

A) Preservative: Cool to 4° C.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within 48 hours.

15) Selenium.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

16) Thallium.

A) Preservative: Concentrated nitric acid to pH less than 2.

B) Plastic or glass (hard or soft).

C) Holding time: Samples must be analyzed as soon after collection as possible, but in any event within six months.

c) Analyses under this Subpart N must be conducted by laboratories that received approval from USEPA or the Agency. The Agency must certify laboratories to conduct analyses for antimony, arsenic ~~(effective January 23, 2006)~~, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, nitrate, nitrite, selenium, and thallium if the laboratory does as follows:

1) It analyzes performance evaluation (PE) samples, provided by the Agency pursuant to 35 Ill. Adm. Code 186, that include those substances at levels not in excess of levels expected in drinking water; and

2) It achieves quantitative results on the analyses within the following acceptance limits:

A) Antimony: ± 30% at greater than or equal to 0.006 mg/ℓ.

B) Arsenic: ± 30% at greater than or equal to 0.003 mg/ℓ.

C) Asbestos: 2 standard deviations based on study statistics.

D) Barium: ± 15% at greater than or equal to 0.15 mg/ℓ.

E) Beryllium: ± 15% at greater than or equal to 0.001 mg/ℓ.

F) Cadmium: ± 20% at greater than or equal to 0.002 mg/ℓ.

G) Chromium: ± 15% at greater than or equal to 0.01 mg/ℓ.

H) Cyanide: ± 25% at greater than or equal to 0.1 mg/ℓ.

I) Fluoride: ± 10% at 1 to 10 mg/ℓ.

J) Mercury: ± 30% at greater than or equal to 0.0005 mg/ℓ.

K) Nickel: ± 15% at greater than or equal to 0.01 mg/ℓ.

L) Nitrate: ± 10% at greater than or equal to 0.4 mg/ℓ.

M) Nitrite: ± 15% at greater than or equal to 0.4 mg/ℓ.

N) Selenium: ± 20% at greater than or equal to 0.01 mg/ℓ.

O) Thallium: ± 30% at greater than or equal to 0.002 mg/ℓ.

BOARD NOTE: Derived from 40 CFR 141.23(k) and appendix A to 40 CFR 141 (2012)~~(2011)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.612 Monitoring Requirements for Old Inorganic MCLs

a) Analyses for the purpose of determining compliance with the old inorganic MCLs of Section 611.300 are required as follows:

1) Analyses for all CWSs utilizing surface water sources must be repeated at yearly intervals.

2) Analyses for all CWSs utilizing only groundwater sources must be repeated at three-year intervals.

3) This subsection (a)(3) corresponds with 40 CFR 141.23(1)(3), which requires monitoring for the repealed old MCL for nitrate at a frequency

specified by the state. The Board has followed the USEPA lead and repealed that old MCL. This statement maintains structural consistency with USEPA rules.

4) This subsection (a)(4) corresponds with 40 CFR 141.23(1)(4) ,which authorizes the state to determine compliance and initiate enforcement action. This statement maintains structural consistency with USEPA rules.

b) If the result of an analysis made under subsection (a) of this Section indicates that the level of any contaminant listed in Section 611.300 exceeds the old MCL, the supplier must report to the Agency within seven days and initiate three additional analyses at the same sampling point within one month.

c) When the average of four analyses made pursuant to subsection (b) of this Section, rounded to the same number of significant figures as the old MCL for the substance in question, exceeds the old MCL, the supplier must notify the Agency and give notice to the public pursuant to Subpart V of this Part. Monitoring after public notification must be at a frequency designated by the Agency by a SEP granted pursuant to Section 611.110 and must continue until the old MCL has not been exceeded in two successive samples or until a different monitoring schedule becomes effective as a condition to a variance, an adjusted standard, a site specific rule, an enforcement action, or another SEP granted pursuant to Section 611.110.

d) This subsection (d) corresponds with 40 CFR 141.23(o), which pertains to monitoring for the repealed old MCL for nitrate. This statement maintains structural consistency with USEPA rules.

e) This subsection (e) corresponds with 40 CFR 141.23(p), which pertains to the use of existing data up until a date long since expired. This statement maintains structural consistency with USEPA rules.

f) Analyses~~Except for arsenic, for which analyses must be made in accordance with Section 611.611, analyses~~ conducted to determine compliance with the old MCLs of Section 611.300 must be made in accordance with the following methods, incorporated by reference in Section 611.102, or alternative methods approved by the Agency pursuant to Section 611.480.

1) Fluoride: The methods specified in Section 611.611(c) must apply for the purposes of this Section.

2) Iron.

A) Standard Methods.

i) Method 3111 B, 18th, 19th, or 21st ed.;

ii) Method 3113 B, 18th, 19th, or 21st ed.; or

iii) Method 3120 B, 18th, 19th, 20th, or 21st ed.

B) Standard Methods Online, Method 3113 B-04.

C) USEPA Environmental Metals Methods.

i) Method 200.7 (rev. 4.4); or

ii) Method 200.9 (rev. 2.2).

D) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added this method as an approved alternative method in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for iron in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

BOARD NOTE: USEPA added Standard Methods, 21st ed.; Methods 3111 B, 3113 B, and 3120 B and USEPA NERL Method 200.5 as approved alternative methods for iron in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

3) Manganese.

A) Standard Methods.

i) Method 3111 B, 18th, 19th, or 21st ed.;

ii) Method 3113 B, 18th, 19th, or 21st ed.; or

iii) Method 3120 B, 18th, 19th, 20th, or 21st ed.

B) Standard Methods Online, Method 3113 B-04.

C) USEPA Environmental Metals Methods.

i) Method 200.7 (rev. 4.4);

ii) Method 200.8 (rev. 5.3); or

iii) Method 200.9 (rev. 2.2).

D) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed.; Methods 3111 B, 3113 B, and 3120 B and USEPA NERL Method 200.5 as approved alternative methods for manganese in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added Standard Methods Online, Method 3113 B-04 as an approved alternative method for manganese in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014).

4) Zinc.

A) Standard Methods.

i) Method 3111 B, 18th, 19th, or 21st ed.; or

ii) Method 3120 B, 18th , 19th, 20th, or 21st ed.

B) USEPA Environmental Metals Methods.

i) Method 200.7 (rev. 4.4); or

ii) Method 200.8 (rev. 5.3).

C) Axially viewed inductively coupled plasma-atomic emission spectrometry (AVICP-AES): USEPA NERL Method 200.5.

BOARD NOTE: USEPA added Standard Methods, 21st ed.; Methods 3111 B and 3120 B and USEPA NERL Method 200.5 as approved alternative methods for zinc in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

BOARD NOTE: The provisions of subsections (a) through (e) of this Section derive from 40 CFR 141.23(l) through (p) (2012)~~(2011)~~. Subsections (f)(2) through (f)(4) of this Section relate exclusively to additional State requirements. The Board retained subsection (f) of this Section to set forth methods for the inorganic contaminants for which there is a State-only MCL. The methods specified are those set forth in 40 CFR 143.4(b) and appendix A to subpart C of 40 CFR 141 (2012)~~(2011)~~, for secondary MCLs.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART O: ORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section 611.641 Old MCLs

a) An analysis of substances for the purpose of determining compliance with the old MCLs of Section 611.310 must be made as follows:

1) The Agency must~~shall~~, by SEP, require CWS suppliers utilizing surface water sources to collect samples during the period of the year when contamination by pesticides is most likely to occur. The Agency must require the supplier to repeat these analyses at least annually.

2) The Agency must~~shall~~, by SEP, require CWS suppliers utilizing only groundwater sources to collect samples at least once every three years.

b) If the result of an analysis made pursuant to subsection (a) indicates that the level of any contaminant exceeds its old MCL, the CWS supplier must report to the Agency within seven days and initiate three additional analyses within one month.

c) When the average of four analyses made pursuant to subsection (a), rounded to the same number of significant figures as the MCL for the substance in question, exceeds the old MCL, the CWS supplier must report to the Agency and give notice to the public pursuant to Subpart T of this Part. Monitoring after public notification must be at a frequency designated by the Agency and must continue until the MCL has not been exceeded in two successive samples or until a monitoring schedule as a condition to a variance, adjusted standard, or enforcement action becomes effective.

d) Analysis made to determine compliance with the old MCLs of Section 611.310 must be made in accordance with the appropriate methods specified in Section 611.645.

BOARD NOTE: This provision now applies only to State-only MCLs. It was formerly derived from 40 CFR 141.24(a) through (e), which USEPA removed and reserved.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.645 Analytical Methods for Organic Chemical Contaminants

Analysis for the Section 611.311(a) VOCs under Section 611.646; the Section 611.311(c) SOCs under Section 611.648; the Section 611.310 old MCLs under Section 611.641; and for THMs, TTHMs, and TTHM potential must be conducted using the methods listed in this Section. All methods are incorporated by reference in Section 611.102. Other required analytical test procedures germane to the conduct of these analyses are contained in the USEPA document, "Technical Notes of Drinking Water Methods," incorporated by reference in Section 611.102.

a) Volatile Organic Chemical Contaminants (VOCs).

Contaminant	Analytical Methods
Benzene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
Carbon tetrachloride	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0) and 551.1 (rev. 1.0)

Chlorobenzene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
1,2-Dichlorobenzene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
1,4-Dichlorobenzene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
1,2-Dichloroethane	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
cis-Dichloroethylene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
trans-Dichloroethylene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
Dichloromethane	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
1,2-Dichloropropane	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
Ethylbenzene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
Styrene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method

	524.3 (rev. 1.0)
Tetrachloroethylene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)and 551.1 (rev. 1.0)
1,1,1-Trichloroethane	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0) and 551.1 (rev. 1.0)
Trichloroethylene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0) and 551.1 (rev. 1.0)
Toluene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
1,2,4-Trichlorobenzene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
1,1-Dichloroethylene	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
1,1,2-Trichloroethane	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
Vinyl chloride	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)
Xylenes (total)	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0)

BOARD NOTE: USEPA added USEPA OGWDW Method 524.3 (rev. 1.0) as an alternative method for all of the VOCs in appendix A to subpart C of 40 CFR 141 on August 3, 2009 (at 74 Fed. Reg. 38348).

b) Synthetic Organic Chemical Contaminants (SOCs).

Contaminant	Analytical Methods
2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD or dioxin)	Dioxin and Furan Method 1613 (rev. B)
2,4-D	USEPA Organic Methods, Methods 515.2 (rev. 1.1), 555 (rev. 1.0), and 515.1 (rev. 4.0); USEPA Organic and Inorganic Methods, Method 515.3 (rev. 1.0); USEPA OGWDW Methods, Method 515.4 (rev. 1.0); ASTM Method D5317-93 or D5317-98; Standard Methods, 21st ed., Method 6640 B
2,4,5-TP (Silvex)	USEPA Organic Methods, Methods 515.2 (rev. 1.1), 555 (rev. 1.0), and 515.1 (rev. 4.0); USEPA Organic and Inorganic Methods, Method 515.3 (rev. 1.0); USEPA OGWDW Methods, Method 515.4 (rev. 1.0); ASTM Method D5317-93 or D5317-98; Standard Methods, 21st ed., Method 6640 B
Alachlor	USEPA Organic Methods, Methods 505 (rev. 2.1)[1], 507 (rev. 2.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev. 1.0)
Atrazine	USEPA Organic Methods, Methods 505 (rev. 2.1)[1], 507 (rev. 2.1), 508.1 (rev. 2.1), 523 (ver. 1.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), 536 (ver. 1.0), and 551.1 (rev. 1.0); Syngenta AG-625[2]

Benzo(a)pyrene	USEPA Organic Methods, Methods 525.2 (rev. 2.0), 525.3 (ver 1.0), 550, and 550.1
Carbofuran	USEPA Organic Methods, Methods 531.1 (rev. 3.1); USEPA OGWDW Methods, Method 531.2 (rev. 1.0); Standard Methods, 18th ed. Supplement, 19th ed., or 20th ed., Method 6610; Standard Methods, 21st ed., Method 6610 B; Standard Methods Online, Method 6610 B-04
Chlordane	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.1), ~~and~~ 525.2 (rev. 2.0), and 525.3 (ver. 1.0)
Dalapon	USEPA Organic Methods, Methods 515.1 (rev. 4.0), 552.1 (rev. 1.0), and 552.2 (rev. 1.0); USEPA Organic and Inorganic Methods, Method 515.3 (rev. 1.0); USEPA OGWDW Methods, Methods 515.4 (rev. 1.0), 552.3 (rev. 1.0), and 557; Standard Methods, 21st ed., Method 6640 B
Di(2-ethylhexyl)adipate	USEPA Organic Methods, Methods 506 (rev. 1.1), ~~and~~ 525.2 (rev. 2.0), and 525.3 (ver. 1.0)
Di(2-ethylhexyl)phthalate	USEPA Organic Methods, Methods 506 (rev. 1.1), ~~and~~ 525.2 (rev. 2.0), and 525.3 (ver. 1.0)
Dibromochloropropane (DBCP)	USEPA Organic Methods, Methods 504.1 (rev. 1.1), USEPA OGWDW Methods, Methods 524.3 (rev. 1.0) and 551.1 (rev. 1.0)

Dinoseb	USEPA Organic Methods, Methods 515.1 (rev. 4.0) and 515.2 (rev. 1.1); USEPA Organic and Inorganic Methods, Method 515.3 (rev. 1.0); USEPA OGWDW Methods, Methods 515.4 (rev. 1.0) and 555 (rev. 1.0); Standard Methods, 21st ed., Method 6640 B
Diquat	USEPA NERL Method 549.2 (rev. 1.0)
Endothall	USEPA Organic Methods, Method 548.1 (rev. 1.0)
Endrin	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev. 1.0)
Ethylene dibromide (EDB)	USEPA Organic Methods, Method 504.1 (rev. 1.1); USEPA OGWDW Methods, Methods 524.3 (rev. 1.0) and 551.1 (rev.1.0)
Glyphosate	USEPA Organic Methods, Method 547; Standard Methods, 18th ed., 19th ed., 20th, or 21st ed., Method 6651 B
Heptachlor	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev. 1.0)
Heptachlor Epoxide	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev.1.0)
Hexachlorobenzene	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev. 1.0)

Hexachlorocyclopentadiene	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev. 1.0)
Lindane	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev. 1.0)
Methoxychlor	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 551.1 (rev. 1.0)
Oxamyl	USEPA Organic Methods, Method 531.1 (rev. 3.1); USEPA OGWDW Methods, Method 531.2 (rev. 1.0); Standard Methods, 18th ed. Supplement, 19th ed. or 20th ed. Method 6610; Standard Methods, 21st ed., Method 6610 B; Standard Methods Online, Method 6610 B-04
PCBs (measured for compliance purposes as decachlorobiphenyl)	USEPA Organic Methods, Method 508A (rev. 1.0)
PCBs (qualitatively identified as Aroclors)	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), ~~and~~ 525.2 (rev. 2.0), and 525.3 (ver. 1.0)
Pentachlorophenol	USEPA Organic Methods, Methods 515.1 (rev. 4.0), 515.2 (rev. 1.1), 525.2 (rev. 2.0), 525.3 (ver. 1.0), and 555 (rev. 1.0); USEPA Organic and Inorganic Methods, Method 515.3 (rev. 1.0); USEPA OGWDW Methods, Method 515.4 (rev. 1.0); ASTM Method D5317-93 or D5317-98 (2003); Standard Methods, 21st ed., Method 6640 B

Picloram	USEPA Organic Methods, Methods 515.1 (rev. 4.0), 515.2 (rev. 1.1) and 555 (rev. 1.0); USEPA Organic and Inorganic Methods, Method 515.3 (rev. 1.0); USEPA OGWDW Methods, Method 515.4 (rev. 1.0); ASTM Method D5317-93 or D5317-98 (2003); Standard Methods, 21st ed., Method 6640 B
Simazine	USEPA Organic Methods, Methods 505 (rev. 2.1)[1], 507 (rev. 2.1), 508.1 (rev. 2.0), 523 (ver. 1.0), 525.2 (rev. 2.0), 525.3 (ver. 1.0), 536 (ver. 1.0), and 551.1 (rev. 1.0)
Toxaphene	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 2.1), 508.1 (rev. 2.0), ~~and~~ 525.2 (rev. 2.0), and 525.3 (ver. 1.0)

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 6610 B and Standard Methods Online, Method 6610 B-04 as approved alternative methods for carbofuran and oxamyl on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added USEPA OGWDW Method 524.3 (rev. 1.0) as an alternative method for dibromochloropropane and ethylene dibromide in appendix A to subpart C of 40 CFR 141 on August 3, 2009 (at 74 Fed. Reg. 38348). USEPA approved Standard Methods, 21st ed., Method 6640 B and Standard Methods Online, Method 6640 B-01 and USEPA OGWDW Methods, Method 557 as approved alternative methods for dalapon in appendix A to subpart C of 40 CFR 141 on June 8, 2010 (at 75 Fed. Reg. 32295). USEPA added Standard Methods, 21st ed., Method 6640 B as an approved alternative method for 2,4-D, 2,4,5-TP (Silvex), dinoseb, pentachlorophenol, and picloram in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014). USEPA added Standard Methods, Online, Method 6640 B-01 as an approved alternative method for 2,4-D, 2,4,5-TP (Silvex), dalapon, dinoseb, pentachlorophenol, and picloram and in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014). Since the version of Method 6640 B that appears in Standard Methods Online is the same as that which appears in Standard Methods, 21st ed., the Board has cited only to Standard Methods, 21st ed. USEPA added Standard Methods, 21st ed., Method 6651 B as an approved alternative method for glyphosate in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014). USEPA added Standard Methods Online, Method 6651 B-00 as an approved alternative

method for glyphosate in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014). Since the version of Method 6651 B that appears in Standard Methods Online is the same as that which appears in Standard Methods, 21st ed., the Board has cited only to Standard Methods, 21st ed. USEPA approved USEPA OGWDW Methods, Method 523 (ver. 1.0) and Method 536 (ver. 1.0) as approved alternative methods for atrazine and simazine and USEPA NERL Methods, Method 525.3 as an approved alternative method for alachlor, atrazine, benzo(a)pyrene, chlordane, di(2-ethylhexyl)-adipate, di(2-ethylhexyl)phthalate, endrin, heptachlor, heptachlor epoxide, hexachloro-benzene, hexachlorocyclopentadiene, lindane, methoxychlor, PCBs (as aroclors), penta-chlorophenol, simazine, and toxaphene in appendix A to subpart C of 40 CFR 141 on June 8, 2012 (at 77 Fed. Reg. 38523).

c) Total Trihalomethanes (TTHMs).

Contaminant	Analytical Methods
Total Trihalomethanes (TTHMs), Trihalomethanes (THMs), and Maximum Total Trihalomethane Potential	USEPA Organic Methods, Methods 502.2 (rev. 2.1) and 524.2 (rev. 4.1); USEPA OGWDW Methods, Method 524.3 (rev. 1.0) and 551.1 (rev. 1.0)

BOARD NOTE: USEPA added USEPA OGWDW Method 524.3 (rev. 1.0) as an alternative method for total trihalomethane in appendix A to subpart C of 40 CFR 141 on August 3, 2009 (at 74 Fed. Reg. 38348).

d) State-Only MCLs (for which a method is not listed in subsections (a) through (c) of this Section).

Contaminant	Analytical Methods
Aldrin	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), and 525.2 (rev. 2.0)
DDT	USEPA Organic Methods, Methods 505 (rev. 2.1) and 508 (rev. 3.1)

Dieldrin	USEPA Organic Methods, Methods 505 (rev. 2.1), 508 (rev. 3.1), 508.1 (rev. 2.0), and 525.2 (rev. 2.0)

e) The following footnotes are appended to method entries in subsections (a) and (b) of this Section:

[1] denotes that, for the particular contaminant, a nitrogen-phosphorus detector should be substituted for the electron capture detector in method 505 (or another approved method should be used) to determine alachlor, atrazine, and simazine if lower detection limits are required.

[2] denotes that Syngenta Method AG-625 may not be used for the analysis of atrazine in any system where chlorine dioxide is used for drinking water treatment. In samples from all other systems, any result for atrazine generated by Syngenta Method AG-625 that is greater than one-half the maximum contaminant level (MCL) (in other words, greater than 0.0015mg/ℓ or 1.5 µg/ℓ) must be confirmed using another approved method for this contaminant and should use additional volume of the original sample collected for compliance monitoring. In instances where a result from Syngenta Method AG-625 triggers such confirmatory testing, the confirmatory result is to be used to determine compliance.

BOARD NOTE: Derived from 40 CFR 141.24(e) and appendix A to subpart C of 40 CFR 141 (2012)~~(2011)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.646 Phase I, Phase II, and Phase V Volatile Organic Contaminants

Monitoring of the Phase I, Phase II, and Phase V VOCs for the purpose of determining compliance with the MCL must be conducted as follows:

a) Definitions. As used in this Section the following have the given meanings:

"Detect" and "detection" mean that the contaminant of interest is present at a level greater than or equal to the "detection limit."

"Detection limit" means 0.0005 mg/ℓ.

BOARD NOTE: Derived from 40 CFR 141.24(f)(7), (f)(11), (f)(14)(i), and (f)(20) (2012)~~(2005)~~. This is a "trigger level" for Phase I, Phase II, and Phase V VOCs inasmuch as it prompts further action. The use of the term "detect" in this Section is not intended to include any analytical capability of quantifying lower levels of any contaminant, or the "method detection limit." Note, however, that certain language at the end of federal paragraph (f)(20) is capable of meaning that the "method detection limit" is used to derive the "detection limit." The Board has chosen to disregard that language at the end of paragraph (f)(20) in favor of the more direct language of paragraphs (f)(7) and (f)(11).

"Method detection limit," as used in subsections (q) and (t) of this Section means the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

BOARD NOTE: Derived from appendix B to 40 CFR 136 (2012)~~(2005)~~. The method detection limit is determined by the procedure set forth in appendix B to 40 CFR 136, incorporated by reference in Section 611.102(c). See subsection (t) of this Section.

b) Required sampling. Each supplier must take a minimum of one sample at each sampling point at the times required in subsection (u) of this Section.

c) Sampling points.

1) Sampling points for a GWS. Unless otherwise provided by a SEP granted by the Agency pursuant to Section 611.110, a GWS supplier must take at least one sample from each of the following points: each entry point that is representative of each well after treatment.

2) Sampling points for an SWS or mixed system supplier. Unless otherwise provided by a SEP granted by the Agency pursuant to Section 611.110, an SWS or mixed system supplier must sample from each of the following points:

A) Each entry point after treatment; or

B) Points in the distribution system that are representative of each source.

3) The supplier must take each sample at the same sampling point unless the Agency has granted a SEP pursuant to Section 611.110 that designates another location as more representative of each source, treatment plant, or within the distribution system.

4) If a system draws water from more than one source, and the sources are combined before distribution, the supplier must sample at an entry point during periods of normal operating conditions when water is representative of all sources being used.

BOARD NOTE: Subsections (b) and (c) of this Section derived from 40 CFR 141.24(f)(1) through (f)(3) (2012)~~(2005)~~.

d) Each CWS and NTNCWS supplier must take four consecutive quarterly samples for each of the Phase I VOCs, excluding vinyl chloride, and Phase II VOCs during each compliance period, beginning in the compliance period starting in the initial compliance period.

e) Reduction to annual monitoring frequency. If the initial monitoring for the Phase I, Phase II, and Phase V VOCs, as allowed in subsection (r)(1) of this Section, was completed by December 31, 1992, and the supplier did not detect any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs, then the supplier must take one sample annually beginning in the initial compliance period.

f) GWS reduction to triennial monitoring frequency. After a minimum of three years of annual sampling, GWS suppliers that have not previously detected any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs must take one sample during each three-year compliance period.

g) A CWS or NTNCWS supplier that has completed the initial round of monitoring required by subsection (d) of this Section and which did not detect any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; and Phase V VOCs may apply to the Agency for a SEP pursuant to Section 611.110 that releases it from the requirements of subsection (e) or (f) of this Section. A supplier that serves fewer than 3300 service connections may apply to the Agency for a SEP that

releases it from the requirements of subsection (d) of this Section as to 1,2,4-trichlorobenzene.

BOARD NOTE: Derived from 40 CFR 141.24(f)(7) and (f)(10) (2012)~~(2005)~~, and the discussion at 57 Fed. Reg. 31825 (July 17, 1992). Provisions concerning the term of the waiver appear in subsections (i) and (j) of this Section. The definition of "detect," parenthetically added to the federal counterpart paragraph, is in subsection (a) of this Section.

h) Vulnerability assessment. The Agency must consider the factors of Section 611.110(e) in granting a SEP from the requirements of subsection (d), (e), or (f) of this Section sought pursuant to subsection (g) of this Section.

i) A SEP issued to a GWS pursuant to subsection (g) of this Section is for a maximum of six years, except that a SEP as to the subsection (d) of this Section monitoring for 1,2,4-trichlorobenzene must apply only to the initial round of monitoring. As a condition of a SEP, except as to a SEP from the initial round of subsection (d) of this Section monitoring for 1,2,4-trichlorobenzene, the supplier shall, within 30 months after the beginning of the period for which the waiver was issued, reconfirm its vulnerability assessment required by subsection (h) of this Section and submitted pursuant to subsection (g) of this Section, by taking one sample at each sampling point and reapplying for a SEP pursuant to subsection (g) of this Section. Based on this application, the Agency must do either of the following:

1) If it determines that the PWS meets the standard of Section 611.610(e), issue a SEP that reconfirms the prior SEP for the remaining three-year compliance period of the six-year maximum term; or

2) Issue a new SEP requiring the supplier to sample annually.

BOARD NOTE: Subsection (i) of this Section does not apply to an SWS or mixed system supplier.

j) Special considerations for a SEP for an SWS or mixed-system supplier.

1) The Agency must determine that an SWS is not vulnerable before issuing a SEP pursuant to Section 611.110 to an SWS supplier. A SEP issued to an SWS or mixed system supplier pursuant to subsection (g) of this

Section is for a maximum of one compliance period; and

2) The Agency may require, as a condition to a SEP issued to an SWS or mixed supplier, that the supplier take such samples for Phase I, Phase II, and Phase V VOCs at such a frequency as the Agency determines are necessary, based on the vulnerability assessment.

BOARD NOTE: There is a great degree of similarity between 40 CFR 141.24(f)(7) (2012)~~(2005)~~, the provision applicable to GWSs, and 40 CFR 141.24(f)(10) (2012)~~(2005)~~, the provision for SWSs. The Board has consolidated the common requirements of both paragraphs into subsection (g) of this Section. Subsection (j) of this Section represents the elements unique to an SWSs or mixed system, and subsection (i) of this Section relates to a GWS supplier. Although 40 CFR 141.24(f)(7) and (f)(10) are silent as to a mixed system supplier, the Board has included a mixed system supplier with an SWS supplier because this best follows the federal scheme for all other contaminants.

k) If one of the Phase I VOCs, excluding vinyl chloride; a Phase II VOC; or a Phase V VOC is detected in any sample, then the following must occur:

1) The supplier must monitor quarterly for that contaminant at each sampling point that resulted in a detection.

2) Annual monitoring.

A) The Agency must grant a SEP pursuant to Section 611.110 that allows a supplier to reduce the monitoring frequency to annual at a sampling point if it determines that the sampling point is reliably and consistently below the MCL.

B) A request for a SEP must include the following minimal information:

i) For a GWS, two quarterly samples.

ii) For an SWS or mixed system supplier, four quarterly samples.

C) In issuing a SEP, the Agency must specify the level of the

contaminant upon which the "reliably and consistently" determination was based. Any SEP that allows less frequent monitoring based on an Agency "reliably and consistently" determination must include a condition requiring the supplier to resume quarterly monitoring pursuant to subsection (k)(1) of this Section if it violates the MCL specified by Section 611.311.

3) Suppliers that monitor annually must monitor during the quarters that previously yielded the highest analytical result.

4) Suppliers that do not detect a contaminant at a sampling point in three consecutive annual samples may apply to the Agency for a SEP pursuant to Section 611.110 that allows it to discontinue monitoring for that contaminant at that point, as specified in subsection (g) of this Section.

5) A GWS supplier that has detected one or more of the two-carbon contaminants listed in subsection (k)(5)(A) of this Section must monitor quarterly for vinyl chloride as described in subsection (k)(5)(B) of this Section, subject to the limitation of subsection (k)(5)(C) of this Section.

A) "Two-carbon contaminants" (Phase I or II VOC) are the following:

1,2-Dichloroethane (Phase I)

1,1-Dichloroethylene (Phase I)

cis-1,2-Dichloroethylene (Phase II)

trans-1,2-Dichloroethylene (Phase II)

Tetrachloroethylene (Phase II)

1,1,1-Trichloroethylene (Phase I)

Trichloroethylene (Phase I)

B) The supplier must sample quarterly for vinyl chloride at each sampling point at which it detected one or more of the two-carbon contaminants listed in subsection (k)(5)(A) of this Section.

C) The Agency must grant a SEP pursuant to Section 611.110 that allows the supplier to reduce the monitoring frequency for vinyl chloride at any sampling point to once in each three-year compliance period if it determines that the supplier has not detected vinyl chloride in the first sample required by subsection (k)(5)(B) of this Section.

l) Quarterly monitoring following MCL violations.

1) Suppliers that violate an MCL for one of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs, as determined by subsection (o) of this Section, must monitor quarterly for that contaminant, at the sampling point where the violation occurred, beginning the next quarter after the violation.

2) Annual monitoring.

A) The Agency must grant a SEP pursuant to Section 611.110 that allows a supplier to reduce the monitoring frequency to annually if it determines that the sampling point is reliably and consistently below the MCL.

B) A request for a SEP must include the following minimal information: four quarterly samples.

C) In issuing a SEP, the Agency must specify the level of the contaminant upon which the "reliably and consistently" determination was based. Any SEP that allows less frequent monitoring based on an Agency "reliably and consistently" determination must include a condition requiring the supplier to resume quarterly monitoring pursuant to subsection (l)(1) of this Section if it violates the MCL specified by Section 611.311.

D) The supplier must monitor during the quarters that previously yielded the highest analytical result.

m) Confirmation samples. The Agency may issue a SEP pursuant to Section 610.110 to require a supplier to use a confirmation sample for results that it finds dubious

for whatever reason. The Agency must state its reasons for issuing the SEP if the SEP is Agency-initiated.

1) If a supplier detects any of the Phase I, Phase II, or Phase V VOCs in a sample, the supplier must take a confirmation sample as soon as possible, but no later than 14 days after the supplier receives notice of the detection.

2) Averaging is as specified in subsection (o) of this Section.

3) The Agency must delete the original or confirmation sample if it determines that a sampling error occurred, in which case the confirmation sample will replace the original or confirmation sample.

n) This subsection (n) corresponds with 40 CFR 141.24(f)(14), an optional USEPA provision relating to compositing of samples that USEPA does not require for state programs. This statement maintains structural consistency with USEPA rules.

o) Compliance with the MCLs for the Phase I, Phase II, and Phase V VOCs must be determined based on the analytical results obtained at each sampling point. If~~Effective January 22, 2004, if~~ one sampling point is in violation of an MCL, the system is in violation of the MCL.

1) For~~Effective January 22, 2004, for~~ a supplier that monitors more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.

2) A~~Effective January 22, 2004, a~~ supplier that monitors annually or less frequently whose sample result exceeds the MCL must begin quarterly sampling. The system will not be considered in violation of the MCL until it has completed one year of quarterly sampling.

3) If~~Effective January 22, 2004, if~~ any sample result will cause the running annual average to exceed the MCL at any sampling point, the supplier is out of compliance with the MCL immediately.

4) If~~Effective January 22, 2004, if~~ a supplier fails to collect the required number of samples, compliance will be based on the total number of samples collected.

5) If~~Effective January 22, 2004, if~~ a sample result is less than the detection limit, zero will be used to calculate the annual average.

~~6) Until January 22, 2004, for a supplier that conducts monitoring at a frequency greater than annual, compliance is determined by a running annual average of all samples taken at each sampling point.~~

~~A) If the annual average of any sampling point is greater than the MCL, then the supplier is out of compliance.~~

~~B) If the initial sample or a subsequent sample would cause the annual average to exceed the MCL, then the supplier is out of compliance immediately.~~

~~C) Any samples below the detection limit must be deemed as zero for purposes of determining the annual average.~~

~~7) Until January 22, 2004, if monitoring is conducted annually, or less frequently, the supplier is out of compliance if the level of a contaminant at any sampling point is greater than the MCL. Until January 22, 2004, if a confirmation sample is taken, the determination of compliance is based on the average of two samples.~~

p) This subsection (p) corresponds with 40 CFR 141.24(f)(16), which USEPA removed and reserved. This statement maintains structural consistency with the federal regulations.

q) Analysis under this Section must only be conducted by laboratories that have received certification by USEPA or the Agency according to the following conditions:

1) To receive certification to conduct analyses for the Phase I VOCs, excluding vinyl chloride; Phase II VOCs; and Phase V VOCs, the laboratory must do the following:

A) It must analyze performance evaluation (PE) samples that include these substances provided by the Agency pursuant to 35 Ill. Adm. Code 186.170;

B) It must achieve the quantitative acceptance limits under subsections (q)(1)(C) and (q)(1)(D) of this Section for at least 80 percent of the regulated organic contaminants in the PE sample;

C) It must achieve quantitative results on the analyses performed under subsection (q)(1)(A) of this Section that are within ± 20 percent of the actual amount of the substances in the PE sample when the actual amount is greater than or equal to 0.010 mg/ℓ;

D) It must achieve quantitative results on the analyses performed under subsection (q)(1)(A) of this Section that are within ± 40 percent of the actual amount of the substances in the PE sample when the actual amount is less than 0.010 mg/ℓ; and

E) It must achieve a method detection limit of 0.0005 mg/ℓ, according to the procedures in appendix B to 40 CFR 136, incorporated by reference in Section 611.102.

2) To receive certification to conduct analyses for vinyl chloride the laboratory must do the following:

A) It must analyze PE samples provided by the Agency pursuant to 35 Ill. Adm. Code 186.170;

B) It must achieve quantitative results on the analyses performed under subsection (q)(2)(A) of this Section that are within ± 40 percent of the actual amount of vinyl chloride in the PE sample;

C) It must achieve a method detection limit of 0.0005 mg/ℓ, according to the procedures in appendix B to 40 CFR 136, incorporated by reference in Section 611.102; and

D) It must obtain certification pursuant to subsection (q)(1) of this Section for Phase I VOCs, excluding vinyl chloride; Phase II VOCs; and Phase V VOCs.

r) This subsection (r) corresponds with 40 CFR 141.24(f)(18), an obsolete provision that relates to the initial compliance period from 1993 through 1995. This

statement maintains consistency with the federal regulations.

s) The Agency shall, by a SEP issued pursuant to Section 611.110, increase the number of sampling points or the frequency of monitoring if it determines that it is necessary to detect variations within the PWS.

t) Each laboratory certified for the analysis of Phase I, Phase II, or Phase V VOCs pursuant to subsection (q)(1) or (q)(2) of this Section shall do the following:

1) Determine the method detection limit (MDL), as defined in appendix B to 40 CFR 136, incorporated by reference in Section 611.102, at which it is capable of detecting the Phase I, Phase II, and Phase V VOCs; and,

2) Achieve an MDL for each Phase I, Phase II, and Phase V VOC that is less than or equal to 0.0005 mg/ℓ.

u) Each supplier must monitor, within each compliance period, at the time designated by the Agency by SEP pursuant to Section 611.110.

v) A new system supplier or a supplier that uses a new source of water ~~that begins operation after January 22, 2004~~ must demonstrate compliance with the MCL within a period of time specified by a permit issued by the Agency. The supplier must also comply with the initial sampling frequencies specified by the Agency to ensure the supplier can demonstrate compliance with the MCL. Routine and increased monitoring frequencies must be conducted in accordance with the requirements in this Section.

BOARD NOTE: Derived from 40 CFR 141.24(f) (2012)~~(2005)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.648 Phase II, Phase IIB, and Phase V Synthetic Organic Contaminants

Analysis of the Phase II, Phase IIB, and Phase V SOCs for the purposes of determining compliance with the MCL must be conducted as follows:

a) Definitions. As used in this Section, the following terms will have the following meanings:

"Detect" or "detection" means that the contaminant of interest is present at a level greater than or equal to the "detection limit."

"Detection limit" means the level of the contaminant of interest that is specified in subsection (r) of this Section.

BOARD NOTE: This is a "trigger level" for Phase II, Phase IIB, and Phase V SOCs inasmuch as it prompts further action. The use of the term "detect" or "detection" in this Section is not intended to include any analytical capability of quantifying lower levels of any contaminant, or the "method detection limit."

b) Required sampling. Each supplier must take a minimum of one sample at each sampling point at the times required in subsection (q) of this Section.

BOARD NOTE: See the Board note appended to Section 611.311(c) for information relating to implementation of requirements relating to aldicarb, aldicarb sulfone, and aldicarb sulfoxide.

c) Sampling points.

1) Sampling points for GWSs. Unless otherwise provided by SEP, a GWS supplier must take at least one sample from each of the following points: each entry point that is representative of each well after treatment.

2) Sampling points for an SWS or mixed system supplier. Unless otherwise provided by SEP, an SWS or mixed system supplier must sample from each of the following points:

A) Each entry point after treatment; or

B) Points in the distribution system that are representative of each source.

3) The supplier must take each sample at the same sampling point unless the Agency has granted a SEP that designates another location as more representative of each source, treatment plant, or within the distribution system.

4) If a system draws water from more than one source, and the sources are combined before distribution, the supplier must sample at an entry point during periods of normal operating conditions when water is representative of all sources being used.

BOARD NOTE: Subsections (b) and (c) of this Section derived from 40 CFR 141.24(h)(1) through (h)(3) (2012)~~(2003)~~.

d) Monitoring frequency.

1) Each CWS and NTNCWS supplier must take four consecutive quarterly samples for each of the Phase II, Phase IIB, and Phase V SOCs during each compliance period, beginning in the three-year compliance period starting in the initial compliance period.

2) Suppliers serving more than 3,300 persons that do not detect a contaminant in the initial compliance period must take a minimum of two quarterly samples in one year of each subsequent three-year compliance period.

3) Suppliers serving fewer than or equal to 3,300 persons that do not detect a contaminant in the initial compliance period must take a minimum of one sample during each subsequent three-year compliance period.

e) Reduction to annual monitoring frequency. A CWS or NTNCWS supplier may apply to the Agency for a SEP that releases it from the requirements of subsection (d) of this Section. A SEP from the requirement of subsection (d) of this Section must last for only a single three-year compliance period.

f) Vulnerability assessment. The Agency must grant a SEP from the requirements of subsection (d) of this Section based on consideration of the factors set forth at Section 611.110(e).

g) If one of the Phase II, Phase IIB, or Phase V SOCs is detected in any sample, then the following must occur:

1) The supplier must monitor quarterly for the contaminant at each sampling point that resulted in a detection.

2) Annual monitoring.

A) A supplier may request that the Agency grant a SEP pursuant to Section 610.110 that reduces the monitoring frequency to annual.

B) A request for a SEP must include the following minimal information:

i) For a GWS, two quarterly samples.

ii) For an SWS or mixed system supplier, four quarterly samples.

C) The Agency must grant a SEP that allows annual monitoring at a sampling point if it determines that the sampling point is reliably and consistently below the MCL.

D) In issuing the SEP, the Agency must specify the level of the contaminant upon which the "reliably and consistently" determination was based. Any SEP that allows less frequent monitoring based on an Agency "reliably and consistently" determination must include a condition requiring the supplier to resume quarterly monitoring pursuant to subsection (g)(1) of this Section if it detects any Phase II SOC.

3) Suppliers that monitor annually must monitor during the quarters that previously yielded the highest analytical result.

4) Suppliers that have three consecutive annual samples with no detection of a contaminant at a sampling point may apply to the Agency for a SEP with respect to that point, as specified in subsections (e) and (f) of this Section.

5) Monitoring for related contaminants.

A) If monitoring results in detection of one or more of the related contaminants listed in subsection (g)(5)(B) of this Section, subsequent monitoring must analyze for all the related compounds in the respective group.

B) Related contaminants.

i) First group.

aldicarb

aldicarb sulfone

aldicarb sulfoxide

BOARD NOTE: See the Board note appended to Section 611.311(c) for information relating to implementation of requirements relating to aldicarb, aldicarb sulfone, and aldicarb sulfoxide.

ii) Second group.

heptachlor

heptachlor epoxide.

h) Quarterly monitoring following MCL violations.

1) Suppliers that violate an MCL for one of the Phase II, Phase IIB, or Phase V SOCs, as determined by subsection (k) of this Section, must monitor quarterly for that contaminant at the sampling point where the violation occurred, beginning the next quarter after the violation.

2) Annual monitoring.

A) A supplier may request that the Agency grant a SEP pursuant to Section 611.110 that reduces the monitoring frequency to annual.

B) A request for a SEP must include, at a minimum, the results from four quarterly samples.

C) The Agency must grant a SEP that allows annual monitoring at a sampling point if it determines that the sampling point is reliably and consistently below the MCL.

D) In issuing the SEP, the Agency must specify the level of the contaminant upon which the "reliably and consistently" determination was based. Any SEP that allows less frequent monitoring based on an Agency "reliably and consistently" determination must include a condition requiring the supplier to resume quarterly monitoring pursuant to subsection (h)(1) of this Section if it detects any Phase II SOC.

E) The supplier must monitor during the quarters that previously yielded the highest analytical result.

i) Confirmation samples.

1) If any of the Phase II, Phase IIB, or Phase V SOCs are detected in a sample, the supplier must take a confirmation sample as soon as possible, but no later than 14 days after the supplier receives notice of the detection.

2) Averaging is as specified in subsection (k) of this Section.

3) The Agency must delete the original or confirmation sample if it determines that a sampling error occurred, in which case the confirmation sample will replace the original or confirmation sample.

j) This subsection (j) corresponds with 40 CFR 141.24(h)(10), an optional USEPA provision relating to compositing of samples that USEPA does not require for state programs. This statement maintains structural consistency with USEPA rules.

k) Compliance with the MCLs for the Phase II, Phase IIB, and Phase V SOCs must be determined based on the analytical results obtained at each sampling point. If~~Effective January 22, 2004, if~~ one sampling point is in violation of an MCL, the supplier is in violation of the MCL.

1) For~~Effective January 22, 2004, for a~~ supplier that monitors more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.

2) A~~Effective January 22, 2004, a~~ supplier that monitors annually or less

frequently whose sample result exceeds the regulatory detection level as defined by subsection (r) of this Section must begin quarterly sampling. The system will not be considered in violation of the MCL until it has completed one year of quarterly sampling.

3) If~~Effective January 22, 2004, if~~ any sample result will cause the running annual average to exceed the MCL at any sampling point, the supplier is out of compliance with the MCL immediately.

4) If~~Effective January 22, 2004, if~~ a supplier fails to collect the required number of samples, compliance will be based on the total number of samples collected.

5) If~~Effective January 22, 2004, if~~ a sample result is less than the detection limit, zero will be used to calculate the annual average.

~~6) Until January 22, 2004, for a supplier that conducts monitoring at a frequency greater than annual, compliance is determined by a running annual average of all samples taken at each sampling point.~~

~~A) If the annual average of any sampling point is greater than the MCL, then the supplier is out of compliance.~~

~~B) If the initial sample or a subsequent sample would cause the annual average to exceed the MCL, then the supplier is out of compliance immediately.~~

~~C) Any samples below the detection limit must be deemed as zero for purposes of determining the annual average.~~

~~7) Until January 22, 2004, if the supplier conducts monitoring annually, or less frequently, the supplier is out of compliance if the level of a contaminant at any sampling point is greater than the MCL. Until January 22, 2004, if a confirmation sample is taken, the determination of compliance is based on the average of two samples.~~

l) This subsection (1) corresponds with 40 CFR 141.24(h)(12), which USEPA removed and reserved. This statement maintains structural consistency with the federal regulations.

m) Analysis for PCBs must be conducted as follows using the methods in Section 611.645:

1) Each supplier that monitors for PCBs must analyze each sample using either USEPA Organic Methods, Method 505 or Method 508.

2) If PCBs are detected in any sample analyzed using USEPA Organic Methods, Method 505 or 508, the supplier must reanalyze the sample using Method 508A to quantitate the individual Aroclors (as decachlorobiphenyl).

3) Compliance with the PCB MCL must be determined based upon the quantitative results of analyses using USEPA Organic Methods, Method 508A.

n) This subsection (n) corresponds with 40 CFR 141.24(h)(14), an obsolete provision that relates to the initial compliance period from 1993 through 1995. This statement maintains consistency with the federal regulations.

o) The Agency must issue a SEP that increases the number of sampling points or the frequency of monitoring if it determines that this is necessary to detect variations within the PWS due to such factors as fluctuations in contaminant concentration due to seasonal use or changes in the water source.

BOARD NOTE: At 40 CFR 141.24(h)(15), USEPA uses the stated factors as non-limiting examples of circumstances that make additional monitoring necessary.

p) This subsection (p) corresponds with 40 CFR 141.24(h)(16), a USEPA provision relating to reserving enforcement authority to the State that would serve no useful function as part of the State's rules. This statement maintains structural consistency with USEPA rules.

q) Each supplier must monitor, within each compliance period, at the time designated by the Agency by SEP pursuant to Section 611.110.

r) "Detection" means greater than or equal to the following concentrations for each contaminant:

1) for PCBs (Aroclors), the following:

Aroclor	Detection Limit (mg/ℓ)
1016	0.00008
1221	0.02
1232	0.0005
1242	0.0003
1248	0.0001
1254	0.0001
1260	0.0002

2) for other Phase II, Phase IIB, and Phase V SOCs, the following:

Contaminant	Detection Limit (mg/ℓ)
Alachlor	0.0002
Aldicarb	0.0005
Aldicarb sulfoxide	0.0005
Aldicarb sulfone	0.0008
Atrazine	0.0001
Benzo(a)pyrene	0.00002
Carbofuran	0.0009
Chlordane	0.0002
2,4-D	0.0001
Dalapon	0.001
1,2-Dibromo-3-chloropropane (DBCP)	0.00002
Di(2-ethylhexyl)adipate	0.0006
Di(2-ethylhexyl)phthalate	0.0006
Dinoseb	0.0002
Diquat	0.0004
Endothall	0.009
Endrin	0.00001
Ethylene dibromide (EDB)	0.00001
Glyphosate	0.006
Heptachlor	0.00004
Heptachlor epoxide	0.00002

Hexachlorobenzene	0.0001
Hexachlorocyclopentadiene	0.0001
Lindane	0.00002
Methoxychlor	0.0001
Oxamyl	0.002
Picloram	0.0001
Polychlorinated biphenyls (PCBs) (as decachlorobiphenyl)	0.0001
Pentachlorophenol	0.00004
Simazine	0.00007
Toxaphene	0.001
2,3,7,8-TCDD (dioxin)	0.000000005
2,4,5-TP (silvex)	0.0002

BOARD NOTE: See the Board note appended to Section 611.311(c) for information relating to implementation of requirements relating to aldicarb, aldicarb sulfone, and aldicarb sulfoxide.

s) Laboratory certification.

1) Analyses under this Section must only be conducted by laboratories that have received approval by USEPA or the Agency according to the conditions of subsection (s)(2) of this Section.

2) To receive certification to conduct analyses for the Phase II, Phase IIB, and Phase V SOCs, the laboratory must do the following:

A) Analyze PE samples provided by the Agency pursuant to 35 Ill. Adm. Code 183.125(c) that include these substances; and

B) Achieve quantitative results on the analyses performed under subsection (s)(2)(A) of this Section that are within the following acceptance limits:

SOC	Acceptance Limits
Alachlor	± 45%
Aldicarb	2 standard deviations
Aldicarb sulfone	2 standard deviations

Aldicarb sulfoxide	2 standard deviations
Atrazine	± 45%
Benzo(a)pyrene	2 standard deviations
Carbofuran	± 45%
Chlordane	± 45%
Dalapon	2 standard deviations
Di(2-ethylhexyl)adipate	2 standard deviations
Di(2-ethylhexyl)phthalate	2 standard deviations
Dinoseb	2 standard deviations
Diquat	2 standard deviations
Endothall	2 standard deviations
Endrin	± 30%
Glyphosate	2 standard deviations
Dibromochloropropane (DBCP)	± 40%
Ethylene dibromide (EDB)	± 40%
Heptachlor	± 45%
Heptachlor epoxide	± 45%
Hexachlorobenzene	2 standard deviations
Hexachlorocyclopentadiene	2 standard deviations
Lindane	± 45%
Methoxychlor	± 45%
Oxamyl	2 standard deviations
PCBs (as decachlorobiphenyl)	0-200%
Pentachlorophenol	± 50%
Picloram	2 standard deviations
Simazine	2 standard deviations
Toxaphene	± 45%
2,4-D	± 50%
2,3,7,8-TCDD (dioxin)	2 standard deviations
2,4,5-TP (silvex)	± 50%

BOARD NOTE: See the Board note appended to Section 611.311(c) for information relating to implementation of requirements relating to aldicarb, aldicarb sulfone, and aldicarb sulfoxide.

t) A new system supplier or a supplier that uses a new source of water ~~that begins operation after January 22, 2004~~ must demonstrate compliance with the MCL within a period of time specified by a permit issued by the Agency. The supplier

must also comply with the initial sampling frequencies specified by the Agency to ensure the supplier can demonstrate compliance with the MCL. Routine and increased monitoring frequencies must be conducted in accordance with the requirements in this Section.

BOARD NOTE: Derived from 40 CFR 141.24(h) (2012)~~(2003)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART Q: RADIOLOGICAL MONITORING AND ANALYTICAL REQUIREMENTS

Section 611.720 Analytical Methods

a) The methods specified below, or alternative methods approved by the Agency pursuant to Section 611.480, incorporated by reference in Section 611.102, are to be used to determine compliance with Section 611.330, except in cases where alternative methods have been approved in accordance with Section 611.480.

1) Gross Alpha and Beta.

A) Standard Methods.

i) Method 302, 13th ed.; or

ii) Method 7110 B, 17th, 18th, 19th, 20th, or 21st ed.;

B) USEPA Interim Radiochemical Methods: pages 1-3;

C) USEPA Radioactivity Methods, Method 900.0;

D) USEPA Radiochemical Analyses: pages 1-5;

E) USEPA Radiochemistry Procedures, Method 00-01; or

F) USGS Methods, Method R-1120-76.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 7110 B as an approved alternative method for gross alpha and beta in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

2) Gross Alpha.

A) Standard Methods, 18th, 19th, 20th, or 21st ed., Method 7110 C; or

B) USEPA Radiochemistry Procedures, Method 00-02.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 7110 C as an approved alternative method for gross alpha in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

3) Radium-226.

A) ASTM Methods.

i) Method D2460-97 or D2460-07; or

ii) Method D3454-97 or D3454-05;

B) New York Radium Method;

C) Standard Methods.

i) Method 304, 13th ed.;

ii) Method 305, 13th ed.;

iii) Method 7500-Ra B, 17th, 18th, 19th, 20th, or 21st ed.; or

iv) Method 7500-Ra C, 17th, 18th, 19th, 20th, or 21st ed.;

D) EML Procedures Manual (27th or 28th ed.), Method Ra-04;

E) USEPA Interim Radiochemical Methods: pages 13-15 or 16-23;

F) USEPA Radioactivity Methods, Methods 903.0, 903.1;

G) USEPA Radiochemical Analyses, pages 19-32;

H) USEPA Radiochemistry Procedures, Method Ra-03 or Ra-04; or

I) USGS Methods.

i) Method R-1140-76; or

ii) Method R-1141-76.

J) Georgia Radium Method.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 7500-Ra B and C as approved alternative methods for radium-226 in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D2460-07 and D3454-05 as approved alternative methods for radium-226 in appendix A to subpart C of 40 CFR 141 on June 8, 2010 (at 75 Fed. Reg. 32295).

4) Radium-228.

A) Standard Methods, 17th, 18th, 19th, 20th, or 21st ed., Method 7500-Ra D;

B) New York Radium Method;

C) USEPA Interim Radiochemical Methods, pages 24-28;

D) USEPA Radioactivity Methods, Method 904.0;

E) USEPA Radiochemical Analyses, pages 19-32;

F) USEPA Radiochemistry Procedures, Method Ra-05;

G) USGS Methods, Method R-1142-76;

H) New Jersey Radium Method; or

I) Georgia Radium Method.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 7500-Ra D as an approved alternative method for radium-228 in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

5) Uranium.

A) Standard Methods, 17th, 18th, 19th, 20th, or 21st ed., Method 7500-U C;

B) Standard Methods, 20th or 21st ed., Method 3125;

C) ASTM Methods.

i) Method D2907-97;

ii) Method D3972-97 or D3972-02;

iii) Method D5174-97, D5174-02, D5174-07, or D3972-09; ~~or~~

iv) Method D5673-03, ~~or~~ Method D5673-05, or Method D5673-10~~5673-05~~; or

v) Method D6239-09;

D) USEPA Radioactivity Methods, Methods 908.0, 908.1;

E) USEPA Environmental Metals Methods, Method 200.8 (rev. 5.3);

F) USEPA Radiochemical Analyses, pages 33-48;

G) USEPA Radiochemistry Procedures, Method 00-07;

H) EML Procedures Manual (27th or 28th ed.), Method U-02 or U-04; or

I) USGS Methods.

i) Method R-1180-76;

ii) Method R-1181-76; or

iii) Method R-1182-76.

BOARD NOTE: If uranium (U) is determined by mass, a conversion factor of 0.67 pCi/µg of uranium must be used. This conversion factor is based on the 1:1 activity ratio of ^{234}U and ^{238}U that is characteristic of naturally occurring uranium.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 7500-U C and ASTM Method D5673-05 as approved alternative methods for uranium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D5174-07 as an approved alternative method for uranium in appendix A to subpart C of 40 CFR 141 on June 8, 2010 (at 75 Fed. Reg. 32295). USEPA added ASTM Method D3972-09 as an approved alternative method for uranium in appendix A to subpart C of 40 CFR 141 on June 24, 2011 (at 76 Fed. Reg. 37014). USEPA added Standard Methods, 21st ed., Method 3125 and ASTM Methods D5673-10 and D6329-09 as approved alternative methods for uranium in appendix A to subpart C of 40 CFR 141 on June 3, 2012 (at 77 Fed. Reg. 38523).

6) Radioactive Cesium.

A) ASTM Methods.

i) Method D2459-72; or

ii) Method D3649-91, D3649-98a, or D3649-06;

B) Standard Methods.

i) Method 7120, 19th, 20th, or 21st ed.; or

ii) Method 7500-Cs B, 17th, 18th, 19th, 20th, or 21st ed.;

C) EML Procedures Manual (27th or 28th ed.), Method 4.5.2.3;

D) USEPA Interim Radiochemical Methods, pages 4-5;

E) USEPA Radioactivity Methods, Methods 901.0, 901.1;

F) USEPA Radiochemical Analyses, pages 92-95; or

G) USGS Methods.

i) Method R-1110-76; or

ii) Method R-1111-76.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 7120 and 7500-Cs B as approved alternative methods for radioactive cesium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D3649-06 as an approved alternative method for radioactive cesium in appendix A to subpart C of 40 CFR 141 on June 8, 2010 (at 75 Fed. Reg. 32295).

7) Radioactive Iodine.

A) ASTM Methods.

i) D3649-91, D3649-98a, or D3649-06; or

ii) D4785-93, D4785-98, or D4785-08;

B) Standard Methods.

i) Method 7120, 19th, 20th, or 21st ed.;

ii) Method 7500-I B, 17th, 18th, 19th, 20th, or 21st ed.;

iii) Method 7500-I C, 17th, 18th, 19th, 20th, or 21st ed.; or

iv) Method 7500-I D, 17th, 18th, 19th, 20th, or 21st ed.;

C) EML Procedures Manual (27th or 28th ed.), Method 4.5.2.3;

D) USEPA Interim Radiochemical Methods, pages 6-8 or 9-12;

E) USEPA Radiochemical Analyses, pages 92-95; or

F) USEPA Radioactivity Methods, Methods 901.1 or 902.0.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 7120 and 7500-I B, C, and D as approved alternative methods for radioactive iodine in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D3649-06 and D4785-08 as approved alternative methods for radioactive iodine in appendix A to subpart C of 40 CFR 141 on June 8, 2010 (at 75 Fed. Reg. 32295).

8) Radioactive Strontium-89 & 90.

A) Standard Methods.

i) Method 303, 13th ed.; or

ii) Method 7500-Sr B, 17th, 18th, 19th, 20th, or 21st ed.;

B) EML Procedures Manual (27th or 28th ed.), Method Sr-01 or Sr-02.

C) USEPA Interim Radiochemical Methods, pages 29-33;

D) USEPA Radioactivity Methods, Method 905.0;

E) USEPA Radiochemical Analyses, pages 65-73;

F) USEPA Radiochemistry Procedures, Method Sr-04; or

G) USGS Methods, Method R-1160-76.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 7500-Sr B as an approved alternative method for radioactive strontium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616).

9) Tritium.

A) ASTM Methods: Method D4107-91, D4107-98, or D4107-08;

B) Standard Methods.

i) Method 306, 13th ed.; or

ii) Method 7500-^{3}H B, 17th, 18th, 19th, 20th, or 21st ed.;

C) USEPA Interim Radiochemical Methods, pages 34-37;

D) USEPA Radioactivity Methods, Method 906.0;

E) USEPA Radiochemical Analyses, pages 87-91;

F) USEPA Radiochemistry Procedures, Method H-02; or

G) USGS Methods, Method R-1171-76.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Method 7500-^{3}H B as an approved alternative method for tritium in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Method D4107-08 as an approved alternative method for tritium in appendix A to subpart C of 40 CFR 141 on June 8, 2010 (at 75 Fed. Reg. 32295).

10) Gamma Emitters.

A) ASTM Methods.

i) Method D3649-91, D3649-98a, or D3649-06; or

ii) Method D4785-93, D4785-00a, or D4785-08;

B) Standard Methods.

i) Method 7120, 19th, 20th, or 21st ed.;

ii) Method 7500-Cs B, 17th, 18th, 19th, 20th, or 21st ed.; or

iii) Method 7500-I B, 17th, 18th, 19th, 20th, or 21st ed.;

C) EML Procedures Manual (27th or 28th ed.), Method Ga-01-R;

D) USEPA Radioactivity Methods, Methods 901.0, 901.1, or 902.0;

E) USEPA Radiochemical Analyses, pages 92-95; or

F) USGS Methods, Method R-1110-76.

BOARD NOTE: USEPA added Standard Methods, 21st ed., Methods 7120, 7500-Cs B, and 7500-I B as approved alternative methods for gamma emitters in appendix A to subpart C of 40 CFR 141 on June 3, 2008 (at 73 Fed. Reg. 31616). USEPA added ASTM Methods D3649-08 and D4785-08 as approved alternative methods for tritium in appendix A to subpart C of 40 CFR 141 on June 8, 2010 (at 75 Fed. Reg. 32295).

b) When the identification and measurement of radionuclides other than those listed in subsection (a) of this Section are required, the following methods, incorporated by reference in Section 611.102, are to be used, except in cases where alternative methods have been approved in accordance with Section 611.480:

1) "Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions," available from NTIS.

2) EML Procedures Manual (27th or 28th ed.), available from USDOE, EML.

c) For the purpose of monitoring radioactivity concentrations in drinking water, the required sensitivity of the radioanalysis is defined in terms of a detection limit. The detection limit must be that concentration which can be counted with a precision of plus or minus 100 percent at the 95 percent confidence level (1.96σ, where σ is the standard deviation of the net counting rate of the sample).

1) To determine compliance with Section 611.330(b), (c), and (e), the detection limit must not exceed the concentrations set forth in the following table:

Contaminant	Detection Limit
Gross alpha particle	3 pCi/ℓ

activity	
Radium-226	1 pCi/ℓ
Radium-228	1 pCi/ℓ
Uranium	1 µg/ℓ

BOARD NOTE: Derived from 40 CFR 141.25(c) Table B(2012)~~(2011)~~.

2) To determine compliance with Section 611.330(d), the detection limits must not exceed the concentrations listed in the following table:

Radionuclide	Detection Limit
Tritium	1,000 pCi/ℓ
Strontium-89	10 pCi/ℓ
Strontium-90	2 pCi/ℓ
Iodine-131	1 pCi/ℓ
Cesium-134	10 pCi/ℓ
Gross beta	4 pCi/ℓ
Other radionuclides	1/10 of applicable limit

BOARD NOTE: Derived from 40 CFR 141.25(c) Table C (2012)~~(2011)~~.

d) To judge compliance with the MCLs listed in Section 611.330, averages of data must be used and must be rounded to the same number of significant figures as the MCL for the substance in question.

BOARD NOTE: Derived from 40 CFR 141.25 and appendix A to subpart C of 40 CFR 141 (2012)~~(2011)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.731 Gross Alpha

Monitoring requirements for gross alpha particle activity, radium-226, radium-228, and uranium are as follows:

a) A~~Effective December 8, 2003, a~~ community water system (CWS) supplier must conduct initial monitoring to determine compliance with Section 611.330(b), (c), and (e)~~ by December 31, 2007~~. For the purposes of monitoring for gross alpha particle activity, radium-226, radium-228, uranium, and beta particle and photon

radioactivity in drinking water, "detection limit" is defined as in Section 611.720(c).

1) Applicability and sampling location for an existing CWS supplier. An existing CWS supplier using groundwater, surface water, or both groundwater and surface water (for the purpose of this Section hereafter referred to as a supplier) must sample at every entry point to the distribution system that is representative of all sources being used (hereafter called a sampling point) under normal operating conditions. The supplier must take each sample at the same sampling point, unless conditions make another sampling point more representative of each source or the Agency has designated a distribution system location, in accordance with subsection (b)(2)(C) of this Section.

2) Applicability and sampling location for a new CWS supplier. A new CWS supplier or a CWS supplier that uses a new source of water must begin to conduct initial monitoring for the new source within the first quarter after initiating use of the source. A CWS supplier must conduct more frequent monitoring when ordered by the Agency in the event of possible contamination or when changes in the distribution system or treatment processes occur that may increase the concentration of radioactivity in finished water.

b) Initial monitoring: A~~Effective December 8, 2003, a~~ CWS supplier must conduct initial monitoring for gross alpha particle activity, radium-226, radium-228, and uranium as follows:

1) A CWS supplier without acceptable historical data, as defined in subsection (b)(2) of this Section, is required to have collected~~must collect~~ four consecutive quarterly samples at all sampling points before December 31, 2007.

2) Grandfathering of data: A CWS supplier may use historical monitoring data collected at a sampling point to satisfy the initial monitoring requirements for that sampling point, under the following situations.

A) To satisfy initial monitoring requirements, a CWS supplier having only one entry point to the distribution system may use the monitoring data from the last compliance monitoring period that

began between June 2000 and December 8, 2003.

B) To satisfy initial monitoring requirements, a CWS supplier with multiple entry points and having appropriate historical monitoring data for each entry point to the distribution system may use the monitoring data from the last compliance monitoring period that began between June 2000 and December 8, 2003.

C) To satisfy initial monitoring requirements, a CWS supplier with appropriate historical data for a representative point in the distribution system may use the monitoring data from the last compliance monitoring period that began between June 2000 and December 8, 2003, provided that the Agency finds that the historical data satisfactorily demonstrate that each entry point to the distribution system is expected to be in compliance based upon the historical data and reasonable assumptions about the variability of contaminant levels between entry points. The Agency must make its finding in writing, by a SEP issued pursuant to Section 611.110, indicating how the data conforms to the requirements of this subsection (b)(2).

3) For gross alpha particle activity, uranium, radium-226, and radium-228 monitoring, the Agency may, by a SEP issued pursuant to Section 611.110, waive the final two quarters of initial monitoring for a sampling point if the results of the samples from the previous two quarters are below the detection limit.

4) If the average of the initial monitoring results for a sampling point is above the MCL, the supplier must collect and analyze quarterly samples at that sampling point until the system has results from four consecutive quarters that are at or below the MCL, unless the supplier enters into another schedule as part of a formal compliance agreement with the Agency.

c) Reduced monitoring: The~~Effective December 8, 2003, the~~ Agency may allow a CWS supplier to reduce the future frequency of monitoring from once every three years to once every six or nine years at each sampling point, based on the following criteria:

1) If the average of the initial monitoring results for each contaminant (i.e., gross alpha particle activity, uranium, radium-226, or radium-228) is below the detection limit specified in the table at Section 611.720(c)(1), the supplier must collect and analyze for that contaminant using at least one sample at that sampling point every nine years.

2) For gross alpha particle activity and uranium, if the average of the initial monitoring results for each contaminant is at or above the detection limit but at or below one-half the MCL, the supplier must collect and analyze for that contaminant using at least one sample at that sampling point every six years. For combined radium-226 and radium-228, the analytical results must be combined. If the average of the combined initial monitoring results for radium-226 and radium-228 is at or above the detection limit but at or below one-half the MCL, the supplier must collect and analyze for that contaminant using at least one sample at that sampling point every six years.

3) For gross alpha particle activity and uranium, if the average of the initial monitoring results for each contaminant is above one-half the MCL but at or below the MCL, the supplier must collect and analyze at least one sample at that sampling point every three years. For combined radium-226 and radium-228, the analytical results must be combined. If the average of the combined initial monitoring results for radium-226 and radium-228 is above one-half the MCL but at or below the MCL, the supplier must collect and analyze at least one sample at that sampling point every three years.

4) A supplier must use the samples collected during the reduced monitoring period to determine the monitoring frequency for subsequent monitoring periods (e.g., if a supplier's sampling point is on a nine year monitoring period, and the sample result is above one-half the MCL, then the next monitoring period for that sampling point is three years).

5) If a supplier has a monitoring result that exceeds the MCL while on reduced monitoring, the supplier must collect and analyze quarterly samples at that sampling point until the supplier has results from four consecutive quarters that are below the MCL, unless the supplier enters into another schedule as part of a formal compliance agreement with the Agency.

d) Compositing: To~~Effective December 8, 2003, to~~ fulfill quarterly monitoring requirements for gross alpha particle activity, radium-226, radium-228, or uranium, a supplier may composite up to four consecutive quarterly samples from a single entry point if analysis is done within a year after the first sample. The analytical results from the composited sample must be treated as the average analytical result to determine compliance with the MCLs and the future monitoring frequency. If the analytical result from the composited sample is greater than one-half the MCL, the Agency may, by a SEP issued pursuant to Section 611.110, direct the supplier to take additional quarterly samples before allowing the supplier to sample under a reduced monitoring schedule.

e) A~~Effective December 8, 2003, a~~ gross alpha particle activity measurement may be substituted for the required radium-226 measurement, provided that the measured gross alpha particle activity does not exceed 5 pCi/ℓ. A gross alpha particle activity measurement may be substituted for the required uranium measurement provided that the measured gross alpha particle activity does not exceed 15 pCi/ℓ.

1) The gross alpha measurement must have a confidence interval of 95% (1.65σ, where σ is the standard deviation of the net counting rate of the sample) for radium-226 and uranium.

2) When a supplier uses a gross alpha particle activity measurement in lieu of a radium-226 or uranium measurement, the gross alpha particle activity analytical result will be used to determine the future monitoring frequency for radium-226 or uranium.

3) If the gross alpha particle activity result is less than detection, one-half the detection limit will be used to determine compliance and the future monitoring frequency.

~~f) Until December 8, 2003, compliance must be based on the analysis of an annual composite of four consecutive quarterly samples or the average of the analyses of four samples obtained at quarterly intervals.~~

~~1) A gross alpha particle activity measurement may be substituted for the required radium-226 and radium-228 analysis, provided that the measured gross alpha particle activity does not exceed 5 pCi/ℓ at a confidence level of 95 percent (1.65σ, where σ is the standard deviation of the net counting~~

~~rate of the sample). In localities where radium-228 may be present in drinking water, the Agency may, by a SEP issued pursuant to Section 611.110, require radium-226 or radium-228 analyses when the gross alpha particle activity exceeds 2 pCi/ℓ.~~

~~2) When the gross alpha particle activity exceeds 5 pCi/ℓ, the same or an equivalent sample must be analyzed for radium-226. If the concentration of radium-226 exceeds 3 pCi/ℓ the same or an equivalent sample must be analyzed for radium-228.~~

~~g) Until December 8, 2003, CWS suppliers must monitor at least once every four years following the procedure required by subsection (f) of this Section. When an annual record taken in conformance with subsection (f) of this Section has established that the average annual concentration is less than half the MCLs established by Section 611.330, the Agency shall, by a SEP issued pursuant to Section 611.110 , substitute analysis of a single sample for the quarterly sampling procedure required by subsection (f) of this Section.~~

~~1) The Agency shall, by a SEP issued pursuant to Section 611.110 , require more frequent monitoring in the vicinity of mining or other operations that may contribute alpha particle radioactivity to either surface or groundwater sources of drinking water.~~

~~2) A CWS supplier must monitor in conformance with subsection (f) of this Section for one year after the introduction of a new water source. The Agency shall, by a SEP issued pursuant to Section 611.110 , require more frequent monitoring in the event of possible contamination or when changes in the distribution system or treatment process occur that may increase the concentration of radioactivity in finished water.~~

~~3) The Agency shall, by a SEP issued pursuant to Section 611.110 , require a CWS supplier using two or more sources having different concentrations of radioactivity to monitor source water, in addition to water from a free-flowing tap.~~

~~4) The Agency must not require monitoring for radium-228 to determine compliance with Section 611.330 after the initial period, provided that the average annual concentration of radium-228 has been assayed at least once using the quarterly sampling procedure required by subsection (f) of this~~

~~Section.~~

~~5) The Agency must require the CWS supplier to conduct annual monitoring if the radium-226 concentration exceeds 3 pCi/ℓ.~~

~~h) Until December 8, 2003, if the average annual MCL for gross alpha particle activity or total radium as set forth in Section 611.330 is exceeded, the CWS supplier must give notice to the Agency and notify the public as required by Subpart V. Monitoring at quarterly intervals must be continued until the annual average concentration no longer exceeds the MCL or until a monitoring schedule as a condition to a variance, adjusted standard or enforcement action becomes effective.~~

BOARD NOTE: Subsections (a) through (e) derive from 40 CFR 141.26(a) (2012)~~(2003)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.732 Beta Particle and Photon Radioactivity

Monitoring and compliance requirements for manmade radioactivity. To determine compliance with the maximum contaminant levels in Section 611.330(d) for beta particle and photon radioactivity, a supplier must monitor at a frequency as follows:

a) A~~Effective December 8, 2003, a~~ CWS supplier (either a surface water or groundwater supplier) designated by the Agency, by a SEP issued pursuant to Section 611.110, as vulnerable must sample for beta particle and photon radioactivity. A supplier must collect quarterly samples for beta emitters and annual samples for tritium and strontium-90 at each entry point to the distribution system (hereafter called a sampling point), beginning within one quarter after being notified by the Agency. A supplier already designated by the Agency must continue to sample until the Agency reviews and either reaffirms or removes the designation, by a SEP issued pursuant to Section 611.110.

1) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity at a sampling point has a running annual average (computed quarterly) less than or equal to 50 pCi/ℓ (screening level), the Agency may reduce the frequency of monitoring at that sampling point to once every three years. A supplier must collect all samples required in subsection (a) of this Section during the reduced monitoring period.

2) For a supplier in the vicinity of a nuclear facility, the Agency may allow the CWS supplier to utilize environmental surveillance data collected by the nuclear facility in lieu of monitoring at the supplier's entry points, where the Agency determines if such data is applicable to a particular water system, by a SEP issued pursuant to Section 611.110. In the event that there is a release from a nuclear facility, a supplier that is using surveillance data must begin monitoring at the community water supplier's entry points in accordance with subsection (b)(1) of this Section.

b) A~~Effective December 8, 2003, a~~ CWS supplier (either a surface water or groundwater supplier) designated by the Agency, by a SEP issued pursuant to Section 611.110, as utilizing waters contaminated by effluents from nuclear facilities must sample for beta particle and photon radioactivity. A supplier must collect quarterly samples for beta emitters and iodine-131 and annual samples for tritium and strontium-90 at each entry point to the distribution system (hereafter called a sampling point), beginning within one quarter after being notified by the Agency. A supplier already designated by the Agency as a supplier using waters contaminated by effluents from nuclear facilities must continue to sample until the Agency reviews and either reaffirms or removes the designation, by a SEP issued pursuant to Section 611.110.

1) Quarterly monitoring for gross beta particle activity must be based on the analysis of monthly samples or the analysis of a composite of three monthly samples.

BOARD NOTE: In corresponding 40 CFR 141.26(b)(2)(i), USEPA recommends the use of a composite of three monthly samples.

2) For iodine-131, a composite of five consecutive daily samples must be analyzed once each quarter. The Agency may, by a SEP issued pursuant to Section 611.110, order more frequent monitoring for iodine-131 where it is identified in the finished water.

3) Annual monitoring for strontium-90 and tritium must be conducted by means of the analysis of a composite of four consecutive quarterly samples or analysis of four quarterly samples.

BOARD NOTE: In corresponding 40 CFR 141.26(b)(2)(iii), USEPA

recommends the analysis of four consecutive quarterly samples.

4) If the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity at a sampling point has a running annual average (computed quarterly) less than or equal to 15 pCi/ℓ, the Agency may, by a SEP issued pursuant to Section 611.110, reduce the frequency of monitoring at that sampling point to once every three years. The supplier must collect the same type of samples required in subsection (b) of this Section during the reduced monitoring period.

5) For a supplier in the vicinity of a nuclear facility, the Agency may allow the CWS to utilize environmental surveillance data collected by the nuclear facility in lieu of monitoring at the system's entry points, where the Agency determines, by a SEP issued pursuant to Section 611.110, that such data is applicable to the particular water system. In the event that there is a release from a nuclear facility, a supplier that uses such surveillance data must begin monitoring at the CWS's entry points in accordance with subsection (b) of this Section.

c) A~~Effective December 8, 2003, a~~ CWS supplier designated by the Agency to monitor for beta particle and photon radioactivity can not apply to the Agency for a waiver from the monitoring frequencies specified in subsection (a) or (b) of this Section.

d) A~~Effective December 8, 2003, a~~ CWS supplier may analyze for naturally occurring potassium-40 beta particle activity from the same or equivalent sample used for the gross beta particle activity analysis. A supplier is allowed to subtract the potassium-40 beta particle activity value from the total gross beta particle activity value to determine if the screening level is exceeded. The potassium-40 beta particle activity must be calculated by multiplying elemental potassium concentrations (in mg/ℓ) by a factor of 0.82.

e) If~~Effective December 8, 2003, if~~ the gross beta particle activity minus the naturally occurring potassium-40 beta particle activity exceeds the appropriate screening level, an analysis of the sample must be performed to identify the major radioactive constituents present in the sample and the appropriate doses must be calculated and summed to determine compliance with Section 611.330(d)(1), using the formula in Section 611.330(d)(2). Doses must also be calculated and combined for measured levels of tritium and strontium to determine compliance.

f) A~~Effective December 8, 2003, a~~ supplier must monitor monthly at the sampling points that exceeds the maximum contaminant level in Section 611.330(d) beginning the month after the exceedence occurs. A supplier must continue monthly monitoring until the supplier has established, by a rolling average of three monthly samples, that the MCL is being met. A supplier that establishes that the MCL is being met must return to quarterly monitoring until it meets the requirements set forth in subsection (a)(1) or (b)(4) of this Section.

~~g)~~ ~~Until December 8, 2003, CWSs using surface water sources and serving more than 100,000 persons and such other CWSs as the Agency, by a SEP issued pursuant to Section 611.110, requires must monitor for compliance with Section 611.331 by analysis of a composite of four consecutive quarterly samples or analysis of four quarterly samples. Compliance with Section 611.331 is assumed without further analysis if the average annual concentration of gross beta particle activity is less than 50 pCi/ℓ and if the average annual concentrations of tritium and strontium-90 are less than those listed in Section 611.331, provided that if both radionuclides are present the sum of their annual dose equivalents to bone marrow must not exceed 4 millirem/year.~~

~~1)~~ ~~If the gross beta particle activity exceeds 50 pCi/ℓ, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses must be calculated to determine compliance with Section 611.331.~~

~~2)~~ ~~If the MCLs are exceeded, the Agency shall, by a SEP issued pursuant to Section 611.110, require the supplier to conduct additional monitoring to determine the concentration of man-made radioactivity in principal watersheds.~~

~~3)~~ ~~The Agency shall, pursuant to subsection (j) of this Section, by a SEP issued pursuant to Section 611.110, require suppliers of water utilizing only groundwater to monitor for man-made radioactivity.~~

~~h)~~ ~~Until December 8, 2003, CWS suppliers must monitor at least every four years following the procedure in subsection (g) of this Section.~~

~~i)~~ ~~Until December 8, 2003, the Agency must, by a SEP issued pursuant to Section 611.110, require any CWS supplier utilizing waters contaminated by effluents~~

~~from nuclear facilities to initiate quarterly monitoring for gross beta particle and iodine-131 radioactivity and annual monitoring for strontium-90 and tritium.~~

~~1) Quarterly monitoring for gross beta particle activity must be based on the analysis of monthly samples or the analysis of a composite of three monthly samples. If the gross beta particle activity in a sample exceeds 15 pCi/ℓ, the same or an equivalent sample must be analyzed for strontium-89 and cesium-134. If the gross beta particle activity exceeds 50 pCi/ℓ, an analysis of the sample must be performed to identify the major radioactive constituents present and the appropriate organ and total body doses must be calculated to determine compliance with Section 611.331.~~

~~2) For iodine-131, a composite of five consecutive daily samples must be analyzed once each quarter. The Agency shall, by a SEP issued pursuant to Section 611.110, require more frequent monitoring when iodine-131 is identified in the finished water.~~

~~3) The Agency shall, by a SEP issued pursuant to Section 611.110, require annual monitoring for strontium-90 and tritium by means of the analysis of a composite of four consecutive quarterly samples or analysis of four quarterly samples.~~

~~4) The Agency shall, by a SEP issued pursuant to Section 611.110, allow the substitution of environmental surveillance data taken in conjunction with a nuclear facility for direct monitoring of manmade radioactivity by the supplier where the Agency determines such data is applicable to the CWS.~~

~~j) Until December 8, 2003, if the average annual MCL for man-made radioactivity set forth in Section 611.331 is exceeded, the CWS supplier must give notice to the Agency and to the public as required by Subpart T. Monitoring at monthly intervals must be continued until the concentration no longer exceeds the MCL or until a monitoring schedule as a condition to a variance, adjusted standard, or enforcement action becomes effective.~~

BOARD NOTE: Subsections (a) through (f) derive from 40 CFR 141.26(b) (2012)~~(2003)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART U: CONSUMER CONFIDENCE REPORTS

Section 611.884 Required Additional Health Information

a) All reports must prominently display the following language: "Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA or Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA Safe Drinking Water Hotline (800-426-4791)."

b) A supplier that detects arsenic above 0.005 mg/ℓ and up to and including 0.010 mg/ℓ must do the following:

1) The supplier must include in its report a short informational statement about arsenic, using the following language: "While your drinking water meets USEPA's standard for arsenic, it does contain low levels of arsenic. USEPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. USEPA continues to research the health effects of low levels of arsenic, which is a naturally-occurring mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."; or

2) The supplier may write its own educational statement, but only in consultation with the Agency.

c) A supplier that detects nitrate at levels above 5 mg/ℓ, but below the MCL, must do the following:

1) The supplier must include a short informational statement about the impacts of nitrate on children, using the following language: "Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an

infant you should ask advice from your health care provider"; or

2) The CWS supplier may write its own educational statement, but only in consultation with the Agency.

d) Every report must include the following lead-specific information:

1) A short informational statement about lead in drinking water and its effects on children. The statement must include the following information:

> If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [NAME OF SUPPLIER] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

2) A supplier may write its own educational statement, but only in consultation with the Agency.

e) A CWS supplier that detects TTHM above 0.080 mg/ℓ, but below the MCL in Section 611.312, as an annual average, monitored and calculated under the provisions of former Section 611.680, must include the health effects language prescribed by Appendix A of this Part.

~~f) Until January 22, 2006, a CWS supplier that detects arsenic above 0.010 mg/ℓ and up to and including 0.05 mg/ℓ must include the arsenic health effects language prescribed by Appendix A to this Part.~~

BOARD NOTE: Derived from 40 CFR 141.154 (2012)~~(2007), as amended at 72 Fed.~~

~~Reg. 7782 (October 12, 2007)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART W: INITIAL DISTRIBUTION SYSTEM EVALUATIONS

Section 611.920 General Requirements

a) USEPA has designated that the requirements of this Subpart W constitute National Primary Drinking Water Regulations. The regulations in this Subpart W establish monitoring and other requirements for identifying Subpart Y compliance monitoring locations for determining compliance with maximum contaminant levels for TTHMs and HAA5. The supplier must use an initial distribution system evaluation (IDSE) to determine the locations in its distribution system that are representative of high TTHM and HAA5 concentrations throughout the supplier's distribution system. An IDSE is used in conjunction with, but separate from, Subpart I compliance monitoring, to identify and select Subpart Y compliance monitoring locations.

b) Applicability. A supplier is subject to the requirements of this Subpart W if it fulfills any of the following conditions:

1) The supplier owns or operates a community water system that uses a primary or residual disinfectant other than ultraviolet light;

2) The supplier delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light; or

3) The supplier owns or operates a non-transient non-community water system that serves at least 10,000 people, and it either uses a primary or residual disinfectant other than ultraviolet light, or it delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

c) Schedule. A supplier must comply with the requirements of this Subpart W on the schedule provided in subsection (c)(1) of this Section based on its system type, as set forth in the applicable of subsections (c)(1)(A) through (c)(1)(E) of this Section, subject to the conditions of subsections (c)(1)(F) through (c)(1)(H) of this Section:

1) Compliance dates.

A) A supplier that is not part of a combined distribution system, or a supplier that serves the largest population in a combined distribution system, and which serves a population of 100,000 or more persons is required to have~~must~~ either ~~have~~ submitted its standard monitoring plan, its system-specific study plan, or its 40/30 certification or ~~must have~~ obtained or ~~have~~ been subject to a very small system waiver before October 1, 2006. The supplier is~~must~~ further required to have completed~~complete~~ its standard monitoring or system-specific study before September 30, 2008 and submitted~~submit~~ its IDSE report to the Agency before January 1, 2009.

B) A supplier that is not part of a combined distribution system, or a supplier that serves the largest population in a combined distribution system, and which serves a population of 50,000 to 99,999 persons is required to have~~must~~ either ~~have~~ submitted its standard monitoring plan, its system-specific study plan, or its 40/30 certification or ~~must have~~ obtained or ~~have~~ been subject to a very small system waiver before April 1, 2007. The supplier is~~must~~ further required to have completed~~complete~~ its standard monitoring or system-specific study before March 31, 2009 and submitted~~submit~~ its IDSE report to the Agency before July 1, 2009.

C) A supplier that is not part of a combined distribution system, or a supplier that serves the largest population in a combined distribution system, and which serves a population of 10,000 to 49,999 persons is required to have either submitted~~must submit~~ its standard monitoring plan, its system-specific study plan, or its 40/30 certification or obtained~~must obtain~~ or been~~be~~ subject to a very small system waiver before October 1, 2007. The supplier is~~must~~ further required to have completed~~complete~~ its standard monitoring or system-specific study before September 30, 2009 and submitted~~submit~~ its IDSE report to the Agency before January 1, 2010.

D) A supplier that is not part of a combined distribution system, or a supplier that serves the largest population in a combined distribution system, and which serves a population of fewer than 10,000 persons (and which is a CWS) is required to have either submitted~~must submit~~ its standard monitoring plan, its system-specific study plan, or its 40/30 certification or obtained~~must obtain~~ or been~~be~~ subject to a very small system waiver before April 1, 2008. The supplier is~~must~~ further required to have completed~~complete~~ its standard monitoring or system-specific study before March 31, 2010 and submitted~~submit~~ its IDSE report to the Agency before July 1, 2010.

E) A supplier that is part of a combined distribution system which does not serve the largest population in the combined system, which is a wholesale system supplier or a consecutive system supplier, is required to have either submitted~~must submit~~ its standard monitoring plan, its system-specific study plan, or its 40/30 certification or obtained~~must obtain~~ or been~~be~~ subject to a very small system waiver; is~~must~~ further required to have completed~~complete~~ its standard monitoring or system-specific study; and submitted~~submit~~ its IDSE report to the Agency at the same time as the supplier in the combined system that has the earliest compliance date.

F) If, within 12 months after the date when submission of the standard monitoring plan, the system-specific study plan, or the 40/30 certification or becoming subject to a very small system waiver was~~is~~ due, as identified in the applicable of subsections (a)(1) through (a)(4) of this Section, the Agency did~~does~~ not approve a supplier's plan or notify the supplier that it had~~has~~ not yet completed its review, the supplier may consider the plan that it submitted as approved. The supplier is required to have implemented~~must implement~~ that plan, and it is required to have completed~~must complete~~ standard monitoring or a system-specific study no later than the date when completion of the standard monitoring or system-specific study is due, as identified in the applicable of subsections (a)(1) through (a)(4) of this Section.

G) The supplier is required to have submitted~~must submit~~ its 40/30 certification pursuant to Section 611.923 before the date indicated in the applicable of subsections (a)(1) through (a)(4) of this Section.

H) If, within three months after the due date for submission of the IDSE report identified in this subsection (c)(1) (nine months after this date if the supplier is required to have complied~~must comply~~ on the schedule in subsection (c)(1)(C) of this Section), the Agency did~~does~~ not approve the supplier's IDSE report or notify the supplier that it had~~has~~ not yet completed its review, the supplier could~~may~~ consider the report that it submitted to the Agency as approved, and the supplier is required to have implemented~~must implement~~ the recommended Subpart Y monitoring as required.

2) For the purpose of determining the applicable compliance schedule in subsection (c)(1) of this Section, the Agency may, by a SEP issued pursuant to Section 611.110, determine that a combined distribution system does not include certain consecutive systems based on such factors as the receipt of water from a wholesale system only on an emergency basis or the receipt of only a small percentage and small volume of water from a wholesale system. The Agency may also determine, by a SEP issued pursuant to Section 611.110, that a combined distribution system does not include certain wholesale systems based on such factors as the delivery of water to a consecutive system only on an emergency basis or the delivery of only a small percentage and small volume of water to a consecutive system.

d) A supplier must do one of the following: it must conduct standard monitoring that meets the requirements in Section 611.921; it must conduct a system-specific study that meets the requirements in Section 611.922; it must certify to the Agency that it meets the 40/30 certification criteria under Section 611.923; or it must qualify for a very small system waiver under Section 611.924.

1) The supplier must have taken the full complement of routine TTHM and HAA5 compliance samples required of a system that serves the appropriate population and which uses the appropriate source water under Subpart I of this Part (or the supplier must have taken the full complement

of reduced TTHM and HAA5 compliance samples required of a system with the supplier's population and source water under Subpart I of this Part if the supplier meets reduced monitoring criteria under Subpart I of this Part) during the period specified in Section 611.923(a) to meet the 40/30 certification criteria in Section 611.923. The supplier must have taken TTHM and HAA5 samples under Sections 611.381 and 611.382 to be eligible for the very small system waiver in Section 611.924.

2) If the supplier has not taken the required samples, the supplier must conduct standard monitoring that meets the requirements in Section 611.921, or a system-specific study that meets the requirements in Section 611.922.

e) The supplier must use only the analytical methods specified in Section 611.381, or otherwise approved by the Agency for monitoring under this Subpart W, to demonstrate compliance with the requirements of this Subpart W.

f) IDSE results will not be used for the purpose of determining compliance with MCLs in Section 611.312.

BOARD NOTE: Derived from 40 CFR 141.600 (2012)~~(2007)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.923 40/30 Certification

a) Eligibility. A supplier is eligible for 40/30 certification if it had no TTHM or HAA5 monitoring violations under Subpart I of this Part and no individual sample exceeded 0.040 mg/ℓ for TTHM or 0.030 mg/ℓ for HAA5 during an eight consecutive calendar quarter period beginning no earlier than the date specified in the applicable of subsections (a)(1) through (a)(4) of this Section, subject to the limitations of subsection (a)(5) of this Section.

1) If the supplier's 40/30 certification was~~is~~ due no later than October 1, 2006, then its eligibility for 40/30 certification was~~is~~ based on eight consecutive calendar quarters of Subpart I compliance monitoring results that began~~beginning~~ no earlier than January 2004.

2) If the supplier's 40/30 certification was~~is~~ due no later than April 1, 2007, then its eligibility for 40/30 certification was~~is~~ based on eight consecutive

calendar quarters of Subpart I compliance monitoring results that began~~beginning~~ no earlier than January 2004.

3) If the supplier's 40/30 certification was~~is~~ due no later than October 1, 2007, then its eligibility for 40/30 certification was~~is~~ based on eight consecutive calendar quarters of Subpart I compliance monitoring results that began~~beginning~~ no earlier than January 2005.

4) If the supplier's 40/30 certification was~~is~~ due no later than April 1, 2008, then its eligibility for 40/30 certification was~~is~~ based on eight consecutive calendar quarters of Subpart I compliance monitoring results that began~~beginning~~ no earlier than January 2005.

5) Eligibility for 40/30 certification is based on eight consecutive calendar quarters of Subpart I compliance monitoring results beginning no earlier than the date set forth in the applicable of subsections (a)(1) through (a)(4) of this Section, unless the supplier is on reduced monitoring under Subpart I of this Part and was not required to monitor during the specified period. If the supplier did not monitor during the specified period, the supplier must base its eligibility on compliance samples taken during the 12 months preceding the specified period.

b) 40/30 certification.

1) A supplier must certify to the Agency that every individual compliance sample taken under Subpart I of this Part during the applicable of the periods specified in subsection (a) of this Section were no more than 0.040 mg/ℓ for TTHM and 0.030 mg/ℓ for HAA5, and that the supplier has not had any TTHM or HAA5 monitoring violations during the period specified in subsection (a) of this Section.

2) The Agency may require the supplier to submit compliance monitoring results, distribution system schematics, or recommended Subpart Y compliance monitoring locations in addition to the supplier's certification. If the supplier fails to submit the requested information, the Agency may require standard monitoring under Section 611.921 or a system-specific study under Section 611.922.

3) The Agency may still require standard monitoring under Section 611.921 or a system-specific study under Section 611.922 even if the supplier meets the criteria in subsection (a) of this Section.

4) The supplier must retain a complete copy of its certification submitted under this Section for 10 years after the date that it submitted the supplier's certification. The supplier must make the certification, all data upon which the certification is based, and any Agency notification available for review by the Agency or the public.

BOARD NOTE: Derived from 40 CFR 141.603 (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART Y: STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS

Section 611.970 General Requirements

a) General. The requirements of this Subpart Y constitute NPDWRs. The regulations in this Subpart Y establish monitoring and other requirements for achieving compliance with MCLs based on LRAAs for TTHM and HAA5, and for achieving compliance with MRDLs for chlorine and chloramine for certain consecutive systems.

b) Applicability. A supplier is subject to these requirements if its system is a CWS or a NTNCWS that uses a primary or residual disinfectant other than ultraviolet light or which delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

c) Schedule. A supplier must comply with the requirements in this Subpart Y on the applicable schedule set forth in subsections (c)(1) through (c)(6) of this Section based on the supplier's system type, subject to the limitations of subsection (b)(7) of this Section.

1) A supplier that is not part of a combined distribution system, or a supplier whose system serves the largest population in a combined system, and whose system serves 100,000 or more persons is required to have compliedmust comply with the requirements of this Subpart Y before April 1, 2012.

2) A supplier that is not part of a combined distribution system, or a supplier whose system serves the largest population in a combined system, and whose system serves 50,000 to 99,999 persons is required to have complied~~must comply~~ with the requirements of this Subpart Y before October 1, 2012.

3) A supplier that is not part of a combined distribution system, or a supplier whose system serves the largest population in a combined system, and whose system serves 10,000 to 49,999 persons must comply with the requirements of this Subpart Y before October 1, 2013.

4) A supplier that is not part of a combined distribution system, or a supplier whose system serves the largest population in a combined system, and whose system serves fewer than 10,000 persons must comply with the requirements of this Subpart Y before October 1, 2013 if no Cryptosporidium monitoring is required pursuant to Section 611.1001(a)(4).

5) A supplier that is not part of a combined distribution system, or a supplier whose system serves the largest population in a combined system, and whose system serves fewer than 10,000 persons must comply with the requirements of this Subpart Y before October 1, 2014 if Cryptosporidium monitoring is required pursuant to Section 611.1001(a)(4) or (a)(6).

6) A supplier whose consecutive system or wholesale system is part of a combined system, other than a supplier that is subject to any of subsections (c)(1) through (c)(4) of this Section, must comply with the requirements of this Subpart Y before the earliest compliance date applicable to any segment of the combined distribution system.

7) The Agency must, by a SEP issued pursuant to Section 611.110, grant up to an additional 24 months for compliance with MCLs and operational evaluation levels if it finds that the additional time is needed because the supplier requires capital improvements to comply with an MCL.

8) The supplier's monitoring frequency is specified in Section 611.971(a)(2).

A) If a supplier is required to conduct quarterly monitoring, it must begin monitoring in the first full calendar quarter that includes the applicable compliance date set forth in this subsection (c).

B) If a supplier is required to conduct monitoring less frequently than quarterly, it must begin monitoring in the calendar month recommended in the IDSE report prepared pursuant to Section 611.921 or Section 611.922 or in the calendar month identified in the Subpart Y monitoring plan developed pursuant to Section 611.972, but in no instance later than 12 months after the applicable compliance date set forth in this subsection (c).

9) If a supplier is required to conduct quarterly monitoring, it must make compliance calculations at the end of the fourth calendar quarter that follows the compliance date and at the end of each subsequent quarter (or earlier if the LRAA calculated based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters). If a supplier is required to conduct monitoring less frequently than quarterly, it must make compliance calculations beginning with the first compliance sample taken after the compliance date.

10) For the purpose of the schedule set forth in this subsection (c), the Agency may, by a SEP issued pursuant to Section 611.110, determine that the combined distribution system does not include certain consecutive systems based on factors such as receipt of water from a wholesale system only on an emergency basis or receipt of only a small percentage and small volume of water from a wholesale system. The Agency may also determine that the combined distribution system does not include certain wholesale systems based on factors such as delivery of water to a consecutive system only on an emergency basis or delivery of only a small percentage and small volume of water to a consecutive system.

BOARD NOTE: The Board found it necessary to deviate from the structure of 40 CFR 141.620(c) when incorporating this subsection (c). Subsections (c)(1) through (c)(4) of this Section correspond with 40 CFR 141.620(c)(1) through (c)(4). Subsections (c)(5) and (c)(6) of this Section correspond with the two segments of 40 CFR 141.620(c)(5). Subsection (c)(7) of this Section corresponds

with the footnote to the table in 40 CFR 141.620(c). Subsections (c)(8) through (c)(10) of this Section correspond with 40 CFR 141.620(c)(6) through (c)(8).

d) Monitoring and compliance.

1) Suppliers required to monitor quarterly. To comply with Subpart Y MCLs in Section 611.312(b)(2), the supplier must calculate LRAAs for TTHM and HAA5 using monitoring results collected under this Subpart Y, and it must determine that each LRAA does not exceed the MCL. If the supplier fails to complete four consecutive quarters of monitoring, it must calculate compliance with the MCL based on the average of the available data from the most recent four quarters. If the supplier takes more than one sample per quarter at a monitoring location, it must average all samples taken in the quarter at that location to determine a quarterly average to be used in the LRAA calculation.

2) Suppliers required to monitor yearly or less frequently. To determine compliance with Subpart Y MCLs in Section 611.312(b)(2), the supplier must determine that each sample taken is less than the MCL. If any sample exceeds the MCL, the supplier must comply with the requirements of Section 611.975. If no sample exceeds the MCL, the sample result for each monitoring location is considered the LRAA for that monitoring location.

e) Violation for failure to monitor. A supplier is in violation of the monitoring requirements for each quarter that a monitoring result would be used in calculating an LRAA if the supplier fails to monitor.

BOARD NOTE: Derived from 40 CFR 141.620 (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.974 Additional Requirements for Consecutive Systems

If a supplier has a consecutive system that does not add a disinfectant but which delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light, it must comply with the analytical and monitoring requirements for chlorine and chloramines in Sections 611.381(c) and 611.382(c)(1) and with the compliance requirements in Section 611.383(c)(1)

~~beginning April 1, 2009, unless the supplier is required to comply earlier by the Agency~~, and the supplier must report monitoring results pursuant to Section 611.384(c).

BOARD NOTE: Derived from 40 CFR 141.624 (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART Z: ENHANCED TREATMENT FOR CRYPTOSPORIDIUM

Section 611.1001 Source Water Monitoring Requirements: Source Water Monitoring

a) Initial round of source water monitoring. A supplier must conduct the following monitoring on the schedule in subsection (c) of this Section, unless it meets the monitoring exemption criteria in subsection (d) of this Section.

1) A filtered system supplier that serves 10,000 or more people must sample its source water for Cryptosporidium, E. coli, and turbidity at least monthly for 24 months.

2) An unfiltered system supplier that serves 10,000 or more people must sample its source water for Cryptosporidium at least monthly for 24 months.

3) Smaller system suppliers monitoring for E. coli.

A) A filtered system supplier that serves fewer than 10,000 people must sample its source water for E. coli at least once every two weeks for 12 months.

B) A filtered system supplier that serves fewer than 10,000 people may avoid E. coli monitoring if the system notifies the Agency that it will monitor for Cryptosporidium as described in subsection (a)(4) of this Section. The system must notify the Agency no later than three months prior to the date before which the system is otherwise required to start E. coli monitoring pursuant to Section 611.1001(c).

4) Smaller system suppliers monitoring for Cryptosporidium. A filtered system supplier that serves fewer than 10,000 people must sample its

source water for Cryptosporidium at least twice per month for 12 months or at least monthly for 24 months if it meets any of the conditions set forth in subsections (a)(4)(A) through (a)(4)(C) of this Section, subject to the limitations of subsection (a)(4)(D) of this Section, based on monitoring conducted pursuant to subsection (a)(3) of this Section.

A) For a supplier that uses lake or reservoir source, the annual mean E. coli concentration is greater than 10 E. coli/100 *mℓ*.

B) For a supplier that uses a flowing stream source the annual mean E. coli concentration is greater than 50 E. coli/100 mℓ.

C) The supplier does not conduct E. coli monitoring as described in subsection (a)(3) of this Section.

D) A supplier that uses groundwater under the direct influence of surface water must comply with the requirements of subsection (a)(4) of this Section based on the E. coli level that applies to the nearest surface water body. If no surface water body is nearby, the system must comply based on the requirements that apply to a supplier that uses a lake or reservoir source.

5) For a filtered system supplier that serves fewer than 10,000 people, the Agency may, by a SEP issued pursuant to Section 611.110, approve monitoring for an indicator other than E. coli pursuant to subsection (a)(3) of this Section. The Agency may also, by a SEP issued pursuant to Section 611.110, approve an alternative to the E. coli concentration in subsection (a)(4)(A), (a)(4)(B) or (a)(4)(D) of this Section to trigger Cryptosporidium monitoring. This approval by the Agency must be provided to the supplier in writing, and it must include the basis for the Agency's determination that the alternative indicator or trigger level will provide a more accurate identification of whether a system will exceed the Bin 1 Cryptosporidium level set forth in Section 611.1010.

6) An unfiltered system supplier that serves fewer than 10,000 people must sample its source water for Cryptosporidium at least twice per month for 12 months or at least monthly for 24 months.

7) A supplier may sample more frequently than required by this Section if the sampling frequency is evenly spaced throughout the monitoring period.

b) Second round of source water monitoring. A supplier must conduct a second round of source water monitoring that meets the requirements for monitoring parameters, frequency, and duration described in subsection (a) of this Section, unless it meets the monitoring exemption criteria in subsection (d) of this Section. The supplier must conduct this monitoring on the schedule set forth in subsection (c) of this Section.

c) Monitoring schedule. A supplier must begin the monitoring required in subsections (a) and (b) of this Section no later than the month beginning with the applicable date listed in subsections (c)(1) through (c)(5) of this Section.

1) A supplier that serves 100,000 or more persons is required to have begun~~must begin~~ the first round of source water monitoring no later than the month beginning October 1, 2006, and it must begin the second round of source water monitoring no later than the month beginning April 1, 2015.

2) A supplier that serves 50,000 to 99,999 persons is required to have begun~~must begin~~ the first round of source water monitoring no later than the month beginning April 1, 2007, and it must begin the second round of source water monitoring no later than the month beginning October 1, 2015.

3) A supplier that serves 10,000 to 49,999 persons is required to have begun~~must begin~~ the first round of source water monitoring no later than the month beginning April 1, 2008, and it must begin the second round of source water monitoring no later than the month beginning October 1, 2016.

4) A supplier that serves fewer than 10,000 persons, that is a filtered system supplier, and which monitors for E. coli is required to have begun~~must begin~~ the first round of source water monitoring no later than the month beginning October 1, 2008, and it must begin the second round of source water monitoring no later than the month beginning October 1, 2017.

5) A supplier that serves fewer than 10,000 persons, that is an unfiltered system supplier, or that is a filtered system supplier which meets the conditions of subsection (a)(4) of this Section, and which monitors for Cryptosporidium, is required to have begun~~must begin~~ the first round of source water monitoring no later than the month beginning April 1, 2010, and it must begin the second round of source water monitoring no later than the month beginning April 1, 2019.

d) Monitoring avoidance.

1) A filtered system supplier is not required to conduct source water monitoring pursuant to this Subpart Z if the system will provide a total of at least 5.5-log of treatment for Cryptosporidium, equivalent to meeting the treatment requirements of Bin 4 in Section 611.1011.

2) An unfiltered system supplier is not required to conduct source water monitoring pursuant to this Subpart Z if the system will provide a total of at least 3-log Cryptosporidium inactivation, equivalent to meeting the treatment requirements for an unfiltered system supplier with a mean Cryptosporidium concentration of greater than 0.01 oocysts/ℓ in Section 611.1012.

3) If a supplier chooses to provide the level of treatment set forth in subsection (d)(1) or (d)(2) of this Section, as applicable, rather than start source water monitoring, it must notify the Agency in writing no later than the date on which the system is otherwise required to submit a sampling schedule for monitoring pursuant to Section 611.1002. Alternatively, a supplier may choose to stop sampling at any point after it has initiated monitoring if it notifies the Agency in writing that it will provide this level of treatment. The supplier must install and operate technologies to provide this level of treatment before the applicable treatment compliance date set forth in Section 611.1013.

e) Plants operating only part of the year. A supplier that has a Subpart B plant that operates for only part of the year must conduct source water monitoring in accordance with this Subpart Z, but with the following modifications:

1) The supplier must sample its source water only during the months that the plant operates, unless the Agency, by a SEP issued pursuant to Section

611.110, specifies another monitoring period based on plant operating practices.

2) A supplier with plants that operate less than six months per year and which monitors for Cryptosporidium must collect at least six Cryptosporidium samples per year during each of two years of monitoring. Samples must be evenly spaced throughout the period during which the plant operates.

f) New sources and new systems.

1) New sources. A supplier that begins using a new source of surface water or groundwater under the direct influence of surface water after the supplier is required to begin monitoring pursuant to subsection (c) of this Section must monitor the new source on a schedule that the Agency has approved by a SEP issued pursuant to Section 611.110. Source water monitoring must meet the requirements of this Subpart Z. The supplier must also meet the bin classification and Cryptosporidium treatment requirements of Sections 611.1010 and 611.1011 or Section 611.1012, as applicable, for the new source on a schedule that the Agency has approved by a SEP issued pursuant to Section 611.110.

2) The requirements of Section 611.1001(f) apply to a Subpart B system supplier that begins operation after the applicable monitoring start date set forth in subsection (c) of this Section.

3) The supplier must begin a second round of source water monitoring no later than six years following initial bin classification pursuant to Section 611.1010 or determination of the mean Cryptosporidium level pursuant to Section 611.1012.

g) Failure to collect any source water sample required under this Section in accordance with the sampling schedule, sampling location, analytical method, approved laboratory, and reporting requirements of Sections 611.1002 through 611.1006 is a monitoring violation.

h) Grandfathering monitoring data. A supplier may use (grandfather) monitoring data collected prior to the applicable monitoring start date in subsection (c) of this Section to meet the initial source water monitoring requirements in subsection (a)

of this Section. Grandfathered data may substitute for an equivalent number of months at the end of the monitoring period. All data submitted pursuant to this subsection must meet the requirements set forth in Section 611.1007.

BOARD NOTE: Derived from 40 CFR 141.701 (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.1004 Source Water Monitoring Requirements: Analytical Methods

a) Cryptosporidium. A supplier must analyze for Cryptosporidium using USEPA OGWDW Methods, Method 1623 (05), 1623.1, or ~~USEPA OGWDW Methods, Method~~ 1622 (05), each incorporated by reference in Section 611.102, or alternative methods approved by the Agency pursuant to Section 611.480.

1) The supplier must analyze at least a 10 ℓ sample or a packed pellet volume of at least 2 mℓ as generated by the methods listed in subsection (a) of this Section. A supplier unable to process a 10 ℓ sample must analyze as much sample volume as can be filtered by two filters approved by USEPA for the methods listed in subsection (a) of this Section, up to a packed pellet volume of at least 2 mℓ.

2) Matrix spike (MS) samples.

A) MS samples, as required by the methods in subsection (a) of this Section, must be spiked and filtered by a laboratory approved for Cryptosporidium analysis pursuant to Section 611.1005.

B) If the volume of the MS sample is greater than 10 ℓ, the supplier may filter all but 10 ℓ of the MS sample in the field, and ship the filtered sample and the remaining 10 ℓ of source water to the laboratory. In this case, the laboratory must spike the remaining 10 ℓ of water and filter it through the filter used to collect the balance of the sample in the field.

3) Flow cytometer-counted spiking suspensions must be used for MS samples and ongoing precision and recovery samples.

b) E. coli. A supplier must use methods for enumeration of E. coli in source water approved in 40 CFR 136.3(a), incorporated by reference in Section 611.102, or alternative methods approved by the Agency pursuant to Section 611.480.

1) The time from sample collection to initiation of analysis may not exceed 30 hours, unless the supplier meets the condition of subsection (b)(2) of this Section.

2) The Agency may, by a SEP issued pursuant to Section 611.110, approve on a case-by-case basis the holding of an E. coli sample for up to 48 hours between sample collection and initiation of analysis if it determines that analyzing an E. coli sample within 30 hours is not feasible. E. coli samples held between 30 to 48 hours must be analyzed by the Autoanalysis Colilert System reagent version of Standard Methods, 18th, 19th, or 20th ed., Method 9223 B, ~~as listed in 40 CFR 136.3(a),~~ incorporated by reference in Section 611.102.

3) A supplier must maintain the temperature of its samples between 0ºC and 10ºC during storage and transit to the laboratory.

4) The supplier may use the membrane filtration, two-step procedure described in Standard Methods, 20th ed., Method 9222 D and G, incorporated by reference in Section 611.102.

BOARD NOTE: On June 3, 2008 (at 73 Fed. Reg. 31616), USEPA added appendix A to subpart C of 40 CFR 141, which authorized alternative methods to those listed for E. coli by multiple-tube technique at corresponding 40 CFR 141.402(c)(2) to allow the use of Standard Methods for the Examination of Water and Wastewater, 20th ed., Method 9222 D and G.

c) Turbidity. A supplier must use methods for turbidity measurement approved in Section 611.531(a).

BOARD NOTE: Derived from 40 CFR 141.704 and appendix A to 40 CFR 141 (2012)~~(2010)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.1012 Treatment Technique Requirements: Unfiltered System Cryptosporidium Treatment Requirements

a) Determination of the mean Cryptosporidium level.

1) Following completion of the initial source water monitoring required by Section 611.1001(a), an unfiltered system supplier is required to have calculated~~must calculate~~ the arithmetic mean of all Cryptosporidium sample concentrations reported pursuant to Section 611.1001(a). The supplier is required to have reported~~must report~~ this value to the Agency for approval no later than six months after the month the supplier is required to have completed~~complete~~ initial source water monitoring based on the applicable schedule set forth in Section 611.1001(c).

2) Following completion of the second round of source water monitoring required by Section 611.1001(b), an unfiltered system supplier must calculate the arithmetic mean of all Cryptosporidium sample concentrations reported pursuant to Section 611.1001(b). The supplier must report this value to the Agency for approval no later than six months after the month the supplier is required to complete the second round of source water monitoring based on the applicable schedule set forth in Section 611.1001(c).

3) If the monthly Cryptosporidium sampling frequency varies, a supplier must first calculate a monthly average for each month of monitoring. The supplier must then use these monthly average concentrations, rather than individual sample concentrations, in the calculation of the mean Cryptosporidium level in subsection (a)(1) or (a)(2) of this Section.

4) The report to the Agency of the mean Cryptosporidium levels calculated pursuant to subsections (a)(1) and (a)(2) of this Section must include a summary of the source water monitoring data used for the calculation.

5) A failure to comply with the conditions of subsection (a) of this Section is a violation of the treatment technique requirement.

b) Cryptosporidium inactivation requirements. An unfiltered system supplier must provide the level of inactivation for Cryptosporidium specified in this subsection, based on its mean Cryptosporidium levels, as determined pursuant to subsection

(a) of this Section and according to the applicable schedule set forth in Section 611.1013.

1) An unfiltered system supplier with a mean Cryptosporidium level of 0.01 oocysts/ℓ or less must provide at least 2-log Cryptosporidium inactivation.

2) An unfiltered system supplier with a mean Cryptosporidium level of greater than 0.01 oocysts/ℓ must provide at least 3-log Cryptosporidium inactivation.

c) Inactivation treatment technology requirements. An unfiltered system supplier must use chlorine dioxide, ozone, or UV, as described in Section 611.1020, to meet the Cryptosporidium inactivation requirements of this Section.

1) A supplier that uses chlorine dioxide or ozone and fails to achieve the Cryptosporidium inactivation required in subsection (b) of this Section on more than one day in the calendar month is in violation of the treatment technique requirement.

2) A supplier that uses UV light and fails to achieve the Cryptosporidium inactivation required in subsection (b) of this Section by meeting the criteria in Section 611.1020(d)(3)(B) is in violation of the treatment technique requirement.

d) Use of two disinfectants. An unfiltered system supplier must meet the combined Cryptosporidium inactivation requirements of this Section and Giardia lamblia and virus inactivation requirements of Section 611.241 using a minimum of two disinfectants, and each of two disinfectants must separately achieve the total inactivation required for any of Cryptosporidium, Giardia lamblia, or viruses.

BOARD NOTE: Derived from 40 CFR 141.712 (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.1013 Treatment Technique Requirements: Schedule for Compliance with Cryptosporidium Treatment Requirements

a) Following initial bin classification pursuant to Section 611.1010(c), a filtered system supplier must provide the level of treatment for Cryptosporidium required

by Section 611.1011 according to the applicable schedule set forth in subsection (c) of this Section.

b) Following initial determination of the mean Cryptosporidium level pursuant to Section 611.1012(a)(1), an unfiltered system supplier must provide the level of treatment for Cryptosporidium required by Section 611.1012 according to the applicable schedule set forth in subsection (c) of this Section.

c) Cryptosporidium treatment compliance dates.

1) A supplier that serves 100,000 or more persons is required to have complied~~must comply~~ with Cryptosporidium treatment requirements before April 1, 2012.

2) A supplier that serves 50,000 to 99,999 persons is required to have complied~~must comply~~ with Cryptosporidium treatment requirements before October 1, 2012.

3) A supplier that serves 10,000 to 49,999 persons must comply with Cryptosporidium treatment requirements before October 1, 2013.

4) A supplier that serves fewer than 10,000 persons must comply with Cryptosporidium treatment requirements before October 1, 2014.

5) The Agency may, by a SEP issued pursuant to Section 611.110, allow up to an additional two years from the applicable date set forth in this subsection (c) for complying with the treatment requirement if it determines that the additional time is necessary for the supplier to make capital improvements to implement the treatment.

d) If the bin classification for a filtered system supplier changes following the second round of source water monitoring, as determined pursuant to Section 611.1010(d), the supplier must provide the level of treatment for Cryptosporidium required by Section 611.1011 on a schedule approved by the Agency by a SEP issued pursuant to Section 611.110.

e) If the mean Cryptosporidium level for an unfiltered system supplier changes following the second round of monitoring, as determined pursuant to Section 611.1012(a)(2), and if the supplier must provide a different level of

Cryptosporidium treatment pursuant to Section 611.1012 due to this change, the supplier must meet this treatment requirement on a schedule approved by the Agency by a SEP issued pursuant to Section 611.110.

BOARD NOTE: Derived from 40 CFR 141.713 (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.1014 Treatment Technique Requirements: Requirements for Uncovered Finished Water Storage Facilities

a) A supplier that uses uncovered finished water storage facilities must comply with the conditions of this Section.

b) A supplier is required to have notified~~must notify~~ the Agency in writing of the use of each uncovered finished water storage facility no later than April 1, 2008.

c) A supplier is required to have met~~must meet~~ either of the following conditions for each uncovered finished water storage facility, or it is required to have been~~must be~~ in compliance with an Agency-approved schedule to meet these conditions, no later than April 1, 2009:

1) The supplier must cover any uncovered finished water storage facility; or

2) The supplier must treat the discharge from the uncovered finished water storage facility to the distribution system to achieve inactivation or removal of at least 4-log virus, 3-log Giardia lamblia, and 2-log Cryptosporidium using a protocol approved by the Agency.

d) A failure to comply with the requirements of this Section is a violation of the treatment technique requirement.

BOARD NOTE: Derived from 40 CFR 141.714 (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.APPENDIX A Regulated Contaminants

Microbiological contaminants.

Contaminant (units): Total Coliform Bacteria
Traditional MCL in mg/ℓ: MCL: (a supplier that collects 40 or more samples/month) five percent or fewer of monthly samples are positive; (systems that collect fewer than 40 samples/month) one or fewer positive monthly samples.
To convert for CCR, multiply by: –
MCL in CCR units: MCL: (a supplier that collects 40 or more samples/month) five percent or fewer of monthly samples are positive; (a supplier that collects fewer than 40 samples/month) one or fewer positive monthly samples.
MCLG: 0
Major sources in drinking water: Naturally present in the environment.
Health effects language: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.Coliforms were found in more samples than allowed and this was a warning of potential problems.

Contaminant (units): Fecal coliform and E. coli
Traditional MCL in mg/ℓ: 0
To convert for CCR, multiply by: –
MCL in CCR units: 0
MCLG: 0
Major sources in drinking water: Human and animal fecal waste.
Health effects language: Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems.

Contaminant (units): Fecal Indicators (enterococci or coliphage).
Traditional MCL in mg/ℓ: TT.
To convert for CCR, multiply by: −
MCL in CCR units: TT.
MCLG: N/A
Major sources in drinking water: Human and animal fecal waste.

Health effects language: Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

Contaminant (units): Total organic carbon (ppm)
Traditional MCL in mg/ℓ: TT
To convert for CCR, multiply by: –
MCL in CCR units: TT
MCLG: N/A
Major sources in drinking water: Naturally present in the environment.
Health effects language: Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Contaminant (units): Turbidity (NTU)
Traditional MCL in mg/ℓ: TT
To convert for CCR, multiply by: –
MCL in CCR units: TT
MCLG: N/A
Major sources in drinking water: Soil runoff.
Health effects language: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Radioactive contaminants.

Contaminant (units): Beta/photon emitters (mrem/yr)
Traditional MCL in mg/ℓ: 4 mrem/yr
To convert for CCR, multiply by: –
MCL in CCR units: 4
MCLG: 0
Major sources in drinking water: Decay of natural and man-made deposits.

Health effects language: Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta particle and photon radioactivity in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): Alpha emitters (pCi/ℓ)
Traditional MCL in mg/ℓ: 15 pCi/ℓ
To convert for CCR, multiply by: –
MCL in CCR units: 15
MCLG: 0
Major sources in drinking water: Erosion of natural deposits.
Health effects language: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): Combined radium (pCi/ℓ)
Traditional MCL in mg/ℓ: 5 pCi/ℓ
To convert for CCR, multiply by: –
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Erosion of natural deposits.
Health effects language: Some people who drink water containing radium-226 or -228 in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): Uranium (µg/ℓ)
Traditional MCL in mg/ℓ: 30 µg/ℓ
To convert for CCR, multiply by: –
MCL in CCR units: 30
MCLG: 0
Major sources in drinking water: Erosion of natural deposits.
Health effects language: Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Inorganic contaminants.

Contaminant (units): Antimony (ppb)
Traditional MCL in mg/ℓ: 0.006

To convert for CCR, multiply by: 1000
MCL in CCR units: 6
MCLG: 6
Major sources in drinking water: Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Health effects language: Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

Contaminant (units): Arsenic (ppb)
Traditional MCL in mg/ℓ: ~~0.05 until January 23, 2006 or~~ 0.010 ~~effective January 23, 2006~~
To convert for CCR, multiply by: 1000
MCL in CCR units: 50
MCLG: 0 ~~(effective January 26, 2006)~~
Major sources in drinking water: Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Health effects language: Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Contaminant (units): Asbestos (MFL)
Traditional MCL in mg/ℓ: 7 MFL
To convert for CCR, multiply by: –
MCL in CCR units: 7
MCLG: 7
Major sources in drinking water: Decay of asbestos cement water mains; erosion of natural deposits.
Health effects language: Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.

Contaminant (units): Barium (ppm)
Traditional MCL in mg/ℓ: 2
To convert for CCR, multiply by: –
MCL in CCR units: 2
MCLG: 2
Major sources in drinking water: Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.

Health effects language: Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

Contaminant (units): Beryllium (ppb)
Traditional MCL in mg/ℓ: 0.004
To convert for CCR, multiply by: 1000
MCL in CCR units: 4
MCLG: 4
Major sources in drinking water: Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries.
Health effects language: Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

Contaminant (units): Bromate (ppb)
Traditional MCL in mg/ℓ: 0.010
To convert for CCR, multiply by: 1000
MCL in CCR units: 10
MCLG: 0
Major sources in drinking water: By-product of drinking water disinfection.
Health effects language: Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): Cadmium (ppb)
Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 5
Major sources in drinking water: Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Health effects language: Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

Contaminant (units): Chloramines (ppm)
Traditional MCL in mg/ℓ: MRDL=4
To convert for CCR, multiply by: –
MCL in CCR units: MRDL=4
MCLG: MRDLG=4
Major sources in drinking water: Water additive used to control microbes.

Health effects language: Some people who drink water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.

Contaminant (units): Chlorine (ppm)
Traditional MCL in mg/ℓ: MRDL=4
To convert for CCR, multiply by: –
MCL in CCR units: MRDL=4
MCLG: MRDLG=4
Major sources in drinking water: Water additive used to control microbes.
Health effects language: Some people who drink water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Contaminant (units): Chlorine dioxide (ppb)
Traditional MCL in mg/ℓ: MRDL=800
To convert for CCR, multiply by: 1000
MCL in CCR units: MRDL=800
MCLG: MRDLG=800
Major sources in drinking water: Water additive used to control microbes.
Health effects language: Some infants and young children who drink water containing chlorine dioxide well in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.

Contaminant (units): Chlorite (ppm)
Traditional MCL in mg/ℓ: MRDL=1
To convert for CCR, multiply by: –
MCL in CCR units: MRDL=1
MCLG: MRDLG=0.8
Major sources in drinking water: By-product of drinking water disinfection.
Health effects language: Some infants and young children who drink water containing chlorite well in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

Contaminant (units): Chromium (ppb)
Traditional MCL in mg/ℓ: 0.1
To convert for CCR, multiply by: 1000
MCL in CCR units: 100
MCLG: 100
Major sources in drinking water: Discharge from steel and pulp mills; erosion of natural deposits.
Health effects language: Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

Contaminant (units): Copper (ppm)
Traditional MCL in mg/ℓ: AL=1.3
To convert for CCR, multiply by: –
MCL in CCR units: AL=1.3
MCLG: 1.3
Major sources in drinking water: Corrosion of household plumbing systems; erosion of natural deposits.
Health effects language: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Contaminant (units): Cyanide (ppb)
Traditional MCL in mg/ℓ: 0.2
To convert for CCR, multiply by: 1000
MCL in CCR units: 200
MCLG: 200
Major sources in drinking water: Discharge from steel/metal factories; discharge from plastic and fertilizer factories.
Health effects language: Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

Contaminant (units): Fluoride (ppm)
Traditional MCL in mg/ℓ: 4
To convert for CCR, multiply by: –
MCL in CCR units: 4
MCLG: 4

Major sources in drinking water: Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Health effects language: Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

Contaminant (units): Lead (ppb)
Traditional MCL in mg/ℓ: AL=0.015
To convert for CCR, multiply by: 1000
MCL in CCR units: AL=15
MCLG: 0
Major sources in drinking water: Corrosion of household plumbing systems; erosion of natural deposits.
Health effects language: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Contaminant (units): Mercury (inorganic) (ppb)
Traditional MCL in mg/ℓ: 0.002
To convert for CCR, multiply by: 1000
MCL in CCR units: 2
MCLG: 2
Major sources in drinking water: Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Health effects language: Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

Contaminant (units): Nitrate (ppm)
Traditional MCL in mg/ℓ: 10
To convert for CCR, multiply by: –
MCL in CCR units: 10
MCLG: 10
Major sources in drinking water: Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Health effects language: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Contaminant (units): Nitrite (ppm)
Traditional MCL in mg/ℓ: 1
To convert for CCR, multiply by: –
MCL in CCR units: 1
MCLG: 1
Major sources in drinking water: Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Health effects language: Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Contaminant (units): Selenium (ppb)
Traditional MCL in mg/ℓ: 0.05
To convert for CCR, multiply by: 1000
MCL in CCR units: 50
MCLG: 50
Major sources in drinking water: Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Health effects language: Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Contaminant (units): Thallium (ppb)
Traditional MCL in mg/ℓ: 0.002
To convert for CCR, multiply by: 1000
MCL in CCR units: 2
MCLG: 0.5
Major sources in drinking water: Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.
Health effects language: Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

Synthetic organic contaminants including pesticides and herbicides.

Contaminant (units): 2,4-D (ppb)
Traditional MCL in mg/ℓ: 0.07
To convert for CCR, multiply by: 1000
MCL in CCR units: 70
MCLG: 70
Major sources in drinking water: Runoff from herbicide used on row crops.
Health effects language: Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

Contaminant (units): 2,4,5-TP (silvex) (ppb)
Traditional MCL in mg/ℓ: 0.05
To convert for CCR, multiply by: 1000
MCL in CCR units: 50
MCLG: 50
Major sources in drinking water: Residue of banned herbicide.
Health effects language: Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

Contaminant (units): Acrylamide
Traditional MCL in mg/ℓ: TT
To convert for CCR, multiply by: –
MCL in CCR units: TT
MCLG: 0
Major sources in drinking water: Added to water during sewage/wastewater treatment.
Health effects language: Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

Contaminant (units): Alachlor (ppb)
Traditional MCL in mg/ℓ: 0.002
To convert for CCR, multiply by: 1000
MCL in CCR units: 2
MCLG: 0
Major sources in drinking water: Runoff from herbicide used on row crops.
Health effects language: Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

Contaminant (units): Atrazine (ppb)
Traditional MCL in mg/ℓ: 0.003
To convert for CCR, multiply by: 1000
MCL in CCR units: 3
MCLG: 3
Major sources in drinking water: Runoff from herbicide used on row crops.
Health effects language: Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

Contaminant (units): Benzo(a)pyrene (PAH) (nanograms/ℓ)
Traditional MCL in mg/ℓ: 0.0002
To convert for CCR, multiply by: 1,000,000
MCL in CCR units: 200
MCLG: 0
Major sources in drinking water: Leaching from linings of water storage tanks and distribution lines.
Health effects language: Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

Contaminant (units): Carbofuran (ppb)
Traditional MCL in mg/ℓ: 0.04
To convert for CCR, multiply by: 1000
MCL in CCR units: 40
MCLG: 40
Major sources in drinking water: Leaching of soil fumigant used on rice and alfalfa.
Health effects language: Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

Contaminant (units): Chlordane (ppb)
Traditional MCL in mg/ℓ: 0.002
To convert for CCR, multiply by: 1000
MCL in CCR units: 2
MCLG: 0
Major sources in drinking water: Residue of banned termiticide.
Health effects language: Some people who drink water containing chlordane in excess of

the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.

Contaminant (units): Dalapon (ppb)
Traditional MCL in mg/ℓ: 0.2
To convert for CCR, multiply by: 1000
MCL in CCR units: 200
MCLG: 200
Major sources in drinking water: Runoff from herbicide used on rights of way.
Health effects language: Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

Contaminant (units): Di(2-ethylhexyl)adipate (ppb)
Traditional MCL in mg/ℓ: 0.4
To convert for CCR, multiply by: 1000
MCL in CCR units: 400
MCLG: 400
Major sources in drinking water: Discharge from chemical factories.
Health effects language: Some people who drink water containing di(2-ethylhexyl)adipate well in excess of the MCL over many years could experience toxic effects, such as weight loss, liver enlargement, or possible reproductive difficulties.

Contaminant (units): Di(2-ethylhexyl)phthalate (ppb)
Traditional MCL in mg/ℓ: 0.006
To convert for CCR, multiply by: 1000
MCL in CCR units: 6
MCLG: 0
Major sources in drinking water: Discharge from rubber and chemical factories.
Health effects language: Some people who drink water containing di(2-ethylhexyl)phthalate well in excess of the MCL over many years may have problems with their liver or experience reproductive difficulties, and they may have an increased risk of getting cancer.

Contaminant (units): Dibromochloropropane (DBCP) (ppt)
Traditional MCL in mg/ℓ: 0.0002
To convert for CCR, multiply by: 1,000,000
MCL in CCR units: 200
MCLG: 0
Major sources in drinking water: Runoff/leaching from soil fumigant used on soybeans,

cotton, pineapples, and orchards.
Health effects language: Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive problems and may have an increased risk of getting cancer.

Contaminant (units): Dinoseb (ppb)
Traditional MCL in mg/ℓ: 0.007
To convert for CCR, multiply by: 1000
MCL in CCR units: 7
MCLG: 7
Major sources in drinking water: Runoff from herbicide used on soybeans and vegetables.
Health effects language: Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

Contaminant (units): Diquat (ppb)
Traditional MCL in mg/ℓ: 0.02
To convert for CCR, multiply by: 1000
MCL in CCR units: 20
MCLG: 20
Major sources in drinking water: Runoff from herbicide use.
Health effects language: Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

Contaminant (units): Dioxin (2,3,7,8-TCDD) (ppq)
Traditional MCL in mg/ℓ: 0.00000003
To convert for CCR, multiply by: 1,000,000,000
MCL in CCR units: 30
MCLG: 0
Major sources in drinking water: Emissions from waste incineration and other combustion; discharge from chemical factories.
Health effects language: Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

Contaminant (units): Endothall (ppb)
Traditional MCL in mg/ℓ: 0.1
To convert for CCR, multiply by: 1000
MCL in CCR units: 100

MCLG: 100
Major sources in drinking water: Runoff from herbicide use.
Health effects language: Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

Contaminant (units): Endrin (ppb)
Traditional MCL in mg/ℓ: 0.002
To convert for CCR, multiply by: 1000
MCL in CCR units: 2
MCLG: 2
Major sources in drinking water: Residue of banned insecticide.
Health effects language: Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

Contaminant (units): Epichlorohydrin
Traditional MCL in mg/ℓ: TT
To convert for CCR, multiply by: –
MCL in CCR units: TT
MCLG: 0
Major sources in drinking water: Discharge from industrial chemical factories; an impurity of some water treatment chemicals.
Health effects language: Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

Contaminant (units): Ethylene dibromide (ppt)
Traditional MCL in mg/ℓ: 0.00005
To convert for CCR, multiply by: 1,000,000
MCL in CCR units: 50
MCLG: 0
Major sources in drinking water: Discharge from petroleum refineries.
Health effects language: Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.

Contaminant (units): Glyphosate (ppb)
Traditional MCL in mg/ℓ: 0.7

To convert for CCR, multiply by: 1000
MCL in CCR units: 700
MCLG: 700
Major sources in drinking water: Runoff from herbicide use.
Health effects language: Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.

Contaminant (units): Heptachlor (ppt)
Traditional MCL in mg/ℓ: 0.0004
To convert for CCR, multiply by: 1,000,000
MCL in CCR units: 400
MCLG: 0
Major sources in drinking water: Residue of banned pesticide.
Health effects language: Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

Contaminant (units): Heptachlor epoxide (ppt)
Traditional MCL in mg/ℓ: 0.0002
To convert for CCR, multiply by: 1,000,000
MCL in CCR units: 200
MCLG: 0
Major sources in drinking water: Breakdown of heptachlor.
Health effects language: Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.

Contaminant (units): Hexachlorobenzene (ppb)
Traditional MCL in mg/ℓ: 0.001
To convert for CCR, multiply by: 1000
MCL in CCR units: 1
MCLG: 0
Major sources in drinking water: Discharge from metal refineries and agricultural chemical factories.
Health effects language: Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.

Contaminant (units): Hexachlorocyclopentadiene (ppb)
Traditional MCL in mg/ℓ: 0.05
To convert for CCR, multiply by: 1000
MCL in CCR units: 50
MCLG: 50
Major sources in drinking water: Discharge from chemical factories.
Health effects language: Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.

Contaminant (units): Lindane (ppt)
Traditional MCL in mg/ℓ: 0.0002
To convert for CCR, multiply by: 1,000,000
MCL in CCR units: 200
MCLG: 200
Major sources in drinking water: Runoff/leaching from insecticide used on cattle, lumber, gardens.
Health effects language: Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

Contaminant (units): Methoxychlor (ppb)
Traditional MCL in mg/ℓ: 0.04
To convert for CCR, multiply by: 1000
MCL in CCR units: 40
MCLG: 40
Major sources in drinking water: Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
Health effects language: Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.

Contaminant (units): Oxamyl (vydate) (ppb)
Traditional MCL in mg/ℓ: 0.2
To convert for CCR, multiply by: 1000
MCL in CCR units: 200
MCLG: 200
Major sources in drinking water: Runoff/leaching from insecticide used on apples, potatoes and tomatoes.
Health effects language: Some people who drink water containing oxamyl in excess of

the MCL over many years could experience slight nervous system effects.

Contaminant (units): PCBs (polychlorinated biphenyls) (ppt)
Traditional MCL in mg/ℓ: 0.0005
To convert for CCR, multiply by: 1,000,000
MCL in CCR units: 500
MCLG: 0
Major sources in drinking water: Runoff from landfills; discharge of waste chemicals.
Health effects language: Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

Contaminant (units): Pentachlorophenol (ppb)
Traditional MCL in mg/ℓ: 0.001
To convert for CCR, multiply by: 1000
MCL in CCR units: 1
MCLG: 0
Major sources in drinking water: Discharge from wood preserving factories.
Health effects language: Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

Contaminant (units): Picloram (ppb)
Traditional MCL in mg/ℓ: 0.5
To convert for CCR, multiply by: 1000
MCL in CCR units: 500
MCLG: 500
Major sources in drinking water: Herbicide runoff.
Health effects language: Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

Contaminant (units): Simazine (ppb)
Traditional MCL in mg/ℓ: 0.004
To convert for CCR, multiply by: 1000
MCL in CCR units: 4
MCLG: 4
Major sources in drinking water: Herbicide runoff.
Health effects language: Some people who drink water containing simazine in excess of

the MCL over many years could experience problems with their blood.

Contaminant (units): Toxaphene (ppb)
Traditional MCL in mg/ℓ: 0.003
To convert for CCR, multiply by: 1000
MCL in CCR units: 3
MCLG: 0
Major sources in drinking water: Runoff/leaching from insecticide used on cotton and cattle.
Health effects language: Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

Volatile organic contaminants.

Contaminant (units): Benzene (ppb)
Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Discharge from factories; leaching from gas storage tanks and landfills.
Health effects language: Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.

Contaminant (units): Carbon tetrachloride (ppb)
Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Discharge from chemical plants and other industrial activities.
Health effects language: Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

Contaminant (units): Chlorobenzene (ppb)
Traditional MCL in mg/ℓ: 0.1

To convert for CCR, multiply by: 1000
MCL in CCR units: 100
MCLG: 100
Major sources in drinking water: Discharge from chemical and agricultural chemical factories.
Health effects language: Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

Contaminant (units): o-Dichlorobenzene (ppb)
Traditional MCL in mg/ℓ: 0.6
To convert for CCR, multiply by: 1000
MCL in CCR units: 600
MCLG: 600
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

Contaminant (units): p-Dichlorobenzene (ppb)
Traditional MCL in mg/ℓ: 0.075
To convert for CCR, multiply by: 1000
MCL in CCR units: 75
MCLG: 75
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia; damage to their liver, kidneys, or spleen; or changes in their blood.

Contaminant (units): 1,2-Dichloroethane (ppb)
Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): 1,1-Dichloroethylene (ppb)

Traditional MCL in mg/ℓ: 0.007
To convert for CCR, multiply by: 1000
MCL in CCR units: 7
MCLG: 7
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

Contaminant (units): cis-1,2-Dichloroethylene (ppb)
Traditional MCL in mg/ℓ: 0.07
To convert for CCR, multiply by: 1000
MCL in CCR units: 70
MCLG: 70
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

Contaminant (units): trans-1,2-Dichloroethylene (ppb)
Traditional MCL in mg/ℓ: 0.1
To convert for CCR, multiply by: 1000
MCL in CCR units: 100
MCLG: 100
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

Contaminant (units): Dichloromethane (ppb)
Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Discharge from pharmaceutical and chemical factories.
Health effects language: Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

Contaminant (units): 1,2-Dichloropropane (ppb)

Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): Ethylbenzene (ppb)
Traditional MCL in mg/ℓ: 0.7
To convert for CCR, multiply by: 1000
MCL in CCR units: 700
MCLG: 700
Major sources in drinking water: Discharge from petroleum refineries.
Health effects language: Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

Contaminant (units): Haloacetic acids (HAA5) (ppb)
Traditional MCL in mg/ℓ: 0.060
To convert for CCR, multiply by: 1000
MCL in CCR units: 60
MCLG: N/A
Major sources in drinking water: Byproduct of drinking water disinfection.
Health effects language: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): Styrene (ppb)
Traditional MCL in mg/ℓ: 0.1
To convert for CCR, multiply by: 1000
MCL in CCR units: 100
MCLG: 100
Major sources in drinking water: Discharge from rubber and plastic factories; leaching from landfills.
Health effects language: Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

Contaminant (units): Tetrachloroethylene (ppb)

Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Discharge from factories and dry cleaners.
Health effects language: Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

Contaminant (units): 1,2,4-Trichlorobenzene (ppb)
Traditional MCL in mg/ℓ: 0.07
To convert for CCR, multiply by: 1000
MCL in CCR units: 70
MCLG: 70
Major sources in drinking water: Discharge from textile-finishing factories.
Health effects language: Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.

Contaminant (units): 1,1,1-Trichloroethane (ppb)
Traditional MCL in mg/ℓ: 0.2
To convert for CCR, multiply by: 1000
MCL in CCR units: 200
MCLG: 200
Major sources in drinking water: Discharge from metal degreasing sites and other factories.
Health effects language: Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

Contaminant (units): 1,1,2-Trichloroethane (ppb)
Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 3
Major sources in drinking water: Discharge from industrial chemical factories.
Health effects language: Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Contaminant (units): Trichloroethylene (ppb)
Traditional MCL in mg/ℓ: 0.005
To convert for CCR, multiply by: 1000
MCL in CCR units: 5
MCLG: 0
Major sources in drinking water: Discharge from metal degreasing sites and other factories.
Health effects language: Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

Contaminant (units): TTHMs (total trihalomethanes) (ppb)
Traditional MCL in mg/ℓ: 0.10/0.080
To convert for CCR, multiply by: 1000
MCL in CCR units: 100/80
MCLG: N/A
Major sources in drinking water: Byproduct of drinking water disinfection.
Health effects language: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

Contaminant (units): Toluene (ppm)
Traditional MCL in mg/ℓ: 1
To convert for CCR, multiply by: –
MCL in CCR units: 1
MCLG: 1
Major sources in drinking water: Discharge from petroleum factories.
Health effects language: Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

Contaminant (units): Vinyl Chloride (ppb)
Traditional MCL in mg/ℓ: 0.002
To convert for CCR, multiply by: 1000
MCL in CCR units: 2
MCLG: 0
Major sources in drinking water: Leaching from PVC piping; discharge from plastics factories.

Health effects language: Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

Contaminant (units): Xylenes (ppm)
Traditional MCL in mg/ℓ: 10
To convert for CCR, multiply by: –
MCL in CCR units: 10
MCLG: 10
Major sources in drinking water: Discharge from petroleum factories; discharge from chemical factories.
Health effects language: Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

Key.

Abbreviation	Meaning
AL	action level
MCL	maximum contaminant level
MCLG	maximum contaminant level goal
MFL	million fibers per liter
MRDL	maximum residual disinfectant level
MRDLG	maximum residual disinfectant level goal
mrem/year	millirems per year (a measure of radiation absorbed by the body)
N/A	not applicable
NTU	nephelometric turbidity units (a measure of water clarity)
pCi/ℓ	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/ℓ)
ppb	parts per billion, or micrograms per liter (µg/ℓ)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TT	treatment technique

BOARD NOTE: Derived from appendix A to subpart O to 40 CFR 141 (2012)~~(2006), as amended at 71 Fed. Reg. 65574 (Nov. 8, 2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

Section 611.APPENDIX B Percent Inactivation of G. Lamblia Cysts

Table 1.1
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia
Cysts by Free Chlorine at 0.5° or Lower

These CT values achieve greater than a 99.99 percent inactivation of viruses. CT values between the indicated pH values may be determined by linear interpolation. CT values between the indicated temperatures of different tables may be determined by linear interpolation. If no interpolation is used, use the CT 99.9 value at the lower temperature and at the higher pH.

Free Residual (mg/ℓ)	pH						
	≤ 6.0	6.5	7.0	7.5	8.0	8.5	≥ 9.0
≤ 0.4~~0.41~~	137	163	195	237	277	329	390
0.6	141	168	200	239	286	342	407
0.8	145	172	205	246	295	354	422
1.0	148	176	210	253	304	365	437
1.2	152	180	215	259	313	376	451
1.4	155	184	221	266	321	387	464
1.6	157	189	226	273	329	397	477
1.8	162	193	231	279	338	407	489
2.0	165	197	236	286	346	417	500
2.2	169	201	242	297	353	426	511
2.4	172	205	247	298	361	435	522
2.6	175	209	252	304	368	444	533
2.8	178	213	257	310	375	452	543
3.0	181	217	261	316	382	460	552

Table 1.2
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia Cysts by Free Chlorine at 5.0° C

These CT values achieve greater than a 99.99 percent inactivation of viruses. CT values between the indicated pH values may be determined by linear interpolation. CT values between the indicated temperatures of different tables may be determined by linear interpolation. If no interpolation is used, use the CT 99.9 value at the lower temperature and at the higher pH.

Free Residual (mg/ℓ)	pH ≤ 6.0	6.5	7.0	7.5	8.0	8.5	≥ 9.0
≤ 0.4	97	117	139	166	198	236	279
0.6	100	120	143	171	204	244	291
0.8	103	122	146	175	210	252	301
1.0	105	125	149	179	216	260	312
1.2	107	127	152	183	221	267	320
1.4	109	130	155	187	227	274	329
1.6	111	132	158	192	232	281	337
1.8	114	135	162	196	238	287	345
2.0	116	138	165	200	243	294	353
2.2	118	140	169	204	248	300	361
2.4	120	143	172	209	253	306	368
2.6	122	146	175	213	258	312	375
2.8	124	148	178	217	263	318	382
3.0	126	151	182	221	268	324	369

Table 1.3
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia Cysts by Free Chlorine at 10.0° C

These CT values achieve greater than a 99.99 percent inactivation of viruses. CT values between the indicated pH values may be determined by linear interpolation. CT values between the indicated temperatures of different tables may be determined by linear interpolation. If no interpolation is used, use the CT 99.9 value at the lower temperature and at the higher pH.

Free Residual (mg/ℓ)	pH ≤ 6.0	6.5	7.0	7.5	8.0	8.5	≥ 9.0
≤ 0.4	73	88	104	125	149	177	209
0.6	75	90	107	128	153	183	218
0.8	78	92	110	131	158	189	226
1.0	79	94	112	134	162	195	234
1.2	80	95	114	137	166	200	240
1.4	82	98	116	140	170	206	247
1.6	83	99	119	144	174	211	253
1.8	86	101	122	147	179	215	259
2.0	87	104	124	150	182	221	265

2.2	89	105	127	153	186	225	271
2.4	90	107	129	157	190	230	276
2.6	92	110	131	160	194	234	281
2.8	93	111	134	163	197	239	287
3.0	95	113	137	166	201	243	292

Table 1.4
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia Cysts by Free Chlorine at 15.0° C

These CT values achieve greater than a 99.99 percent inactivation of viruses. CT values between the indicated pH values may be determined by linear interpolation. CT values between the indicated temperatures of different tables may be determined by linear interpolation. If no interpolation is used, use the CT 99.9 value at the lower temperature and at the higher pH.

Free Residual (mg/ℓ)	pH						
	≤ 6.0	6.5	7.0	7.5	8.0	8.5	≥ 9.0
≤ 0.4	49	59	70	83	99	118	140
0.6	50	60	72	86	102	122	146
0.8	52	61	73	88	105	126	151
1.0	53	63	75	90	108	130	156
1.2	54	64	76	92	111	134	160
1.4	55	65	78	94	114	137	165
1.6	56	66	79	96	116	141	169
1.8	57	68	81	98	119	144	173
2.0	58	69	83	100	122	147	177
2.2	59	70	85	102	124	150	181
2.4	60	72	86	105	127	153	184
2.6	61	73	88	107	129	156	188
2.8	62	74	89	109	132	159	191
3.0	63	76	91	111	134	162	195

Table 1.5
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia Cysts by Free Chlorine at 20° C

These CT values achieve greater than a 99.99 percent inactivation of viruses. CT values between the indicated pH values may be determined by linear interpolation. CT values between the

indicated temperatures of different tables may be determined by linear interpolation. If no interpolation is used, use the CT 99.9 value at the lower temperature and at the higher pH.

Free Residual (mg/ℓ)	pH ≤ 6.0	6.5	7.0	7.5	8.0	8.5	≥ 9.0
≤ 0.4	36	44	52	62	74	89	105
0.6	38	45	54	64	77	92	109
0.8	39	46	55	66	79	95	113
1.0	39	47	56	67	81	98	117
1.2	40	48	57	69	83	100	120
1.4	41	49	58	70	85	103	123
1.6	42	50	59	72	87	105	126
1.8	43	51	61	74	89	108	129
2.0	44	52	62	75	91	110	132
2.2	44	53	63	77	93	113	135
2.4	45	54	65	78	95	115	138
2.6	46	55	66	80	97	117	141
2.8	47	56	67	81	99	119	143
3.0	47	57	68	83	101	122	146

Table 1.6
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia Cysts
by Free Chlorine at 25° C and Higher

These CT values achieve greater than a 99.99 percent inactivation of viruses. CT values between the indicated pH values may be determined by linear interpolation. CT values between the indicated temperatures of different tables may be determined by linear interpolation. If no interpolation is used, use the CT 99.9 value at the lower temperature and at the higher pH.

Free Residual (mg/ℓ)	pH ≤ 6.0	6.5	7.0	7.5	8.0	8.5	≥ 9.0
≤ 0.4	24	29	35	42	50	59	70
0.6	25	30	36	43	51	61	73
0.8	26	31	37	44	53	63	75
1.0	26	31	37	45	54	65	78
1.2	27	32	38	46	55	67	80

1.4	27	33	39	47	57	69	82
1.6	28	33	40	48	58	70	84
1.8	29	34	41	49	60	72	86
2.0	29	35	41	50	61	74	88
2.2	30	35	42	51	62	75	90
2.4	30	36	43	52	63	77	92
2.6	31	37	44	53	65	78	94
2.8	31	37	45	54	66	80	96
3.0	32	38	46	55	67	81	97

Table 2.1
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia Cysts by Chlorine Dioxide and Ozone

These CT values achieve greater than a 99.99 percent inactivation of viruses. CT values between the indicated pH values may be determined by linear interpolation. If no interpolation is used, use the $CT_{99.9}$ value at the lower temperature for determining $CT_{99.9}$ values between indicated temperatures.

	≤ 1° C	5° C	10° C	15° C	20° C	≥ 25° C
Chlorine dioxide	63	26	23	19	15	11
Ozone	2.9	1.9	1.4	0.95	0.72	0.48

Table 3.1
CT-99.9 for 99.9 Percent Inactivation of Giardia Lamblia Cysts by Chloramines

These values are for pH values of 6 to 9. These CT values may be assumed to achieve greater than a 99.99 percent inactivation of viruses only if chlorine is added and mixed in the water prior to the addition of ammonia. If this condition is not met, the system must demonstrate, based on on-site studies or other information, as approved by the Agency, that the system is achieving at least a 99.99 percent inactivation of viruses. CT values between the indicated temperatures may be determined by linear interpolation. If no interpolation is used, use the $CT_{99.9}$ value at the lower temperature for determining $CT_{99.9}$ values between indicated temperatures.

	≤ 1° C	5° C	10° C	15° C	20° C	≥ 25° C
Chloramines	3800	2200	1850	1500	1100	750

BOARD NOTE: Derived from 40 CFR 141.74(b) Tables 1.1 through 3.1 (20012)~~(2002)~~.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 611.APPENDIX C Common Names of Organic Chemicals

The following common names are used for certain organic chemicals:

Common Name	CAS No.	CAS Name
Aldrin	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)-
Bromoform	75-25-2	Methane, tribromo-
Chlordane	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
Chloroform	67-66-3	Methane, trichloro-
2,4-D	94-75-7	Acetic acid, 2,4-dichlorophenoxy-
DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aalpha, 2beta, 2aalpha, 3beta, 6beta, 6aalpha, 7beta, 7aalpha)-
Endrin	72-20-8	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha, 2beta, 2abeta, 3alpha, 6alpha, 6abeta, 7beta, 7aalpha)-,
Heptachlor	76-44-8	4,7-Methano-1H-indene,1,4,5,6,7, 8,8-heptachloro-3a,4,7,7a-tetrahydro-
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno(1,2b) oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1a alpha, 1b beta, 2 alpha, 5 alpha, 5a beta, 6 beta, 6a alpha)-

Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha, 2alpha, 3beta, 4alpha, 5alpha, 6beta)-
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-
Silvex (2,4,5-TP)	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
Toxaphene	8001-35-2	Toxaphene
TTHM	Total trihalomethanes (See Section 611.101)	

BOARD NOTE: Derived from 40 CFR 141.30 and 261, appendix VIII (2012)~~(2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.APPENDIX D Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Escherichia Coli from Drinking Water

Autoanalysis Colilert Presence-Absence (AC P-A) Method.

The AC P-A test format must be either a 100 mℓ 10-tube most probable number test (one tube positive denoting the presence of total coliforms in that sample) or a single vessel containing sufficient reagent to receive 100 mℓ of sample. The reagent is available from Access Medical Systems, Branford Connecticut.

The AC P-A method must be performed as follows:

1. For the 10-tube method, add 10 mℓ of water sample to each test tube. For the single-vessel method, add 100 mℓ of water sample to the vessel.

2. Dissolve the reagent powder by agitation. (This should produce a colorless solution.)

3. Incubate the test tubes or vessel at 35° C for 24 hours.

4. Development of yellow during incubation denotes the presence of total coliforms in either the test tube or the vessel.

5. Expose each positive (yellow) test tube or vessel to a fluorescent (366 nm) light source. Fluorescence specifically demonstrates the presence of Escherichia coli.

BOARD NOTE: Derived from S. Edberg, M. Allen & D. Smith, "National Field Evaluation of a Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Escherichia coli from Drinking Water: Comparison with Presence-Absence Techniques," Applied and Environmental Microbiology, vol. 55, pp. 1003-1008, as incorporated by reference in Section 611.102(b) (2012)~~(2004)~~. This method is for use in conjunction with the requirements of Section 611.526.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.APPENDIX E Mandatory Lead Public Education Information for Community Water Systems

1) INTRODUCTION

The United States Environmental Protection Agency (USEPA) and (insert name of water supplier) are concerned about lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the USEPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/ℓ). Under Federal law we are required to have a program in place to minimize lead in your drinking water by (insert date when corrosion control will be completed for your system). This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace the portion of each lead service line that we own if the line contributes lead concentrations of more than 15 ppb after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead regulation please give us a call at (insert water system's phone number). This brochure explains the simple steps you can take to protect you and your family by reducing your exposure to lead in drinking water.

2) HEALTH EFFECTS OF LEAD

Lead is a common metal found throughout the environment in lead-based paint; air; soil; household dust; food; certain types of pottery, porcelain, and pewter; and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells, and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination – like dirt and dust – that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

3) LEAD IN DRINKING WATER

A) Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

B) Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%.

C) When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

4) STEPS YOU CAN TAKE IN THE HOME TO REDUCE EXPOSURE TO LEAD IN DRINKING WATER

A) Despite our best efforts mentioned earlier to control water corrosivity and remove lead from the water supply, lead levels in some homes or buildings can be high. To find out whether you need to take action in your own home, have your drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. Some local laboratories that can provide this service are listed at the end of this booklet. For more information on having your water tested, please call (insert phone number of water system).

B) If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:

i) Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15-30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before

using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one or two gallons of water and costs less than (insert a cost estimate based on flushing two times a day for 30 days) per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash the dishes or water the plants. If you live in a high-rise building, letting the water flow before using it may not work to lessen your risk from lead. The plumbing systems have more, and sometimes larger pipes than smaller buildings. Ask your landlord for help in locating the source of the lead and for advice on reducing the lead level.

ii) Try not to cook with or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove.

iii) Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced, by removing the faucet strainers from all taps and running the water from 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.

iv) If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify the Illinois Environmental Protection Agency about the violation.

v) Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in the files of the (insert name of department that issues building permits). A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes, or pipe fittings that contain lead. The public water system that delivers water to your home should also maintain

records of the materials located in the distribution system. If the service line that connects your dwelling to the water main contributes more than 15 ppb to drinking water, after our comprehensive treatment program is in place, we are required to replace the portion of the line that we own. If the line is only partially owned by the (insert name of the city, county, or water system that controls the line), we are required to provide the owner of the privately-owned portion of the line with information on how to replace the privately-owned portion of the service line, and offer to replace that portion of the line at the owner's expense. If we replace only the portion of the line that we own, we also are required to notify you in advance and provide you with information on the steps that you can take to minimize exposure to any temporary increase in lead levels which may result from the partial replacement, to take a follow-up sample at our expense from the line within 72 hours after the partial replacement, and to mail or otherwise provide you with the results of that sample within three business days after receiving the results. Acceptable replacement alternatives include copper, steel, iron, and plastic pipes.

vi) Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

C) The steps described above will reduce the lead concentrations in your drinking water. However, if a water test indicates that the drinking water coming from your tap contains lead concentrations in excess of 15 ppb after flushing, or after we have completed our actions to minimize lead levels, then you may want to take the following additional measures:

i) Purchase or lease a home treatment device. Home treatment devices are limited in that each unit treats only the water that flows from the faucet to which it is connected, and all of the devices require periodic maintenance and replacement. Devices such as reverse osmosis systems or distillers can effectively remove lead from your drinking water. Some activated carbon filters may reduce lead levels at the tap, however all lead reduction claims should be investigated. Be sure to check the actual performance of a specific home treatment device before and after installing the unit.

ii) Purchase bottled water for drinking and cooking.

D) You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. State and local government agencies that can be contacted include the following:

i) (Insert the name of city or county department of public utilities) at (insert phone number) can provide you with information about your community's water supply, and a list of local laboratories that have been certified by EPA for testing water quality;

ii) (Insert the name of city or county department that issues building permits) at (insert phone number) can provide you with information about building permit records that should contain the names of plumbing contractors that plumbed your home; and

iii) The Illinois Department of Public Health at 217-782-4977 or 312-814-2608 or the (insert the name of the city or county health department) at (insert phone number) can provide you with information about the health effects of lead and how you can have your child's blood tested.

E) The following is a list of some State-approved laboratories in your area that you can call to have your water tested for lead. (Insert names and phone numbers of at least two laboratories.)

BOARD NOTE: Derived from 40 CFR 141.85(a)(1) (2012)~~(2002)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

Section 611.APPENDIX G NPDWR Violations and Situations Requiring Public Notice

See note 1 at the end of this Appendix G for an explanation of the Agency's authority to alter the magnitude of a violation from that set forth in the following table.

	MCL/MRDL/TT violations[2]		Monitoring & testing procedure violations	
Contaminant	Tier of public notice required	Citation	Tier of public notice required	Citation

I. Violations of National Primary Drinking Water Regulations (NPDWR):[3]

A. Microbiological Contaminants

1. Total coliform	2	611.325(a)	3	611.521-611.525
2. Fecal coliform/E. coli	1	611.325(b)	[4] 1, 3	611.525
3. Turbidity MCL	2	611.320(a)	3	611.560
4. Turbidity MCL (average of two days' samples greater than 5 NTU)	[5] 2, 1	611.320(b)	3	611.560
5. Turbidity (for TT violations resulting from a single exceedence of maximum allowable turbidity level)	[6] 2, 1	611.231(b), 611.233(b)(1), 611.250(a)(2), 611.250(b)(2), 611.250(c)(2), 611.250(d), 611.743(a)(2), 611.743(b), 611.955(b)(2)	3	611.531(a), 611.532(b), 611.533(a), 611.744, 611.956(a)(1)-(a)(3), 611.956(b)
6. Surface Water Treatment Rule violations, other than violations resulting from single exceedence of max. allowable turbidity level (TT)	2	611.211, 611.213, 611.220, 611.230-611.233, 611.240-611.242, 611.250	3	611.531-611.533

7. Interim Enhanced Surface Water Treatment Rule violations, other than violations resulting from single exceedence of max. turbidity level (TT)	2	[7] 611.740-611.743, 611.950-611.955	3	611.742, 611.744, 611.953, 611.954, 611.956
8. Filter Backwash Recycling Rule violations	2	611.276(c)	3	611.276(b), (d)
9. Long Term 1 Enhanced Surface Water Treatment Rule violations	2	611.950-611.955	3	611.953, 611.954, 611.956
10. LT2ESWTR violations	2	611.1010-611.1020	19~~22~~ 2, 3	611.1001-611.1005 and 611.1008-611.1009
11. Groundwater Rule violations	2	611.804	3	611.802(h)

B. Inorganic Chemicals (IOCs)

1. Antimony	2	611.301(b)	3	611.600, 611.601, 611.603
2. Arsenic	2	[8] 611.301(b)	3	~~11~~ 611.601, 611.603~~611.612(a), 611.612(b)~~
3. Asbestos (fibers greater than 10 µm)	2	611.301(b)	3	611.600, 611.601, 611.602
4. Barium	2	611.301(b)	3	611.600, 611.601, 611.603
5. Beryllium	2	611.301(b)	3	611.600, 611.601, 611.603
6. Cadmium	2	611.301(b)	3	611.600, 611.601, 611.603
7. Chromium (total)	2	611.301(b)	3	611.600, 611.601, 611.603

8. Cyanide	2	611.301(b)	3	611.600, 611.601, 611.603
9. Fluoride	2	611.301(b)	3	611.600, 611.601, 611.603
10. Mercury (inorganic)	2	611.301(b)	3	611.600, 611.601, 611.603
11. Nitrate	1	611.301(b)	8~~12~~ 1, 3	611.600, 611.601, 611.604, 611.606
12. Nitrite	1	611.301(b)	8~~12~~ 1, 3	611.600, 611.601, 611.605, 611.606
13. Total Nitrate and Nitrite	1	611.301(b)	3	611.600, 611.601
14. Selenium	2	611.301(b)	3	611.600, 611.601, 611.603
15. Thallium	2	611.301(b)	3	611.600, 611.601, 611.603

C. Lead and Copper Rule (Action Level for lead is 0.015 mg/ℓ, for copper is 1.3 mg/ℓ)

1. Lead and Copper Rule (TT)	2	611.350-611.355	3	611.356-611.359

D. Synthetic Organic Chemicals (SOCs)

1. 2,4-D	2	611.310(c)	3	611.648
2. 2,4,5-TP (silvex)	2	611.310(c)	3	611.648
3. Alachlor	2	611.310(c)	3	611.648
4. Atrazine	2	611.310(c)	3	611.648
5. Benzo(a)pyrene (PAHs)	2	611.310(c)	3	611.648
6. Carbofuran	2	611.310(c)	3	611.648
7. Chlordane	2	611.310(c)	3	611.648

8. Dalapon	2	611.310(c)	3	611.648
9. Di(2-ethylhexyl)adipate	2	611.310(c)	3	611.648
10. Di(2-ethylhexyl)phthalate	2	611.310(c)	3	611.648
11. Dibromochloropropane (DBCP)	2	611.310(c)	3	611.648
12. Dinoseb	2	611.310(c)	3	611.648
13. Dioxin (2,3,7,8-TCDD)	2	611.310(c)	3	611.648
14. Diquat	2	611.310(c)	3	611.648
15. Endothall	2	611.310(c)	3	611.648
16. Endrin	2	611.310(c)	3	611.648
17. Ethylene dibromide	2	611.310(c)	3	611.648
18. Glyphosate	2	611.310(c)	3	611.648
19. Heptachlor	2	611.310(c)	3	611.648
20. Heptachlor epoxide	2	611.310(c)	3	611.648
21. Hexachlorobenzene	2	611.310(c)	3	611.648
22. Hexachlorocyclopentadiene	2	611.310(c)	3	611.648
23. Lindane	2	611.310(c)	3	611.648
24. Methoxychlor	2	611.310(c)	3	611.648
25. Oxamyl (Vydate)	2	611.310(c)	3	611.648
26. Pentachlorophenol	2	611.310(c)	3	611.648
27. Picloram	2	611.310(c)	3	611.648
28. Polychlorinated biphenyls (PCBs)	2	611.310(c)	3	611.648
29. Simazine	2	611.310(c)	3	611.648
30. Toxaphene	2	611.310(c)	3	611.648

E. Volatile Organic Chemicals (VOCs)

1. Benzene	2	611.310(a)	3	611.646
2. Carbon tetrachloride	2	611.310(a)	3	611.646
3. Chlorobenzene (monochlorobenzene)	2	611.310(a)	3	611.646
4. o-Dichlorobenzene	2	611.310(a)	3	611.646
5. p-Dichlorobenzene	2	611.310(a)	3	611.646
6. 1,2-Dichloroethane	2	611.310(a)	3	611.646
7. 1,1-Dichloroethylene	2	611.310(a)	3	611.646
8. cis-1,2-Dichloroethylene	2	611.310(a)	3	611.646
9. trans-1,2-Dichloroethylene	2	611.310(a)	3	611.646
10. Dichloromethane	2	611.310(a)	3	611.646

11. 1,2-Dichloropropane	2	611.310(a)	3	611.646
12. Ethylbenzene	2	611.310(a)	3	611.646
13. Styrene	2	611.310(a)	3	611.646
14. Tetrachloroethylene	2	611.310(a)	3	611.646
15. Toluene	2	611.310(a)	3	611.646
16. 1,2,4-Trichlorobenzene	2	611.310(a)	3	611.646
17. 1,1,1-Trichloroethane	2	611.310(a)	3	611.646
18. 1,1,2-Trichloroethane	2	611.310(a)	3	611.646
19. Trichloroethylene	2	611.310(a)	3	611.646
20. Vinyl chloride	2	611.310(a)	3	611.646
21. Xylenes (total)	2	611.310(a)	3	611.646

F. Radioactive Contaminants

1. Beta/photon emitters	2	611.330(d)	3	611.720(a), 611.732
2. Alpha emitters	2	611.330(c)	3	611.720(a), 611.731
3. Combined radium (226 & 228)	2	611.330(b)	3	611.720(a), 611.731
4. Uranium	2	611.330(e)	3	611.720(a), 611.731

G. Disinfection Byproducts (DBPs), Byproduct Precursors, Disinfectant Residuals. Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). USEPA sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAAs).[13]

1. Total trihalomethanes (TTHMs)	2	11~~14~~611.312(b)	3	Subparts W and Y of this Part
2. Haloacetic Acids (HAA5)	2	611.312(b)	3	Subpart Y of this Part
3. Bromate	2	611.312(a)	3	611.382(a)-(b)
4. Chlorite	2	611.312(a)	3	611.382(a)-(b)
5. Chlorine (MRDL)	2	611.313(a)	3	611.382(a), (c)
6. Chloramine (MRDL)	2	611.313(a)	3	611.382(a), (c)

7. Chlorine dioxide (MRDL), where any two consecutive daily samples at entrance to distribution system only are above MRDL	2	611.313(a), 611.383(c)(3)	2[12]~~15~~, 3	611.382(a), (c), 611.383(c)(2)
8. Chlorine dioxide (MRDL), where samples in distribution system the next day are also above MRDL	[13]~~16~~1	611.313(a), 611.383(c)(3)	1	611.382(a), (c), 611.383(c)(2)
9. Control of DBP precursors – TOC (TT)	2	611.385(a)-(b)	3	611.382(a), (d)
10. Benchmarking and disinfection profiling	N/A	N/A	3	611.742, 611.953, 611.954
11. Development of monitoring plan	N/A	N/A	3	611.382(f)

H. Other Treatment Techniques

1. Acrylamide (TT)	2	611.296	N/A	N/A
2. Epichlorohydrin (TT)	2	611.296	N/A	N/A

II. Unregulated Contaminant Monitoring: [14]~~17~~

A. Unregulated contaminants	N/A	N/A	3	611.510
B. Nickel	N/A	N/A	3	611.603, 611.611

III. Public Notification for Relief Equivalent to a SDWA section 1415 Variance or a section 1416 Exemption.

A. Operation under relief equivalent to a SDWA section 1415 variance or a section 1416 exemption	3	[15]~~18~~ 1415, 1416	N/A	N/A
B. Violation of conditions of relief equivalent to a SDWA section 1415 variance or a section 1416 exemption	2	1415, 1416, [16]~~19~~ 611.111, 611.112	N/A	N/A

IV. Other Situations Requiring Public Notification.

A. Fluoride secondary maximum contaminant level (SMCL) exceedence	3	611.858	N/A	N/A
B. Exceedence of nitrate MCL for a non-CWS supplier, as allowed by the Agency	1	611.300(d)	N/A	N/A
C. Availability of unregulated contaminant monitoring data	3	611.510	N/A	N/A
D. Waterborne disease outbreak	1	611.101, 611.233(b)(2)	N/A	N/A
E. Other waterborne emergency [17]~~20~~	1	N/A	N/A	N/A
F. Source water sample positive for Groundwater Rule fecal indicators: E. coli, enterococci, or coliphage	1	611.802(g)	N/A	N/A
G. Other situations as determined by the Agency by a SEP issued pursuant to Section 611.110	[18]~~21~~1, 2, 3	N/A	N/A	N/A

Appendix G – Endnotes

1. Violations and other situations not listed in this table (e.g., failure to prepare Consumer Confidence Reports) do not require notice, unless otherwise determined by the Agency by a SEP issued pursuant to Section 611.110. The Agency may, by a SEP issued pursuant to Section 611.110, further require a more stringent public notice tier (e.g., Tier 1 instead of Tier 2 or Tier 2 instead of Tier 3) for specific violations and situations listed in this Appendix, as authorized under Sections 611.902(a) and 611.903(a).

2. Definition of the abbreviations used: "MCL" means maximum contaminant level, "MRDL" means maximum residual disinfectant level, and "TT" means treatment technique.

3. The term "violations of National Primary Drinking Water Regulations (NPDWR)" is used here to include violations of MCL, MRDL, treatment technique, monitoring, and testing procedure requirements.

4. Failure to test for fecal coliform or E. coli is a Tier 1 violation if testing is not done after any repeat sample tests positive for coliform. All other total coliform monitoring and testing procedure violations are Tier 3 violations.

5. A supplier that violates the turbidity MCL of 5 NTU based on an average of measurements over two consecutive days must consult with the Agency within 24 hours after learning of the violation. Based on this consultation, the Agency may subsequently decide to issue a SEP pursuant to Section 611.110 that elevates the violation to a Tier 1 violation. If a supplier is unable to make contact with the Agency in the 24-hour period, the violation is automatically elevated to a Tier 1 violation.

6. A supplier with a treatment technique violation involving a single exceedence of a maximum turbidity limit under the Surface Water Treatment Rule (SWTR), the Interim Enhanced Surface Water Treatment Rule (IESWTR), or the Long Term 1 Enhanced Surface Water Treatment Rule are required to consult with the Agency within 24 hours after learning of the violation. Based on this consultation, the Agency may subsequently decide to issue a SEP pursuant to Section 611.110 that elevates the violation to a Tier 1 violation. If a supplier is unable to make contact with the Agency in the 24-hour period, the violation is automatically elevated to a Tier 1 violation.

7. The Surface Water Treatment Rule (SWTR) remains in effect for a supplier that serves at least 10,000 persons ; the Interim Enhanced Surface Water Treatment Rule adds additional requirements and does not in many cases supercede the SWTR.

~~8. This endnote 8 corresponds with the endnote to the table in appendix A to subpart Q of 40 CFR 141 (2006), which stated a past effective date. This statement maintains structural consistency with the federal regulations.~~

~~9. This endnote 8 corresponds with the endnote to the table in appendix A to subpart Q of 40 CFR 141 (2006), which stated a past effective date. This statement maintains structural consistency with the federal regulations.~~

8.~~10.~~ Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.

~~11. This endnote 11 corresponds with the endnote to the table in appendix A to subpart Q of 40 CFR 141 (2006), which stated a past effective date. This statement maintains structural consistency with the federal regulations.~~

9.~~12.~~ Failure to take a confirmation sample within 24 hours for nitrate or nitrite after an initial sample exceeds the MCL is a Tier 1 violation. Other monitoring violations for nitrate are Tier 3.

10~~13~~. A Subpart B community or non-transient non-community system supplier must comply with new DBP MCLs, disinfectant MRDLs, and related monitoring requirements. A Subpart B transient non-community system supplier that serves 10,000 or more persons that uses chlorine dioxide as a disinfectant or oxidant or a Subpart B transient non-community system supplier that serves fewer than 10,000 persons, which uses only groundwater not under the direct influence of surface water, and which uses chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL.

11.~~14.~~ Sections 611.312(b)(1) and 611.382(a) and (b) apply until Subpart Y of this Part takes effect under the schedule set forth in Section 611.970(c).

12.~~15.~~ Failure to monitor for chlorine dioxide at the entrance to the distribution system the day after exceeding the MRDL at the entrance to the distribution system is a Tier 2 violation.

13.~~16.~~ If any daily sample taken at the entrance to the distribution system exceeds the MRDL for chlorine dioxide and one or more samples taken in the distribution system the next day exceed the MRDL, Tier 1 notification is required. A failure to take the required samples in the distribution system after the MRDL is exceeded at the entry point also triggers Tier 1 notification.

14.~~17.~~ Some water suppliers must monitor for certain unregulated contaminants listed in Section 611.510.

15.~~18.~~ This citation refers to sections 1415 and 1416 of the federal Safe Drinking Water Act. sections 1415 and 1416 require that "a schedule prescribed...for a public water system granted relief equivalent to a SDWA section 1415 variance or a section 1416 exemption must require compliance by the system...."

16.~~19.~~ In addition to sections 1415 and 1416 of the federal Safe Drinking Water Act, 40 CFR 142.307 specifies the items and schedule milestones that must be included in relief equivalent to a SDWA section 1415 small system variance. In granting any form of relief from an NPDWR, the Board will consider all applicable federal requirements for and limitations on the State's ability to grant relief consistent with federal law.

17.~~20.~~ Other waterborne emergencies require a Tier 1 public notice under Section 611.902(a) for situations that do not meet the definition of a waterborne disease outbreak given in Section 611.101, but which still have the potential to have serious adverse effects on health as a result of short-term exposure. These could include outbreaks not related to treatment deficiencies, as well as situations that have the potential to cause outbreaks, such as failures or significant interruption in water treatment processes, natural disasters that disrupt the water supply or distribution system, chemical spills, or unexpected loading of possible pathogens into the source water.

18.~~21.~~ The Agency may place any other situation in any tier it deems appropriate in writing, based on the prospective threat which it determines that the situation poses to public health, and subject to Board review pursuant to Section 40 of the Act [415 ILCS 5/40].

19.~~22.~~ A failure to collect three or more samples for Cryptosporidium analysis is a Tier 2 violation requiring special notice, as specified in Section 611.911. All other monitoring and testing procedure violations are Tier 3.

BOARD NOTE: Derived from Appendix A to Subpart Q to 40 CFR 141 (2012~~2006~~).

(Source: Amended at 37 Ill. Reg. _____, effective _____)

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

Section 611.APPENDIX H Standard Health Effects Language for Public Notification

Contaminant	MCLG [1] mg/ℓ	MCL [2] mg/ℓ	Standard health effects language for public notification
National Primary Drinking Water Regulations (NPDWR):			
A. Microbiological Contaminants			
1a. Total coliform	Zero	See footnote 3	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
1b. Fecal coliform/E. coli	Zero	Zero	Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
1c. Fecal indicators (GWR): i. E. coli ii. enterococci iii. coliphage	 Zero None None	 TT TT TT	Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

1d. Groundwater Rule TT violations	None	TT	Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
2a. Turbidity (MCL) [4]	None	1 NTU [5]/5 NTU	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
2b. Turbidity (SWTR TT)	None	TT [7]	Turbidity has no health effects. However,[6] turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
2c. Turbidity (IESWTR TT and LT1ESWTR TT)	None	TT	Turbidity has no health effects. However,[8] turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

B. Surface Water Treatment Rule (SWTR), Interim Enhanced Surface Water Treatment Rule (IESWTR), Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR), and Filter Backwash Recycling Rule (FBRR) violations:			
3. Giardia lamblia (SWTR/IESWTR/ LT1ESWTR)	Zero	TT [10]	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
4. Viruses (SWTR/IESWTR/ LT1ESWTR)			Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
5. Heterotrophic plate count (HPC) bacteria[9] (SWTR/IESWTR/ LT1ESWTR)			Inadequately treated water may contain disease-causing organisms.These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
6. Legionella (SWTR/IESWTR/ LT1ESWTR)			Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
7. Cryptosporidium (IESWTR/FBRR/ LT1ESWTR)			Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

C. Inorganic Chemicals (IOCs)			
8. Antimony	0.006	0.006	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
9. Arsenic [11]	0	0.010	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
10. Asbestos (10 µm)	7 MFL[11~~12~~]	7 MFL	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
11. Barium	2	2	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
12. Beryllium	0.004	0.004	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
13. Cadmium	0.005	0.005	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
14. Chromium (total)	0.1	0.1	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

15. Cyanide	0.2	0.2	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
16. Fluoride	4.0	4.0	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
17. Mercury (inorganic)	0.002	0.002	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
18. Nitrate	10	10	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
19. Nitrite	1	1	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

20. Total Nitrate and Nitrite	10	10	Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
21. Selenium	0.05	0.05	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
22. Thallium	0.0005	0.002	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
D. Lead and Copper Rule			
23. Lead	Zero	TT 12~~13~~	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

24. Copper	1.3	TT [13~~14~~]	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
E. Synthetic Organic Chemicals (SOCs)			
25. 2,4-D	0.07	0.07	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
26. 2,4,5-TP (silvex)	0.05	0.05	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
27. Alachlor	Zero	0.002	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
28. Atrazine	0.003	0.003	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

29. Benzo(a)pyrene (PAHs).	Zero	0.0002	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
30. Carbofuran	0.04	0.04	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
31. Chlordane	Zero	0.002	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
32. Dalapon	0.2	0.2	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
33. Di(2-ethylhexyl)adipate	0.4	0.4	Some people who drink water containing di(2-ethylhexyl)adipate well in excess of the MCL over many years could experience toxic effects, such as weight loss, liver enlargement, or possible reproductive difficulties.
34. Di(2-ethylhexyl) phthalate	Zero	0.006	Some people who drink water containing di(2-ethylhexyl) phthalate well in excess of the MCL over many years may have problems with their liver or experience reproductive difficulties, and they may have an increased risk of getting cancer.

35. Dibromochloropropane (DBCP)	Zero	0.0002	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
36. Dinoseb	0.007	0.007	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
37. Dioxin (2,3,7,8-TCDD)	Zero	3×10^{-8}	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
38. Diquat	0.02	0.02	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
39. Endothall	0.1	0.1	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
40. Endrin	0.002	0.002	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
41. Ethylene dibromide	Zero	0.00005	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.

42. Glyphosate	0.7	0.7	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
43. Heptachlor	Zero	0.0004	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.
44. Heptachlor epoxide	Zero	0.0002	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
45. Hexachlorobenzene	Zero	0.001	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
46. Hexachlorocyclo-pentadiene	0.05	0.05	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
47. Lindane	0.0002	0.0002	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

48. Methoxychlor	0.04	0.04	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
49. Oxamyl (Vydate)	0.2	0.2	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
50. Pentachlorophenol	Zero	0.001	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
51. Picloram	0.5	0.5	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
52. Polychlorinated biphenyls (PCBs)	Zero	0.0005	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
53. Simazine	0.004	0.004	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

54. Toxaphene	Zero	0.003	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
F. Volatile Organic Chemicals (VOCs)			
55. Benzene	Zero	0.005	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
56. Carbon tetrachloride	Zero	0.005	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
57. Chlorobenzene (monochlorobenzene)	0.1	0.1	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
58. o-Dichlorobenzene	0.6	0.6	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
59. p-Dichlorobenzene	0.075	0.075	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

60. 1,2-Dichloroethane	Zero	0.005	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
61. 1,1-Dichloroethylene	0.007	0.007	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
62. cis-1,2-Dichloroethylene	0.07	0.07	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
63. trans-1,2-Dichloroethylene	0.1	0.1	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
64. Dichloromethane	Zero	0.005	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
65. 1,2-Dichloropropane	Zero	0.005	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
66. Ethylbenzene	0.7	0.7	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

67. Styrene	0.1	0.1	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
68. Tetrachloroethylene	Zero	0.005	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
69. Toluene	1	1	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
70. 1,2,4-Trichlorobenzene	0.07	0.07	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
71. 1,1,1-Trichloroethane	0.2	0.2	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
72. 1,1,2-Trichloroethane	0.003	0.005	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
73. Trichloroethylene	Zero	0.005	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

74. Vinyl chloride	Zero	0.002	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
75. Xylenes (total)	10	10	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
G. Radioactive Contaminants			
76. Beta/photon emitters	Zero	4 mrem/yr [14]~~15~~	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
77. Alpha emitters	Zero	15 pCi/ℓ [15]~~17~~	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
78. Combined radium (226 & 228)	Zero	5 pCi/ℓ	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
79. Uranium	Zero	30 µg/ℓ	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

H. Disinfection Byproducts (DBPs), Byproduct Precursors, and Disinfectant Residuals: Where disinfection is used in the treatment of drinking water, disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). USEPA sets standards for controlling the levels of disinfectants and DBPs in drinking water, including trihalomethanes (THMs) and haloacetic acids (HAA5) [16~~18~~]			
80. Total trihalomethanes (TTHMs)	N/A	0.080[17,18~~19,20~~]	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.
81. Haloacetic Acids (HAA5)	N/A	0.060[19~~21~~]	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
82. Bromate	Zero	0.010	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
83. Chlorite	0.08	1.0	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.

84. Chlorine	4 (MRDLG)[20~~22~~]	4.0 (MRDL)[21~~23~~]	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
85. Chloramines	4 (MRDLG)	4.0 (MRDL)	Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.

85a. Chlorine dioxide, where any two consecutive daily samples taken at the entrance to the distribution system are above the MRDL	0.8 (MRDLG)	0.8 (MRDL)	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia. Add for public notification only: The chlorine dioxide violations reported today are the result of exceedences at the treatment facility only, not within the distribution system that delivers water to consumers. Continued compliance with chlorine dioxide levels within the distribution system minimizes the potential risk of these violations to consumers.

86a. Chlorine dioxide, where one or more distribution system samples are above the MRDL	0.8 (MRDLG)	0.8 (MRDL)	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia. Add for public notification only: The chlorine dioxide violations reported today include exceedences of the USEPA standard within the distribution system that delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure.

87. Control of DBP precursors (TOC)	None	TT	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
I. Other Treatment Techniques:			
88. Acrylamide	Zero	TT	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
89. Epichlorohydrin	Zero	TT	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

Appendix H – Endnotes

1. "MCLG" means maximum contaminant level goal.

2. "MCL" means maximum contaminant level.

3. For a water supplier analyzing at least 40 samples per month, no more than 5.0 percent of the monthly samples may be positive for total coliforms. For a supplier analyzing fewer than 40 samples per month, no more than one sample per month may be positive for total coliforms.

4. There are various regulations that set turbidity standards for different types of systems, including Section 611.320, the 1989 Surface Water Treatment Rule (SWTR), the 1998 Interim Enhanced Surface Water Treatment Rule (IESWTR), and the 2002 Long Term 1 Enhanced Surface Water Treatment Rule (LT1ESWTR). The MCL for the monthly turbidity average is 1 NTU; the MCL for the 2-day average is 5 NTU for a supplier that is required to filter but has not yet installed filtration (Section 611.320).

5. "NTU" means nephelometric turbidity unit.

6. There are various regulations that set turbidity standards for different types of systems, including Section 611.320, the 1989 SWTR, the 1998 IESWTR, and the 2002 LT1ESWTR. A supplier subject to the SWTR (both filtered and unfiltered) may not exceed 5 NTU. In addition, in filtered systems, 95 percent of samples each month must not exceed 0.5 NTU in systems using conventional or direct filtration and must not exceed 1 NTU in systems using slow sand or diatomaceous earth filtration or other filtration technologies approved by the Agency.

7. "TT" means treatment technique.

8. There are various regulations that set turbidity standards for different types of systems, including Section 611.320, the 1989 SWTR, the 1998 IESWTR, and the 2002 LT1ESWTR. For a supplier subject to the IESWTR (a supplier that serves at least 10,000 people, using surface water or groundwater under the direct influence of surface water), that use conventional filtration or direct filtration, the turbidity level of a system's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a system's combined filter effluent must not exceed 1 NTU at any time. A supplier subject to the IESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the Agency. For a supplier subject to the LT1ESWTR (a supplier that serves fewer than 10,000 people, using surface water or groundwater under the direct influence of surface water) that uses conventional filtration or direct filtration, after January 1, 2005, the turbidity level of the supplier's combined filter effluent may not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of the supplier's combined filter effluent must not exceed 1 NTU at any time. A supplier subject to the LT1ESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration must meet turbidity limits set by the Agency.

9. The bacteria detected by heterotrophic plate count (HPC) are not necessarily harmful. HPC is simply an alternative method of determining disinfectant residual levels. The number of such bacteria is an indicator of whether there is enough disinfectant in the distribution system.

10. SWTR, IESWTR, and LT1ESWTR treatment technique violations that involve turbidity exceedences may use the health effects language for turbidity instead.

~~11. These arsenic values are effective January 23, 2006. Until then, the MCL is 0.05 mg/ℓ and there is no MCLG.~~

11.~~12.~~ Millions of fibers per liter.

12.~~13.~~ Action Level = 0.015 mg/ℓ.

13.~~14.~~ Action Level = 1.3 mg/ℓ.

14.~~15.~~ Millirems per year.

15.~~16.~~ Picocuries per liter.

~~17. This endnote 17 corresponds with the endnote to the table in appendix B to subpart Q of 40 CFR 141 (2006), which stated a past effective date. This statement maintains structural consistency with the federal regulations.~~

16.~~18.~~ A surface water system supplier or a groundwater system supplier under the direct influence of surface water is regulated under Subpart B of this Part. A Supbart B community water system supplier or a non-transient non-community system supplier must comply with Subpart I DBP MCLs and disinfectant maximum residual disinfectant levels (MRDLs). A Subpart B transient non-community system supplier that uses chlorine dioxide as a disinfectant or oxidant must comply with the chlorine dioxide MRDL.

17.~~19.~~ Community and non-transient non-community systems must comply with Subpart Y TTHM and HAA5 MCLs of 0.080 mg/ℓ and 0.060 mg/ℓ, respectively (with compliance calculated as a locational running annual average) on the schedule in Section 611.970.

18.~~20.~~ The MCL for total trihalomethanes is the sum of the concentrations of the individual trihalomethanes.

19.~~21.~~ The MCL for haloacetic acids is the sum of the concentrations of the individual haloacetic acids.

20.~~22.~~ "MRDLG" means maximum residual disinfectant level goal.

21.~~23.~~ "MRDL" means maximum residual disinfectant level.

BOARD NOTE: Derived from appendix B to subpart Q to 40 CFR 141 (2012)~~(2006), as amended at 71 Fed. Reg. 65574 (Nov. 8, 2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.APPENDIX I Acronyms Used in Public Notification Regulation

CCR	Consumer Confidence Report
CWS	Community Water System
DBP	Disinfection Byproduct
GWR	Groundwater Rule
HPC	Heterotrophic Plate Count
IESWTR	Interim Enhanced Surface Water Treatment Rule
IOC	Inorganic Chemical
LCR	Lead and Copper Rule
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
NCWS	Non-Community Water System
NPDWR	National Primary Drinking Water Regulation
NTNCWS	Non-Transient Non-Community Water System
NTU	Nephelometric Turbidity Unit
OGWDW	USEPA, Office of Ground Water and Drinking Water
OW	USEPA, Office of Water
PN	Public Notification
PWS	Public Water System
SDWA	Safe Drinking Water Act
SMCL	Secondary Maximum Contaminant Level
SOC	Synthetic Organic Chemical
SWTR	Surface Water Treatment Rule
TCR	Total Coliform Rule
TT	Treatment Technique
TWS	Transient Non-Community Water System
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Chemical

BOARD NOTE: Derived from Appendix C to Subpart Q to 40 CFR 141 (2012)~~(2006), as amended at 71 Fed. Reg. 65574 (Nov. 8, 2006)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE A Total Coliform Monitoring Frequency

TOTAL COLIFORM MONITORING FREQUENCY FOR CWSs

Population Served			Minimum Number of Samples per Month
25	to	1000	1
1001	to	2500	2
2501	to	3300	3
3301	to	4100	4
4101	to	4900	5
4901	to	5800	6
5801	to	6700	7
6701	to	7600	8
7601	to	8500	9
8501	to	12,900	10
12,901	to	17,200	15
17,201	to	21,500	20
21,501	to	25,000	25
25,001	to	33,000	30
33,001	to	41,000	40
41,001	to	50,000	50
50,001	to	59,000	60
59,001	to	70,000	70
70,001	to	83,000	80
83,001	to	96,000	90
96,001	to	130,000	100
130,001	to	220,000	120
220,001	to	320,000	150
320,001	to	450,000	180
450,001	to	600,000	210
600,001	to	780,000	240
780,001	to	970,000	270
970,001	to	1,230,000	300
1,230,001	to	1,520,000	330
1,520,001	to	1,850,000	360
1,850,001	to	2,270,000	390
2,270,001	to	3,020,000	420
3,020,001	to	3,960,000	450

3,960,001	or more	480

PWSs that have at least 15 service connections, but serve fewer than 25 persons are included in the entry for 25 to 1000 persons served.

BOARD NOTE: Derived from 40 CFR 141.21(a)(2) (2012)~~(2002)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE B Fecal or Total Coliform Density Measurements

System Size (Persons Served)			Samples per Week
500	or fewer		1
501	to	3300	2
3301	to	10,000	3
10,001	to	25,000	4
More than	25,000		5

Samples must be taken on separate days.

BOARD NOTE: Derived from 40 CFR 141.74(b)(1) (2012)~~(1991)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE C Frequency of RDC Measurement

System Size (Persons Served)			Samples per Day
500	or fewer		1
501	to	1,000	2
1001	to	2,500	3
2501	to	3,300	4

The day's samples cannot be taken at the same time. The sampling intervals are subject to Agency review and approval by a SEP issued pursuant to Section 611.110 .

BOARD NOTE: Derived from 40 CFR 141.74(b)(5) and (c)(2) (2012)~~(2002)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE D Number of Lead and Copper Monitoring Sites

System Size (Persons Served)	Number of Sites (Standard Monitoring)	Number of Sites (Reduced Monitoring)
More than 100,000	100	50
10,001-100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
100 or fewer	5	5

BOARD NOTE: Derived from 40 CFR 141.86(c) (2012)~~(1992)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

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Section 611.TABLE E Lead and Copper Monitoring Start Dates

System Size (Persons served)	First Six-month Monitoring Period Begins
more than 50,000	January 1, 1992
3,301 to 50,000	July 1, 1992
3,300 or fewer	July 1, 1993

BOARD NOTE: Derived from 40 CFR 141.86(d)(1) (2012)~~(2002)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE F Number of Water Quality Parameter Sampling Sites

System Size (Persons Served)	Number of Sites (Standard Monitoring)	(Reduced Monitoring)
more than 100,000	25	10
10,001 to 100,000	10	7
3,301 to 10,000	3	3
501 to 3,300	2	2
101 to 500	1	1
100 or fewer	1	1

BOARD NOTE: Derived from 40 CFR 141.87(a)(2) and (e) (2012)~~(1992)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE G Summary of Section 611.357 Monitoring Requirements for Water Quality Parameters

See end note 1 below.

Monitoring Period	Parameters[2]	Location	Frequency
Initial Monitoring	pH, alkalinity, orthophosphate or silica[3], calcium, conductivity, temperature	Taps and at entry points to the distribution system	Every six months
After installation of corrosion control	pH, alkalinity, orthophosphate or silica[3], calcium[4]	Taps	Every six months
	pH, alkalinity dosage rate and concentration (if alkalinity is adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual[5]	Entry points to the distribution system[6]	No less frequently than every two weeks
After the Agency specifies parameter values for optimal corrosion control	pH, alkalinity, orthophosphate or silica[3], calcium[4]	Taps	Every six months
	pH, alkalinity dosage rate and concentration (if alkalinity is adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual[5]	Entry points to the distribution system[6]	No less frequently than every two weeks

Reduced monitoring	pH, alkalinity, orthophosphate or silica[3], calcium[4]	Taps	Every six months, annually[7] or every three years[8]; reduced number of sites
	pH, alkalinity dosage rate and concentration (if alkalinity is adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual[5]	Entry points to the distribution system[6]	No less frequently than every two weeks

[1] This Table G is for illustrative purposes; consult the text of Section 611.357 for precise regulatory requirements.

[2] Small- and medium-sized systems have to monitor for water quality parameters only during monitoring periods in which the system exceeds the lead or copper action level.

[3] Orthophosphate must be measured only when an inhibitor containing a phosphate compound is used. Silica must be measured only when an inhibitor containing silicate compound is used.

[4] Calcium must be measured only when calcium carbonate stabilization is used as part of corrosion control.

[5] Inhibitor dosage rates and inhibitor residual concentrations (orthophosphate or silica) must be measured only when an inhibitor is used.

[6] A groundwater system supplier may limit monitoring to representative locations throughout the system.

[7] A water supplier may reduce frequency of monitoring for water quality parameters at the tap from every six months to annually if it has maintained the range of values for water quality parameters reflecting optimal corrosion control during three consecutive years of monitoring.

[8] A water supplier may further reduce the frequency of monitoring for water quality parameters at the tap from annually to once every three years if it has maintained the range of values for water quality parameters reflecting optimal corrosion control during three consecutive years

of annual monitoring. A water supplier may accelerate to triennial monitoring for water quality parameters at the tap if it has maintained 90th percentile lead levels less than or equal to 0.005 mg/ℓ, 90th percentile copper levels less than or equal to 0.65 mg/ℓ, and the range of water quality parameters designated by the Agency under Section 611.352(f) as representing optimal corrosion control during two consecutive six-month monitoring periods.

BOARD NOTE: Derived from the table to 40 CFR 141.87 (2012)~~(2002)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE H CT Values (mg·min/ℓ) for Cryptosporidium Inactivation by Chlorine Dioxide

Log Credit	Water Temperature (°C)										
	≤ 0.5	1	2	3	5	7	10	15	20	25	30
0.25	159	153	140	128	107	90	69	45	29	19	12
0.5	319	305	279	256	214	180	138	89	58	38	24
1.0	637	610	558	511	429	360	277	179	116	75	49
1.5	956	915	838	767	643	539	415	268	174	113	73
2.0	1275	1220	1117	1023	858	719	553	357	232	150	98
2.5	1594	1525	1396	1278	1072	899	691	447	289	188	122
3.0	1912	1830	1675	1534	1286	1079	830	536	347	226	147

A supplier may use the following equation to determine log credit between the indicated values:

$$\text{Log credit} = (0.001506 \times (1.09116)^{\text{Temp(in °C)}}) \times \text{CT}$$

BOARD NOTE: Derived from the table at 40 CFR 141.720(b)(1) (2012)~~(2006), which corresponds with Section 611.1020(b)(1)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 611.TABLE I CT Values (mg·min/ℓ) for Cryptosporidium Inactivation by Ozone

Log Credit	Water Temperature (°C)										
	≤ 0.5	1	2	3	5	7	10	15	20	25	30
0.25	6.0	5.8	5.2	4.8	4.0	3.3	2.5	1.6	1.0	0.6	0.39
0.5	12	12	10	9.5	7.9	6.5	4.9	3.1	2.0	1.2	0.78
1.0	24	23	21	19	16	13	9.9	6.2	3.9	2.5	1.6
1.5	36	35	31	29	24	20	15	9.3	5.9	3.7	2.4
2.0	48	46	42	38	32	26	20	12	7.8	4.9	3.1
2.5	60	58	52	48	40	33	25	16	9.8	6.2	3.9
3.0	72	69	63	57	47	39	30	19	12	7.4	4.7

A supplier may use the following equation to determine log credit between the indicated values:

$$\text{Log credit} = (0.0397 \times (1.09757)^{\text{Temp(in °C)}}) \times \text{CT}$$

BOARD NOTE: Derived from the table at 40 CFR 141.720(b)(2) (2012)~~(2006), which corresponds with Section 611.1020(b)(2)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

POLLUTION CONTROL BOARD

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Section 611.TABLE J UV Dose Table for Cryptosporidium, Giardia lamblia, and Virus Inactivation Credit

UV dose (mJ/cm^2)			
Log credit	Cryptosporidium	Giardia lamblia	Virus
0.5	1.6	1.5	39
1.0	2.5	2.1	58
1.5	3.9	3.0	79
2.0	5.8	5.2	100
2.5	8.5	7.7	121
3.0	12	11	143
3.5	15	15	163
4.0	22	22	186

BOARD NOTE: Derived from the table at 40 CFR 141.720(d)(1) (2012)~~(2006), which corresponds with Section 611.1020(d)(1)~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

POLLUTION CONTROL BOARD

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Section 611.TABLE Z Federal Effective Dates

The following are the effective dates of the various federal NPDWRs:

Fluoride (40 CFR 141.62(b)(1)~~141.60(b)(1)~~) (corresponding with Section 611.301(b))	October 2, 1987
Phase I VOCs (40 CFR 141.61(a) through (a)(8)~~141.60(a)(1)~~) (corresponding with Section 611.311(a)) (benzene, carbon tetrachloride, p-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethylene, 1,1,1-trichloroethane, trichloroethylene, and vinyl chloride)	January~~July~~ 9, 1989
Lead and Copper (40 CFR141, subpart I) (corresponding with Subpart G of this Part) (lead and copper monitoring, reporting, and recordkeeping requirements of 40 CFR 141.86 through 141.91)	July 7, 1991
Phase II IOCs (40 CFR 141.62(b)(2) and (b)(4) through (b)(10)~~141.60(b)(2)~~) (corresponding with Section 611.301(b)) (asbestos, cadmium, chromium, mercury, nitrate, nitrite, and selenium)	July 30, 1992
Phase II VOCs (40 CFR 141.61(a)(9) through (a)(18)~~141.60(a)(2)~~) ~~(corresponding with Section 611.311(a))~~ (o-dichlorobenzene, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, 1,2-dichloropropane, ethylbenzene, monochlorobenzene, styrene, tetrachloroethylene, toluene, and xylenes (total))	July 30, 1992
Phase II SOCs (40 CFR 141.61(c)(1) through (c)(18)~~141.60(a)(2)~~) ~~(corresponding with Section 611.311(c))~~ (alachlor, atrazine, carbofuran, chlordane, dibromochloropropane, ethylene dibromide, heptachlor, heptachlor epoxide, lindane, methoxychlor, polychlorinated biphenyls, toxaphene, 2,4-D, and 2,4,5-TP (silvex))	July 30, 1992

Phase V SOC (40 CFR 141.61(c)(3)) (corresponding with Section 611.311(c)) (endrin)	August 17, 1992
Lead and Copper (40 CFR141, subpart I) (corresponding with Subpart G of this Part) (lead and copper corrosion control, water treatment, public education, and lead service line replacement requirements of 40 CFR 141.81 through 141.85)	December 7, 1992
Phase IIB IOC (40 CFR 141.62(b)(3)~~141.60(b)(2)~~) (corresponding with Section 611.301(b)) (barium)	January 1, 1993
Phase IIB SOCs (40 CFR 141.61(a)(9) through (a)(18)~~141.60(a)(2)~~) (corresponding with Section 611.311(c)) (aldicarb, aldicarb sulfone, aldicarb sulfoxide, and pentachlorophenol. See the Board note appended to Section 611.311(c) for information relating to implementation of requirements relating to aldicarb, aldicarb sulfone, and aldicarb sulfoxide.)	January 1, 1993
Phase V IOCs (40 CFR 141.62(b)(11) through (b)(15)~~141.60(b)(3)~~) (corresponding with Section 611.301(b)) (antimony, beryllium, cyanide, nickel, and thallium)	January 17, 1994
Phase V VOCs (40 CFR 141.61(b)(19) through (b)(21)~~141.60(a)(3)~~) (corresponding with Section 611.311(a)) (dichloromethane, 1,2,4-trichlorobenzene, and 1,1,2-trichloroethane)	January 17, 1994
Phase V SOCs (40 CFR 141.61(c)(19) through (c)(25)~~141.60(a)(3)~~) (corresponding with Section 611.311(c)) (benzo(a)pyrene, dalapon, di(2-ethylhexyl)adipate, di(2-ethylhexyl)phthalate dinoseb, diquat, endothall, endrin, glyphosate, hexachlorobenzene, hexachlorocyclopentadiene, oxamyl, picloram, simazine, and 2,3,7,8-TCDD)	January 17, 1994

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Consumer Confidence Report Rule (40 CFR 141, subpart Q) (corresponding with Subpart O of this Part) (notification to public of drinking water quality)	September 18, 1998
Interim Enhanced Surface Water Treatment Rule (40 CFR 141, subpart P) (corresponding with Subpart R of this Part) (applicable to suppliers providing water to fewer than 10,000 persons) (Giardia lamblia, viruses, heterotrophic plate count bacteria, Legionella, Cryptosporidium, and turbidity)	February 16, 1999
Public Notification Rule (40 CFR 141, subpart Q) (corresponding with Subpart V of this Part) (notification to public of NPDWR violations, variances or exemptions, or other situations that could bear on public health)	June 5, 2000
Filter Backwash Rule (40 CFR 141.76) (corresponding with Section 611.276) (reuse of spent filter backwash water, thickener supernatant, or liquids from dewatering processes)	August 7, 2001
Disinfection/Disinfectant Byproducts Rule (40 CFR 141.64, 141.65 & 141, subpart L)	
Smaller Systems (serving 10,000 or fewer persons)	December 16, 2001
Larger Systems (serving more than 10,000 persons)	December 16, 2003
(corresponding with Sections 611.312 & 611.313) (total trihalomethanes, haloacetic acids (five), bromate, chlorite, chlorine, chloramines, and chlorine dioxide)	
Long Term 1 Enhanced Surface Water Treatment Rule (40 CFR 141, Subpart T) (corresponding with Subpart X of this Part) (applicable to suppliers providing water to 10,000 or more persons) (Giardia lamblia, viruses, heterotrophic plate count bacteria, Legionella, Cryptosporidium, and turbidity)	February 13, 2002

Radionuclides (40 CFR 141.66)	December 8, 2003
(corresponding with Section 611.330)	
(combined radium (Ra-226 + Ra-228), gross alpha particle activity, beta particle and photon activity, and uranium)	
Arsenic (40 CFR 141.62(b)(16))	January 23, 2006
(corresponding with Section 611.301(b))	
(arsenic)	
Stage 2 Disinfection/Disinfectant Byproducts Rule (40 CFR 141, subparts U & V)	
Systems that serve fewer than 10,000 persons	
Submit plan	April 1, 2008
Complete monitoring or study	March 31, 2010
Submit IDSE report	July 1, 2010
Compliance with monitoring requirements	
If no Cryptosporidium monitoring is required	October 1, 2013
If Cryptosporidium monitoring is required	October 1, 2014
Systems that serve 10,000 to 49,999 persons	
Submit plan	October 1, 2007
Complete monitoring or study	September 30, 2009
Submit IDSE report	January 1, 2010
Compliance with monitoring requirements	October 1, 2013
Systems that serve 50,000 to 99,999 persons	
Submit plan	April 1, 2007
Complete monitoring or study	March 31, 2009
Submit IDSE report	July 1, 2009
Compliance with monitoring requirements	October 1, 2012
Systems that serve 100,000 or more persons	
Submit plan	October 1, 2006
Complete monitoring or study	September 30, 2008
Submit IDSE report	January 1, 2009
Compliance with monitoring requirements	April 1, 2012
(corresponding with Subparts W & Y of this Part)	
(total trihalomethanes and haloacetic acids (five))	
Long Term 2 Enhanced Surface Water Treatment Rule (40 CFR 141, subpart W)	
Systems that serve fewer than 10,000 persons	
And which monitor for E. coli	
Begin first round of monitoring	October 1, 2008

Begin treatment for Cryptosporidium	October 1, 2014
Begin second round of monitoring	October 1, 2017
And which monitor for cryptosporidium	
Begin first round of monitoring	April 1, 2010
Begin treatment for Cryptosporidium	October 1, 2014
Begin second round of monitoring	April 1, 2019
Systems that serve 10,000 to 49,999 persons	
Begin first round of monitoring	April 1, 2008
Begin treatment for Cryptosporidium	October 1, 2013
Begin second round of monitoring	October 1, 2016
Systems that serve 50,000 to 99,999 persons	
Begin first round of monitoring	April 1, 2007
Begin treatment for Cryptosporidium	October 1, 2012
Begin second round of monitoring	October 1, 2015
Systems that serve 100,000 or more persons	
Begin first round of monitoring	October 1, 2006
Begin treatment for Cryptosporidium	April 1, 2012
Begin second round of monitoring	April 1, 2015
(corresponding with Subpart Z of this Part)	
(E. coli, Cryptosporidium, Giardia lamblia, viruses, and turbidity)	
Groundwater Rule (40 CFR 141, subpart S)	December 1, 2009
(corresponding with Subpart S of this Part)	
(E. coli, enterococci, and coliphage)	

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Control of Communicable Diseases Code

2) Code Citation: 77 Ill. Adm. Code 690

3)

Section Numbers:	Proposed Action:
690.900	Amend
690.1500	New
690.1510	New
690.1520	New
690.1530	New
690.1540	New

4) Statutory Authority: Communicable Disease Report Act [745 ILCS 45] and the Department of Public Health Act [20 ILCS 2305]

5) A Complete Description of the Subjects and Issues Involved: This rulemaking establishes new provisions for the Department's Multi-Drug Resistant Organism (MDRO) Registry. The Registry will allow the Department to collect data on persons entering health care facilities who have been diagnosed with an MDRO infection. Included are definitions; entities required to submit information; information required to be reported; reporting methods; and availability of Registry information.

The economic effect of this proposed rulemaking is unknown. Therefore, the Department requests any information that would assist in calculating this effect.

The Department anticipates adoption of this rulemaking approximately six to nine months after publication of the Notice in the *Illinois Register*.

6) Published studies or reports, and sources of underlying data used to compose this rulemaking: None

7) Will this rulemaking replace any emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? No

10) Are there any other proposed rulemakings pending on this Part? No

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

11) Statement of Statewide Policy Objectives: This rulemaking does not create or expand a State mandate.

12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: Interested persons may present their comments concerning this rulemaking within 45 days after the publication of this issue of the *Illinois Register* to:

Susan Meister
Division of Legal Services
Illinois Department of Public Health
535 W. Jefferson St., 5th floor
Springfield, Illinois 62761

217/782-2043
e-mail: dph.rules@illinois.gov

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities and not for profit corporations affected: Hospitals, hospitals-affiliated clinical laboratories, independent or free-standing laboratories, long-term care facilities, long-term acute care hospitals

B) Reporting, bookkeeping or other procedures required for compliance: Reporting requirements are set forth in the rulemaking.

C) Types of professional skills necessary for compliance: None

14) Regulatory Agenda on which this rulemaking was summarized: This rulemaking was not included on either of the two most recent Regulatory Agendas because the need for the rulemaking was not apparent when the Agendas were prepared.

The full text of the Proposed Amendments begins on the next page:

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

TITLE 77: PUBLIC HEALTH
CHAPTER I: DEPARTMENT OF PUBLIC HEALTH
SUBCHAPTER k: COMMUNICABLE DISEASE CONTROL AND IMMUNIZATIONS

PART 690
CONTROL OF COMMUNICABLE DISEASES CODE

SUBPART A: REPORTABLE DISEASES AND CONDITIONS

Section
690.100 Diseases and Conditions
690.110 Diseases Repealed from This Part

SUBPART B: REPORTING

Section
690.200 Reporting

SUBPART C: DETAILED PROCEDURES FOR THE CONTROL OF COMMUNICABLE DISEASES

Section
690.290 Acquired Immunodeficiency Syndrome (AIDS) (Repealed)
690.295 Any Unusual Case or Cluster of Cases That May Indicate a Public Health Hazard, Including, But Not Limited to, Glanders, Orf, Monkeypox, Viral Hemorrhagic Fever (Reportable by telephone immediately (within 3 hours))
690.300 Amebiasis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days) (Repealed)
690.310 Animal Bites (Reportable by mail or telephone as soon as possible, within 7 days) (Repealed)
690.320 Anthrax (Reportable by telephone immediately, within 3 hours, upon initial clinical suspicion of the disease)
690.322 Arboviral Infections (including, but not limited to, California encephalitis, St. Louis encephalitis and West Nile virus) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)
690.325 Blastomycosis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days) (Repealed)
690.327 Botulism, Foodborne, Intestinal Botulism (Formerly Infant), Wound, or Other (Reportable by telephone immediately, within 3 hours upon initial clinical

suspicion of the disease for foodborne botulism or within 24 hours by telephone or facsimile for other types)

690.330 Brucellosis (Reportable by mail, telephone, facsimile or electronically as soon as possible (within 7 days), unless suspected bioterrorist event or part of an outbreak, then reportable immediately (within 3 hours) by telephone)

690.335 Campylobacteriosis (Reportable by mail, telephone, facsimile or electronically, within 7 days) (Repealed)

690.340 Chancroid (Repealed)

690.350 Chickenpox (Varicella) (Reportable by telephone, facsimile or electronically , within 24 hours)

690.360 Cholera (Vibrio cholerae O1 or O139) (Reportable by telephone or facsimile as soon as possible, within 24 hours)

690.362 Creutzfeldt-Jakob Disease (CJD) (all laboratory confirmed and probable cases) (Reportable by mail, telephone, facsimile or electronically within 7 days after confirmation of the disease)

690.365 Cryptosporidiosis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.368 Cyclosporiasis (Reportable by mail, telephone, facsimile or electronically, within 7 days)

690.370 Diarrhea of the Newborn (Reportable by telephone as soon as possible, within 24 hours) (Repealed)

690.380 Diphtheria (Reportable by telephone as soon as possible, within 24 hours)

690.385 Ehrlichiosis, Human Granulocytotropic anaplasmosis (HGA) (See Tickborne Disease)

690.386 Ehrlichiosis, Human Monocytotropic (HME) (See Tickborne Disease)

690.390 Encephalitis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days) (Repealed)

690.400 Escherichia coli Infections (E. coli O157:H7 and Other Shiga toxin-producing E. coli, Enterotoxigenic E. coli, Enteropathogenic E. coli and Enteroinvasive E. coli) (Reportable by telephone or facsimile as soon as possible, within 24 hours)

690.410 Foodborne or Waterborne Illness (Reportable by telephone or facsimile as soon as possible, within 24 hours)

690.420 Giardiasis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.430 Gonorrhea (Repealed)

690.440 Granuloma Inguinale (Repealed)

690.441 Haemophilus influenzae, Meningitis and Other Invasive Disease (Reportable by telephone or facsimile, within 24 hours)

690.442 Hantavirus Pulmonary Syndrome (Reportable by telephone or facsimile, within

24 hours)

690.444 Hemolytic Uremic Syndrome, Post-diarrheal (Reportable by telephone or facsimile, within 24 hours)

690.450 Hepatitis A (Reportable by telephone or facsimile as soon as possible, within 24 hours)

690.451 Hepatitis B and Hepatitis D (Reportable by mail, telephone, facsimile or electronically, within 7 days)

690.452 Hepatitis C, Acute Infection and Non-Acute Confirmed Infection (Reportable by mail, telephone, facsimile or electronically, within 7 days)

690.453 Hepatitis, Viral, Other (Reportable by mail, telephone, facsimile or electronically, within 7 days) (Repealed)

690.460 Histoplasmosis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.465 Influenza, Death (in persons less than 18 years of age) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.469 Influenza A, Novel Virus (Reportable by telephone immediately, within 3 hours upon initial clinical suspicion or laboratory test order)

690.470 Intestinal Worms (Reportable by mail or telephone as soon as possible, within 7 days) (Repealed)

690.475 Legionellosis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.480 Leprosy (Hansen's Disease) (infectious and non-infectious cases are reportable) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.490 Leptospirosis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.495 Listeriosis (when both mother and newborn are positive, report mother only) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.500 Lymphogranuloma Venereum (Lymphogranuloma Inguinale Lymphopathia Venereum) (Repealed)

690.505 Lyme Disease (See Tickborne Disease)

690.510 Malaria (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)

690.520 Measles (Reportable by telephone as soon as possible, within 24 hours)

690.530 Meningitis, Aseptic (Including Arboviral Infections) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days) (Repealed)

690.540 Meningococcemia (Reportable by telephone as soon as possible) (Repealed)

DEPARTMENT OF PUBLIC HEALTH

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690.550 Mumps (Reportable by telephone, facsimile or electronically as soon as possible, within 24 hours)
690.555 Neisseria meningitidis, Meningitis and Invasive Disease (Reportable by telephone or facsimile as soon as possible, within 24 hours)
690.560 Ophthalmia Neonatorum (Gonococcal) (Reportable by mail or telephone as soon as possible, within 7 days) (Repealed)
690.570 Plague (Reportable by telephone immediately, within 3 hours upon initial clinical suspicion of the disease)
690.580 Poliomyelitis (Reportable by telephone as soon as possible, within 24 hours)
690.590 Psittacosis (Ornithosis) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)
690.595 Q-fever (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days, unless suspected bioterrorist event or part of an outbreak, then reportable immediately (within 3 hours) by telephone)
690.600 Rabies, Human (Reportable by telephone or facsimile as soon as possible, within 24 hours)
690.601 Rabies, Potential Human Exposure (Reportable by telephone or facsimile, within 24 hours)
690.610 Rocky Mountain Spotted Fever (See Tickborne Disease)
690.620 Rubella (German Measles) (Including Congenital Rubella Syndrome) (Reportable by telephone, facsimile or electronically as soon as possible, within 24 hours)
690.630 Salmonellosis (Other than Typhoid Fever) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)
690.635 Severe Acute Respiratory Syndrome (SARS) (Reportable by telephone immediately (within 3 hours) upon initial clinical suspicion of the disease)
690.640 Shigellosis (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)
690.650 Smallpox (Reportable by telephone immediately, within 3 hours upon initial clinical suspicion of the disease)
690.655 Smallpox vaccination, complications of (Reportable by telephone or electronically as soon as possible, within 24 hours)
690.658 Staphylococcus aureus, Methicillin Resistant (MRSA) Infection, Clusters of 2 or More Laboratory Confirmed Cases Occurring in Community Settings (including, but not limited to, schools, correctional facilities, day care settings, and sports teams) (Reportable by telephone or facsimile as soon as possible, within 24 hours)
690.660 Staphylococcus aureus, Methicillin Resistant (MRSA), Occurring In Infants Under 61 Days of Age (Reportable by telephone or facsimile or electronically as soon as possible, within 24 hours)
690.661 Staphylococcus aureus Infections with Intermediate (Minimum inhibitory

	concentration (MIC) between 4 and 8) (VISA) or High Level Resistance to Vancomycin (MIC greater than or equal to 16) (VRSA) (Reportable by telephone or facsimile, within 24 hours)
690.670	Streptococcal Infections, Group A, Invasive Disease (Including Streptococcal Toxic Shock Syndrome and necrotizing fasciitis) and Sequelae to Group A Streptococcal Infections (rheumatic fever and acute glomerulonephritis) (Reportable by telephone or facsimile, within 24 hours)
690.675	Streptococcal Infections, Group B, Invasive Disease, of the Newborn (birth to 3 months) (Reportable by mail, telephone, facsimile or electronically, within 7 days) (Repealed)
690.678	Streptococcus pneumoniae, Invasive Disease in Children Less than 5 Years (Including Antibiotic Susceptibility Test Results) (Reportable by mail, telephone, facsimile or electronically, within 7 days)
690.680	Syphilis (Repealed)
690.690	Tetanus (Reportable by mail, telephone, facsimile or electronically, within 7 days)
690.695	Toxic Shock Syndrome due to Staphylococcus aureus Infection (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)
690.698	Tickborne Disease (includes Ehrlichiosis, Anaplasmosis, Lyme disease and Rocky Mountain spotted fever) (Reportable by mail, telephone, facsimile or electronically, within 7 days)
690.700	Trachoma (Repealed)
690.710	Trichinosis (Trichinellosis) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)
690.720	Tuberculosis (Repealed)
690.725	Tularemia (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days, unless suspected bioterrorist event or part of an outbreak, then reportable immediately (within 3 hours) by telephone)
690.730	Typhoid Fever (Reportable by telephone or facsimile as soon as possible, within 24 hours)
690.740	Typhus (Reportable by telephone or facsimile as soon as possible, within 24 hours)
690.745	Vibriosis (Non-cholera Vibrio Infections) (Reportable by mail, telephone, facsimile or electronically as soon as possible, within 7 days)
690.750	Pertussis (Whooping Cough) (Reportable by telephone as soon as possible, within 24 hours)
690.752	Yersiniosis (Reportable by mail, telephone, facsimile or electronically, within 7 days)
690.800	Any Suspected Bioterrorist Threat or Event (Reportable by telephone immediately, within 3 hours upon initial clinical suspicion of the disease)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

SUBPART D: DEFINITIONS

Section
690.900 Definition of Terms

SUBPART E: GENERAL PROCEDURES

Section
690.1000 General Procedures for the Control of Communicable Diseases
690.1010 Incorporated and Referenced Materials

SUBPART F: SEXUALLY TRANSMITTED DISEASES (Repealed)

Section
690.1100 The Control of Sexually Transmitted Diseases (Repealed)

SUBPART G: PROCEDURES FOR WHEN DEATH OCCURS FROM COMMUNICABLE DISEASES

Section
690.1200 Death of a Person Who Had a Known or Suspected Communicable Disease
690.1210 Funerals (Repealed)

SUBPART H: ISOLATION, QUARANTINE, AND CLOSURE

Section
690.1300 General Purpose
690.1305 Department of Public Health Authority
690.1310 Local Health Authority
690.1315 Responsibilities and Duties of the Certified Local Health Department
690.1320 Responsibilities and Duties of Health Care Providers
690.1325 Conditions and Principles for Isolation and Quarantine
690.1330 Order and Procedure for Isolation, Quarantine and Closure
690.1335 Isolation or Quarantine Premises
690.1340 Enforcement
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690.1365 Service of Isolation, Quarantine, or Closure Order
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690.1380 Physical Examination, Testing and Collection of Laboratory Specimens
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SUBPART I: REGISTRIES

Section
690.1500 Multi-Drug Resistant Organism Registry
690.1510 Entities Required to Submit Information
690.1520 Information Required to be Reported
690.1530 Methods of Reporting MDRO Registry Information
690.1540 Availability of Registry Information

690.EXHIBIT A Typhoid Fever Agreement (Repealed)

AUTHORITY: Implementing the Communicable Disease Report Act [745 ILCS 45] and implementing and authorized by the Department of Public Health Act [20 ILCS 2305].

SOURCE: Amended July 1, 1977; emergency amendment at 3 Ill. Reg. 14, p. 7, effective March 21, 1979, for a maximum of 150 days; amended at 3 Ill. Reg. 52, p. 131, effective December 7, 1979; emergency amendment at 4 Ill. Reg. 21, p. 97, effective May 14, 1980, for a maximum of 150 days; amended at 4 Ill. Reg. 38, p. 183, effective September 9, 1980; amended at 7 Ill. Reg. 16183, effective November 23, 1983; codified at 8 Ill. Reg. 14273; amended at 8 Ill. Reg. 24135, effective November 29, 1984; emergency amendment at 9 Ill. Reg. 6331, effective April 18, 1985, for a maximum of 150 days; amended at 9 Ill. Reg. 9124, effective June 3, 1985; amended at 9 Ill. Reg. 11643, effective July 19, 1985; amended at 10 Ill. Reg. 10730, effective June 3, 1986; amended at 11 Ill. Reg. 7677, effective July 1, 1987; amended at 12 Ill. Reg. 10045, effective May 27, 1988; amended at 15 Ill. Reg. 11679, effective August 15, 1991; amended at 18 Ill. Reg. 10158, effective July 15, 1994; amended at 23 Ill. Reg. 10849, effective August 20, 1999; amended at 25 Ill. Reg. 3937, effective April 1, 2001; amended at 26 Ill. Reg. 10701, effective July 1, 2002; emergency amendment at 27 Ill. Reg. 592, effective January 2, 2003, for a

maximum of 150 days; emergency expired May 31, 2003; amended at 27 Ill. Reg. 10294, effective June 30, 2003; amended at 30 Ill. Reg. 14565, effective August 23, 2006; amended at 32 Ill. Reg. 3777, effective March 3, 2008; amended at 37 Ill. Reg. _____, effective _____.

SUBPART D: DEFINITIONS

Section 690.900 Definition of Terms

For the purpose of this Part, the following shall be the accepted definitions of terms.

"Acceptable Laboratory" − A laboratory that is certified under the Centers for Medicare and Medicaid Services, Department of Health and Human Services, Laboratory Requirements (42 CFR 493), which implements the Clinical Laboratory Improvement Amendments of 1988 (42 USC 263).

"Act" – The Department of Public Health Act of the Civil Administrative Code of Illinois [20 ILCS 2305].

"Airborne Precautions" or "Airborne Infection Isolation Precautions" – Infection control measures designed to reduce the risk of transmission of infectious agents that may be suspended in the air in either dust particles or small particle aerosols (airborne droplet nuclei (5 µm or smaller in size)) (see Section 690.1010(a)(7)).

"Authenticated Fecal Specimen" − A specimen is considered to be authenticated when a public health authority or a person authorized by a public health authority has observed one or more of the following:

The patient produce the specimen.

Conditions such that no one other than the case, carrier or contact could be the source of the specimen.

"Bioterrorist Threat or Event" – The intentional use of any microorganism, virus, infectious substance or biological product that may be engineered as a result of biotechnology, or any naturally occurring or bioengineered component of any such microorganism, virus, infectious substance, or biological product, to cause death, disease, or other biological malfunction in a human, an animal, a plant or another living organism.

"Carbapenam Antibiotics" – A class of broad-spectrum Beta-lactam antibiotics.

"Carrier" − A person or deceased person who harbors a specific infectious agent in the absence of discernible clinical disease and serves as a potential source of infection for others.

"Case" − Any person or deceased person having a recent illness due to a communicable disease.

"Confirmed Case" – A case that is classified as confirmed per federal or State case definitions.

"Probable Case" − A case that is classified as probable per federal or State case definitions.

"Suspect Case" − A person whose medical history or symptoms suggest that he or she may have or may be developing a communicable disease and does not yet meet the case definition of a probable or confirmed case.

"Certified Local Health Department" − A local health authority that is certified pursuant to Section 600.210 of the Certified Local Health Department Code (77 Ill. Adm. Code 600).

"Chain of Custody" − The methodology of tracking specimens for the purpose of maintaining control and accountability from initial collection to final disposition of the specimens and providing for accountability at each stage of collecting, handling, testing, storing, and transporting the specimens and reporting test results.

"Child Care Facility" − A center, private home, or drop-in facility open on a regular basis where children are enrolled for care or education.

"Cleaning" − The removal of visible soil (organic and inorganic material) from objects and surfaces; it normally is accomplished by manual or mechanical means using water with detergents or enzymatic products.

"Clinical Materials" – A clinical isolate containing the infectious agent or other material containing the infectious agent or evidence of the infectious agent.

"Cluster" – Two or more persons with a similar illness, usually associated by place or time, unless defined otherwise in Subpart C of this Part.

"Communicable Disease" – An illness due to a specific infectious agent or its toxic products that arises through transmission of that agent or its products from an infected person, animal or inanimate source to a susceptible host, either directly or indirectly through an intermediate plant or animal host, vector or the inanimate environment.

"Contact" − Any person known to have been associated sufficiently with a case or carrier of a communicable disease to have been the source of infection for that person or to have been associated sufficiently with the case or carrier of a communicable disease to have become infected by the case or carrier.

"Contact Precautions" – Infection control measures designed to reduce the risk of transmission of infectious agents that can be spread through direct contact with the patient or indirect contact with potentially infectious items or surfaces (see Section 690.1010(a)(7)).

"Contagious Disease" – An infectious disease that can be transmitted from person to person.

"Dangerously Contagious or Infectious Disease" − An illness due to a specific infectious agent or its toxic products that arises through transmission of that agent or its products from an infected person, animal or inanimate reservoir to a susceptible host, either directly or indirectly through an intermediate plant or animal host, vector or the inanimate environment, and may pose an imminent and significant threat to the public health, resulting in severe morbidity or high mortality.

"Decontamination" − A procedure that removes pathogenic microorganisms from objects so they are safe to handle, use or discard.

"Department" − Illinois Department of Public Health.

"Director" − The Director of the Department, or his or her duly designated officer or agent.

"Diarrhea" − The presence of 3 or more loose stools within a 24-hour period.

"Disinfection" − A process, generally less lethal than sterilization, that eliminates virtually all recognized pathogenic microorganisms, but not necessarily all microbial forms (e.g., bacterial spores).

"Droplet Precautions" – Infection control measures designed to reduce the risk of transmission of infectious agents via large particle droplets that do not remain suspended in the air and are usually generated by coughing, sneezing, or talking (see Section 690.1010(a)(7)).

"Emergency" – An occurrence or imminent threat of an illness or health condition that:

is believed to be caused by any of the following:

bioterrorism;

the appearance of a novel or previously controlled or eradicated infectious agent or biological toxin;

a natural disaster;

a chemical attack or accidental release; or

a nuclear attack or incident; and

poses a high probability of any of the following harms:

a large number of deaths in the affected population;

a large number of serious or long-term disabilities in the affected population; or

widespread exposure to an infectious or toxic agent that poses a significant risk of substantial future harm to a large number of people in the affected population.

"Epidemic" − The occurrence in a community or region of cases of a

communicable disease (or an outbreak) clearly in excess of expectancy.

"Extensively Drug-Resistant Organisms" – Organisms designated by the Department to be of public health importance for which two or fewer conventional antimicrobials are effective for treatment.

"Fever" – The elevation of body temperature above the normal (typically considered greater than or equal to 100.4 degrees Fahrenheit).

"First Responder" – Those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 USC 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations.

"Food Handler" − A person who produces, prepares, packages or dispenses food or drink.

"Health Care Facility" − Any institution, building, or agency or portion thereof, whether public or private (for-profit or nonprofit) that is used, operated, or designed to provide health services, medical treatment, or nursing, rehabilitative, or preventive care to any person or persons. This includes, but is not limited to: ambulatory surgical treatment centers, home health agencies, hospices, hospitals, end-stage renal disease facilities, long-term care facilities, medical assistance facilities, mental health centers, outpatient facilities, public health centers, rehabilitation facilities, residential treatment facilities, and adult day care centers.

"Health Care Provider" – Any person or entity who provides health care services, including, but not limited to, hospitals, medical clinics and offices, long-term care facilities, medical laboratories, physicians, pharmacists, dentists, physician assistants, nurse practitioners, registered and other nurses, paramedics, emergency medical or laboratory technicians, and ambulance and emergency workers.

"Health Care Worker" − Any person who is employed by (or volunteers his or her services to) a health care facility to provide direct personal services to others. This definition includes, but is not limited to, physicians, dentists, nurses and nursing assistants.

"Incubation Period" – The time interval between initial contact with an infectious agent and the first appearance of symptoms associated with the infection.

"Infectious Disease" – A disease caused by a living organism or other pathogen, including a fungus, bacteria, parasite, protozoan, prion, or virus. An infectious disease may, or may not, be transmissible from person to person, animal to person, or insect to person.

"Institution" – An established organization or foundation, especially one dedicated to education, public service, or culture, or a place for the care of persons who are destitute, disabled, or mentally ill.

"Isolation" – The physical separation and confinement of an individual or groups of individuals who are infected or reasonably believed to be infected with a contagious or possibly contagious disease from non-isolated individuals, to prevent or limit the transmission of the disease to non-isolated individuals.

"Isolation, Modified" – A selective, partial limitation of freedom of movement or actions of a person or group of persons infected with, or reasonably suspected to be infected with, a contagious or infectious disease. Modified isolation is designed to meet particular situations and includes, but is not limited to, the exclusion of children from school, the prohibition or restriction from engaging in a particular occupation or using public or mass transportation, or requirements for the use of devices or procedures intended to limit disease transmission.

"Isolation Precautions" – Infection control measures for preventing the transmission of infectious agents, i.e., Standard Precautions, Airborne Precautions (also known as Airborne Infection Isolation Precautions), Contact Precautions, and Droplet Precautions (see Section 690.1010(a)(7)).

"Least Restrictive" − The minimal limitation of the freedom of movement and communication of a person or group of persons while under an order of isolation or an order of quarantine, which also effectively protects unexposed and susceptible persons from disease transmission.

"Local Health Authority" − The health authority (i.e., full-time official health department, as recognized by the Department) having jurisdiction over a particular area, including city, village, township and county boards of health and

health departments and the responsible executive officers of such boards, or any person legally authorized to act for such health authority. In areas without a health department recognized by the Department, the local health authority shall be the Department.

"Medical Record" – A written or electronic account of a patient's medical history, current illness, diagnosis, details of treatments, chronological progress notes, and discharge recommendations.

"Multi-Drug Resistant Organism" or "MDRO" − A microorganism that is extensively resistant to two or more classes of antimicrobial agents.

"Multi-Drug Resistant Organism Isolate" or "MDRO Isolate" − A specimen obtained for clinical decision making that tests positive for an MDRO specified for monitoring. Active surveillance testing specimens are excluded.

"Non-Duplicative MDRO Isolate" − Any specimen source or unique blood source MDRO isolate.

"Non-Susceptible to Any Carbapenem Antibiotic" − The finding of any of the following:

A requirement for at least 2 micrograms per milliliter of a carbapenem antibiotic to inhibit growth of the bacterium (i.e., a minimum inhibitory concentration of ≥2 µg/ml;

Laboratory classification of the bacterium as "intermediate" or "resistant" to any carbapenem antibiotic;

Gene sequence specific for carbapenemase; or

Carbapenemase produced by the bacterium, as demonstrated by any phenotypic test.

"Observation" − The practice of close medical or other supervision of contacts in order to promote prompt recognition of infection or illness, but without restricting their movements.

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"Observation and Monitoring" − Close medical or other supervision, including, but not limited to, review of current health status, by health care personnel, of a person or group of persons on a voluntary or involuntary basis to permit prompt recognition of infection or illness.

"Outbreak" – The occurrence of illness in a person or a group of epidemiologically associated persons, with the rate of frequency clearly in excess of normal expectations. The number of cases indicating presence of an outbreak is disease-specific.

"Premises" − The physical portion of a building or other structure and its surrounding area so designated by the Director of the Department, his authorized representative, or the local health authority.

"Public Health Order" − A written or verbal command, directive, instruction or proclamation issued or delivered by the Department or certified local health department.

"Quarantine" – The physical separation and confinement of an individual or groups of individuals who are or may have been exposed to a contagious disease or possibly contagious disease and who do not show signs or symptoms.

"Registry" – Collections of secondary data related to patients with a specific diagnosis, condition or procedure.

"Sensitive Occupation" − An occupation involving the direct care of others, especially young children and the elderly, or any other occupation so designated by the Department or the local health authority, including, but not limited to, health care workers and child care facility personnel.

"Sentinel Surveillance" – A means of monitoring the prevalence and/or incidence of infectious disease or syndromes through reporting of cases, suspected cases, or carriers or submission of clinical materials by selected sites.

"Specimens" – Include, but are not limited to, blood, sputum, urine, stool, other bodily fluids, wastes, tissues, and cultures necessary to perform required tests.

"Standard Precautions" – Infection prevention and control measures that apply to all patients regardless of diagnosis or presumed infection status (see Section 690.1010(a)(7)).

"Sterilization" – The use of a physical or chemical process to destroy all microbial life, including large numbers of highly resistant bacterial endospores.

"Susceptible (non-immune)" − A person who is not known to possess sufficient resistance against a particular pathogenic agent to prevent developing infection or disease if or when exposed to the agent.

"Syndromic Surveillance" − Surveillance using health-related data that precede diagnosis and signal a sufficient probability of a case or an outbreak to warrant further public health response.

"Tests" – Include, but are not limited to, any diagnostic or investigative analyses necessary to prevent the spread of disease or protect the public's health, safety, and welfare.

"Transmission" − Any mechanism by which an infectious agent is spread from a source or reservoir to a person, including direct, indirect, and airborne transmission.

"Voluntary Compliance" – Deliberate consented compliance of a person or group of persons that occurs at the request of the Department or local health authority prior to instituting a mandatory order for isolation, quarantine, closure, physical examination, testing, collection of laboratory specimens, observation, monitoring, or medical treatment pursuant to this Subpart.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

SUBPART I: REGISTRIES

Section 690.1500 Multi-Drug Resistant Organism Registry

a) This Section establishes a Multi-Drug Resistant Organism Registry to collect data on persons entering health care facilities who have been diagnosed with an MDRO infection. Options for treating patients with MDRO infections are often limited, and MDRO infections are associated with increased lengths of stay, costs

and mortality. The Registry is established to protect patients and to stop the spread of communicable disease in health care facilities.

b) MDROs to be included in the registry include non-duplicative MDROs considered to be of epidemiologic importance due to either severity of clinical disease, potential for transmission of genetic elements, or opportunities for effective control efforts.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 690.1510 Entities Required to Submit Information

The Department requires the following health care facilities to report patient MDRO incident information:

a) Hospitals;

b) Hospital-affiliated clinical laboratories;

c) Independent or free-standing laboratories;

d) Long-term care facilities; and

e) Long-term acute care hospitals (LTACHs)

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 690.1520 Information Required to be Reported

a) A facility required to submit MDRO information shall report each MDRO incidence, as specified in this Section, to the Department.

b) The information to be reported shall be provided in a format designated by the Department and may be submitted either by direct electronic transmission or entry into a website. The information to be reported is divided into four subject areas, each containing a particular set of information. The four subject areas of the incidence report shall include the following:

1) Patient Data and Address − patient's full name (including maiden name, when applicable and available), last four digits of the Social Security number, telephone number and residential address, including street address, city, county, state and postal code;

2) Personal Data − patient's birthdate, age, sex, race and ethnicity;

3) Culture Data − culture acquisition date, antibiotic susceptibility profile, microbial genus and species when available, and specimen source (e.g., blood, urine); and

4) Facility Data − facility identification number provided by the Department, the medical record number, and the date of admission.

c) Each MDRO report shall be submitted within one month after the culture acquisition date.

d) Each reporting facility shall provide the Department or the Department's designee access to information from all medical, pathological and other pertinent records and logs related to the MDRO diagnosis, treatment and follow-up for the purposes of quality control, rapid case ascertainment and patient follow-up.

e) Every reporting entity shall provide access to information from all medical, pathological and other pertinent records and logs related to MDRO diagnosis and treatment for the purposes of patient record review specified for research studies or for rapid case ascertainment related to MDRO prevention and control conducted by the Department and that have been approved, after appropriate review by the Department, for assisting protection of human subjects.

f) Beginning September 1, 2013, reporting facilities shall report all MDROs related to the Enterobacteriaceae family, particularly those organisms that are non-susceptible to any carbapenem antibiotic. Other reportable MDROs will be phased in as necessary to protect the public health.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 690.1530 Methods of Reporting MDRO Registry Information

a) All patients identified at a reporting facility with a non-duplicative MDRO recovered from any specimen source are reportable to the Registry within one month after the culture acquisition date.

b) A reporting facility may report MDRO infections by one of the following methods:

1) Option #1. Electronic Reporting: Health care facilities that have the capacity to submit laboratory data electronically shall use this option.

2) Option #2. Manual Entry into a Website: Facilities that do not have the capacity to submit laboratory data electronically shall submit the data through a Department-approved website.

c) All reporting facilities are responsible for complete case finding, which means identifying all non-duplicate MDRO isolates.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 690.1540 Availability of Registry Information

a) The Department will use information in the MDRO Registry for the following purposes:

1) To provide appropriate information to a physician or institution providing care or treatment to a person;

2) To alert health care facilities of the admission of a patient with an MDRO infection; and

3) To assess the burden of MDROs in health care facilities located in Illinois.

b) The Department will maintain the confidentiality of information in the MDRO Registry that would identify individual patients. The Department will handle confidentiality of MDRO Registry information as set forth in Section 690.200(d).

c) The Department may release summary statistics from the MDRO Registry to highlight or prevent a population based public health problem or to highlight the state or regional burden of MDROs. Any summary statistics released by the

Department will not reveal the identity of the reporting health care facility or a patient.

d) The availability of MDRO Registry information will be in accordance with the Health and Hazardous Substances Registry Code (77 Ill. Adm. Code 840.30(a), (b), (c), (d), (e), (f), (g), (j) and (k)).

(Source: Added at 37 Ill. Reg. _____, effective _____)

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NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Private Sewage Disposal Code

2) Code Citation: 77 Ill. Adm. Code 905

3)

Section Numbers:	Proposed Action:
905.10	Amend
905.15	Amend
905. 20	Amend
905.30	Amend
905.40	Amend
905.50	Amend
905.55	Amend
905.60	Amend
905.70	Amend
905.80	Amend
905.90	Amend
905.95	Amend
905.96	Amend
905.100	Amend
905.110	Amend
905.115	New
905.120	Amend
905.125	Amend
905. 130	Amend
905. 135	New
905.140	Amend
905.180	Amend
905.190	Amend
905.200	Amend
905.205	Amend
905.APPENDIX A.ILLUSTRATION C	Amend
905.APPENDIX A.ILLUSTRATION D	Amend
905.APpENDIX A.ILLUSTRATION I.EXHIBIT E	Amend
905.APPENDIX A.ILLUSTRATION J.EXHIBIT C	Amend
905.APPENDIX A.ILLUSRTATION J.EXHIBIT D	Amend
905.APPENDIX A.ILLUSTRATION L.EXHIBIT C	Amend
905.APPENDIX A.ILLUSTRATION M.EXHIBIT A	Amend
905.APPENDIX A.ILLUSTRATION M.EXHIBIT B	Amend
905.APPENDIX A.ILLUSTRATION N.EXHIBIT A	Amend

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905.APPENDIX A.ILLUSTRATION N.EXHIBIT B	Amend
905.APPENDIX A.ILLUSTRATION N.EXHIBIT C	Amend
905.APPENDIX B	Amend

4) Statutory Authority: Private Sewage Disposal Licensing Act [225 ILCS 225]

5) A Complete Description of the Subjects and Issues Involved:

Amendments to each Section are as follows:

Section 905.10 – Provides new definitions and clarification to existing definitions.
Section 905.15 – Provides additional references and updates to standards and guides for the design and performance of private sewage disposal systems.
Section 905.20 – Provides updates and clarification on prohibited influent, water softeners, pipe sizing, electrical devices and alarms. Provides site restrictions for areas to be utilized for a subsurface seepage component of a private sewage disposal system.
Section 905.30 – Provides the addition of subsurface drip irrigation system technologies approved by the Department and a list of approved technologies. It removes the mound code as an approved technology.
Section 905.40 – Incorporates NSF Standard 46 requirements for filters and provides grammatical updates and clarification.
Section 905.50 – Provides amendments for the use of a NSF Standard 40 private sewage disposal system and pretreatment devices.
Section 905.55 – Provides amendments for the use of soil investigations for determining soil suitability on a site and restrictions on percolation tests; grammatical updates, clarifications, soil identification for determining the size and type of private sewage disposal system to be utilized.
Section 905.60 – Provides amendments on using soil information to size a subsurface seepage system, evaluation of a site, use of artificial drains, addition of subsurface drip irrigation systems and clarifications.
Sections 905.70, 905.80, 905.90, 905.95, 905.96 - Provides grammatical updates and clarifications.
Section 905.100 – Provides amendments for maintaining a list of NSF approved systems and components, in addition to grammatical updates and clarifications.
Section 905.110 – Provides language for compliance for surface discharging private sewage disposal system with an NPDES permit, limitations on common collectors, discharges to a 2/3 size subsurface seepage field and effluent limitations.
Section 905.115 – Provides language for the compliance with an NPDES permit when one is required.

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Section 905.120 – Provides amendments that all surface discharges be disinfected, NSF Standard 46 compliant and location of disinfection devices.
Section 905.125 – Provides grammatical updates and clarifications.
Section 905.130 – Provides for the abandonment of privies, removal of portable toilet language and provides grammatical updates and clarifications.
Section 905.135 – Provides an additional Section for portable toilet regulations covering use, design, cleaning, transporting, licensing a business and certifying individuals.
Section 905.140 – Provides amendments on when a holding tank can be used as well as grammatical updates and clarifications.
Section 905.180 – Provides amendments to fees for exam, lowers the required minimum test score to pass, consequences if an individual fails to attend an exam and a regulator exemption with requirements.
Section 905.190 – Provides amendments acknowledging by signature the requirements of maintenance for a private sewage disposal system and grammatical updates and clarifications.
Section 905.200 – Provides amendments to fees for licenses, addition of portable toilet license and certificate requirements.
Section 905.205 – Provides grammatical updates and clarifications.
Section 905.Appendix A, Section 905.Illustration C – Provides updates to ASTM standards.
Section 905.Appendix A, Section 905.Illustration D – Provides amendments to vertical separation distances for discharging points and Class V systems.
Section 905.Appendix A, Section 905.Illustration I, Section 905. Exhibit E – Provides amendments on the limitations of the design of chamber systems in a subsurface seepage system.
Section 905.Appendix A.Illustration J. Exhibit C;
Section 905.Appendix A.Illustration J. Exhibit D;
Section 905.Appendix A.Illustration L. Exhibit C;
Section 905.Appendix A.Illustration M. Exhibit A;
Section 905.Appendix A.Illustration M. Exhibit B;
Section 905.Appendix A.Illustration N. Exhibit A;
Section 905.Appendix A.Illustration N. Exhibit B;
Section 905.Appendix A.Illustration N. Exhibit C;
Section 905.Appendix B – Provides amendments to update and clarify appendices.

The economic effect on this proposed rulemaking is unknown. Therefore, the Department requests any information that would assist in calculating this effect.

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The Department anticipates adoption of this rulemaking approximately six to nine months after publication of the Notice in the *Illinois Register*.

6) Published studies or reports, and sources of underlying data used to compose this rulemaking: None

7) Will this rulemaking replace any emergency rulemaking currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? Yes

10) Are there any other proposed rulemakings pending on this Part? No

11) Statement of Statewide Policy Objectives: This rulemaking does not create or expand any state mandates on units of local government.

12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking:

Interested persons may present their comments concerning this rulemaking within 45 days after the publication of this issue of the *Illinois Register* to:

Susan Meister
Division of Legal Services
Illinois Department of Public Health
535 W. Jefferson St., 5th floor
Springfield, Illinois 62761

217/782-2043
e-mail: dph.rules@illinois.gov

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities and not for profit corporations affected: Private sewage disposal systems installation contractors, private sewage disposal system pumping contractors and private sewage disposal system owners

B) Reporting, bookkeeping or other procedures required for compliance: None

C) Types of professional skills necessary for compliance: None

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14) Regulatory Agenda on which this rulemaking was summarized: January 2012

The full text of the Proposed Amendments begins on the next page:

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

TITLE 77: PUBLIC HEALTH
CHAPTER I: DEPARTMENT OF PUBLIC HEALTH
SUBCHAPTER r: WATER AND SEWAGE

PART 905
PRIVATE SEWAGE DISPOSAL CODE

Section	
905.10	Definitions
905.15	Incorporated and Referenced Materials
905.20	General Requirements
905.30	Approved Private Sewage Disposal Systems
905.40	Septic Tanks
905.50	Distribution Boxes
905.55	Subsurface Seepage System Design Requirements
905.60	Subsurface Seepage System Construction Requirements
905.70	Buried Sand Filters
905.80	Re-circulating~~Recirculating~~ Sand Filter
905.90	Waste Stabilization Ponds
905.95	Illinois Raised Filter Bed
905.96	Peat Filter Systems
905.100	Aerobic Treatment Plants and NSF International/ANSI Standard 40 Wastewater Treatment Systems
905.110	Effluent Discharges
905.115	NPDES Permit Compliance
905.120	Disinfection
905.125	Pumps, Pumping/Dosing Chambers, and Ancillary Equipment
905.130	Human Waste Disposal
905.135	Portable Sanitation
905.140	Holding Tanks
905.150	Sanitary Dump Stations
905.160	Swimming Pool Wastewater
905.170	Servicing, Cleaning, Transporting and Disposing of Wastes from Private Sewage Disposal Systems
905.180	Examinations for Licensure
905.190	Installation Approval
905.200	Licenses and Fees
905.205	Civil Penalties and Time Allowances for Corrective Action
905.210	Notification of Disposal Site (Repealed)

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NOTICE OF PROPOSED AMENDMENTS

905.APPENDIX A	Illustrations and Exhibits
905.ILLUSTRATION A	Quantity of Sewage Flows
905.ILLUSTRATION B	Approved Plastic Pipe Materials (Repealed)
905.ILLUSTRATION C	List of Approved Plastic Pipe for Private Sewage Disposal System
905.ILLUSTRATION D	Location of Components of Private Sewage Disposal Systems
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905.APPENDIX B Contact Information for the Central and Regional Offices~~Telephone or Address Inquiries to the Regional Office~~

AUTHORITY: Implementing and authorized by the Private Sewage Disposal Licensing Act [225 ILCS 225].

SOURCE: Filed October 19, 1974, effective October 25, 1974; rules repealed, new rules adopted at 6 Ill. Reg. 3095, effective March 9, 1982; amended at 8 Ill. Reg. 8552, effective June 4, 1984; codified at 8 Ill. Reg. 19821; amended at 9 Ill. Reg. 20738, effective January 3, 1986; amended at 10 Ill. Reg. 11054, effective July 1, 1986; amended at 20 Ill. Reg. 2431, effective March 15, 1996; amended at 23 Ill. Reg. 5080, effective April 10, 1999; amended at 27 Ill. Reg. 3074, effective February 10, 2003; amended at 37 Ill. Reg. _____, effective _____.

Section 905.10 Definitions

In addition to the definitions contained in the Private Sewage Disposal Licensing Act [225 ILCS 225], the following definitions shall apply:

"Act" means the Private Sewage Disposal Licensing Act [225 ILCS 225].

"Aerobic Treatment Plant" means equipment or devices for the treatment of sewage by the forced addition of air or oxygen.

"Ag~~.~~ Experiment Station" means the University of Illinois at Urbana-Champaign Agricultural Experiment Station.

"Approved" or "Approval" means accepted by or acceptable to the Department or local authority.

"Approved Certification Agency" means an organization that has been accredited by the American National Standards Institute (ANSI) and has been found to meet the requirements specified in the International Organization for Standardization (ISO)/International Electrotechnical Commission Guide 65 to evaluate wastewater treatment units and components for compliance with National Sanitation Foundation (NSF) International/ANSI Standards.

~~"ASTM" means the American Society for Testing and Materials.~~

"Building Drain" means that part of the lowest horizontal piping of a drainage system that receives the discharge from soil, waste and other drainage pipes inside the walls of the building and conveys it to the building (house) sewer. The building drain's developed length terminates 5 feet outside the building foundation wall.

"Building Sewer" means that part of the horizontal piping of a drainage system that~~which~~ extends from the end of the building drain, receives the discharge of the building drain and conveys it to a public sanitary sewer or~~,~~ private~~ sewer, individual~~ sewage disposal system~~, or other point of disposal~~. The building sewer commences 5 feet outside the building foundation wall.

"Clear Water" means cooling water and condensate water from refrigeration or air conditioning equipment, cooled condensate from steam heating systems and sub-soil drainage.

"Common Area" means the property that is used by all owners or tenants for a private sewage disposal system.

"Common Collector" means an underground~~,~~ enclosed conduit designed to carry treated sewage effluent exclusive of storm water and that serves more than one property. ~~stormwater from 3 or fewer properties provided the combined treated sewage effluent is less than 1500 gallons per day and has a surface discharge. An example of a common collector is a solid plastic pipe installed to carry treated sewage effluent from 2 or 3 discharging systems with a combined design flow of less than 1500 gallons per day. Examples of what is not a common collector are road ditches, field ditches, curbs and gutters, grassed waterways, concrete or other lined drainage ways.~~

"Component" means an integral part of a private sewage disposal system that is necessary for the satisfactory design, construction and operation of the system.

"Discharge Point" means the point at which treated effluent discharges from an approved private sewage disposal system, which is compliant with Section 905.110(a).

"Domestic Sewage" means waste water derived principally from dwellings, business or office buildings, institutions, food service establishments and similar facilities.

"Effective Size" means the size of screen opening where 90 percent by weight of a sample of filter media is retained on the screen and 10 percent passes through the screen.

"Effluent" means treated or partially treated liquid discharged from a private sewage disposal system or a component.

"Estimated Seasonal High Water Table" means the highest level to which the soil is saturated, as determined by direct observation or as may be determined by a Soil Classifier examining additional information.

"Gravelless Seepage System" means the use of approved perforated 8-inch or 10-inch diameter~~,~~ filter-wrapped~~,~~ plastic pipe~~,~~ in lieu of 4-inch pipe and gravel, in subsurface fields and serial distribution systems.

"Hot Tub" means an artificial container of water with a liquid capacity greater than 100 gallons and designed with a mechanical air injection system or~~and/or~~ re-circulating~~recirculating~~ device. These devices may filter or~~and/or~~ disinfect the water for reuse and are not intended to be drained between uses.

"Influent" means something that flows into a private sewage disposal system or a component.

"Limiting Layer" means a horizon or condition in the soil profile or underlying strata that~~which~~ includes:

An estimated~~A seasonal~~ high water table, whether perched or regional~~, determined by direct observation of the water table or indicated by soil mottling where common mottles comprise at least 2% to 20% of the soil, in a progressive downward direction in the soil~~.

Masses of loose rock fragments, including gravel, with insufficient fine soil to fill the voids between the fragments.

Rock formation, other stratum or soil condition that~~which~~ is so slowly

permeable that it effectively limits downward passage of effluent.

"Liquid Capacity" means the volume of a tank below the invert of the outlet line.

"Local Authority" means a local unit of government that~~which~~ enforces a private sewage disposal ordinance that~~which~~ has been approved by the Department; or a local health department that~~which~~ has been designated an agent of the State for conduct of the Private Sewage Disposal Program.

"Maintained and Serviced" means the tasks, procedures and inspections required by the manufacturer of the component/system or the Department for the private sewage disposal system to operate within the parameters and requirements of this Part and any other restrictions established as part of the system approval or as part of a variance.

"Minimum Slope" means the slope required for treated effluent to travel in the designed direction of flow.

"Non-Residential Property" means any property that is not residential property.

"NPDES Permit" means any general or individual National Pollutant Discharge Elimination System permit issued by the Illinois Environmental Protection Agency or the United States Environmental Protection Agency.

~~"NRCS" means the USDA Natural Resource Conservation Service.~~

"NSF International" means the National Sanitation Foundation International, an independent testing laboratory.

"NSF International/ANSI Standard 40 Wastewater Treatment System" means any system that has been certified by an approved certification agency to meet NSF International/ANSI Standard 40, Residential Wastewater Treatment Systems.

"Person" means any individual, group of individuals, association, trust, partnership, corporation, limited liability company, person doing business under an assumed name, or any other entity.

"Portable Potable Hand Washing Unit" means a self-contained, movable, potable water unit equipped with a waste-receiving holding container that may be moved or transported from site to site.

"Portable Sanitation Business" means any partnership, company, limited liability company, corporation or individual that sells, rents, leases, transports, services, cleans, sanitizes or maintains a portable toilet or portable potable hand washing unit or pumps, or transports or disposes of waste from portable toilets or portable potable hand washing units.

"Portable Sanitation Technician" means any individual who is certified by the Department to be an employee for a portable sanitation business and who has completed the training required by this Part.

"Portable Sanitation Technician Trainee" means any individual who is certified by the Department as an employee for a portable sanitation business for less than one year.

"Portable Toilet" means a self-contained, movable unit equipped with a waste-receiving holding container that may be moved or transported from site to site.

"Proper Operation" means operation of a system within the parameters and requirements of this Part, the Act and any other restrictions established as part of the system approval or as part of a variance.

"Residential Property" means a single-family home or multi-family unit that is intended for occupation as living quarters and~~that~~ is not used to conduct any business that generates wastewater or domestic sewage.

"Septage" means the solid and liquid wastes removed from private sewage disposal systems.

"Shall" means that the stated provision is mandatory.

"Soil Boring" means an observation pit, dug by hand or backhoe, or an undisturbed soil core taken intact and undisturbed by a probe.

"Soil Classifier" means one of the following:

A Certified Professional Soil Classifier (CPSC) who is certified by~~soil classifier of~~ the Illinois Soil Classifiers Association (ISCA) or a certified soil classifier with the American Registry of Certified Professionals in Agronomy, Crops and Soils (ARCPACS).

A person who is a full member or associate member of the Illinois Soil Classifiers Association (ISCA), provided that direct supervision is provided to this person by an ISCA Certified Professional Soil Classifier or ARCPACS certified soil classifier who accompanies the person on at least 25% of the soil investigations and reviews and signs all of that person's soil investigation reports.

"Sub-soil Drainage" means groundwater such as runoff water, seepage water or clear water from the soil that is free from domestic sewage.

"Subsurface Seepage System" means a subsurface seepage field or~~,~~ seepage bed~~, or an 8 inch- or 10 inch- gravelless seepage system~~.

"Uniformity Coefficient" means a number obtained by dividing that size of sand in millimeters of which 60% by weight is smaller, by that size of sand in millimeters of which 10% by weight is smaller.

"Waste" means either human waste or domestic sewage or both.

"Wastewater Source" means any equipment, facility~~,~~ or other source of any type whatsoever that discharges wastewater, directly or indirectly, to the waters of the State.

"Water Table" means the upper limit of the portion of the soil or rock formation that~~which~~ is completely saturated with water. ~~The seasonal high water table is the highest level to which the soil is saturated, as may be indicated by mottling (soil color patterns).~~

Soil science terms used throughout the text of this Part~~Code~~ are defined in the Soil Science Society of America, Glossary of Soil Science Terms ~~(July 1987)~~ unless otherwise defined.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.15 Incorporated and Referenced Materials

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

The following materials~~standards of nationally recognized organizations and federal and State regulations~~ are incorporated or referenced in this Part:

a) The following materials are incorporated by reference:

1) NSF International/ANSI~~ANSI/NSF~~ Standard 46, Evaluation of Components and Devices Used in Wastewater Treatment Systems (October 22, 2004~~May 2, 2002~~) published by:

NSF International
789 Dixboro Road
Ann Arbor, Michigan 48105

Referenced in Sections 905.40 and 905.120~~Section 905.30~~

2) NSF International/ANSI~~ANSI/NSF,~~ Standard 40, Residential Wastewater Treatment Systems (August 1, 2005~~July 12, 2000~~) published by:

NSF International
789 Dixboro Road
Ann Arbor, Michigan 48105

Referenced in Section 905.100

3) NSF International/ANSI~~ANSI/NSF,~~ Standard 41, Non-Liquid Saturated Treatment Systems (March 28, 2005~~1998~~) published by:

NSF International
789 Dixboro Road
Ann Arbor, Michigan 48105

Referenced in Section 905.130

4) American Society for Testing and Materials (ASTM) required standards and dates that are not listed in subsection (a)(5) are listed under ~~Section 905.~~Appendix A, Illustration C. A list~~List~~ of approved plastic pipe for private sewage disposal system uses and standards may be obtained from:

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, Pennsylvania 19428-2959

Referenced in Sections 905.40, 905.60, 905.70

5) The following ASTM standards for the physical properties and characteristics of gravelless drainage pipe, which may be obtained from:

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, Pennsylvania 19428-2959

ASTM D4632-08 (2008)
ASTM D3786-09 (2009)
ASTM D737-08 (2008)
ASTM F662-86 (1992)

6)~~5)~~ Standard Methods for Examination of Water and Wastewater (21st Edition, October 2005) published by:

American Public Health Association
1015 8th Street
Washington DC~~, D.C.~~ 20036

Referenced in Section 905.110

7)~~6)~~ Glossary of Soil Science Terms (2001~~July 1987~~) published by:

~~The~~ Soil Science Society of America
677 South Segoe Road
Madison, Wisconsin 53711

Referenced in Section 905.10

8)~~7)~~ ~~Title 40 of the Code of Federal Regulations,~~ Standards for the Use or Disposal of Sewage Sludge (40 CFR 503) (2008)

Referenced in Section 905.170

9)~~8)~~ National Electrical Code, 2005~~1993~~ Edition, published by:

National Fire Protection Association
1 Batterymarch Park
Quincy, Massachusetts 02269

Referenced in Section 905.20

10) International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) Guide 65 (December 18, 2006), published by:

ISO Central Secretariat
International Organization for Standardization (ISO)
1, ch. de la Voie-Creuse
Case postale 56
CH-1211 Geneva 20
Switzerland

IEC Central Office
3, rue de Varembé
PO Box 131
CH-1211 Geneva 20
Switzerland

Referenced in Section 905.100

11) Field Book for Describing and Sampling Soils ver. 2.0 (2002 Edition)

National Resources Conservation Service
US Department of Agriculture
1400 Independence Ave., SW
Washington DC 20250

Referenced in Section 905.55

12) Soil Taxonomy 1999 (2nd edition)

US Department of Agriculture
1400 Independence Ave., SW
Washington DC 20250

Referenced in Section 905.55

13) Soil Survey Manual 1993

Soil Conservation Service
US Department of Agriculture
1400 Independence Ave., SW
Washington DC 20250

Referenced in Section 605.55

b) The following materials are referenced in this Part:

1) Department of Public Health administrative rules and statutes~~regulations~~

~~A) Private Sewage Mound Code (77 Ill. Adm. Code 906)~~

~~Referenced in Section 905.30~~

A)~~B)~~ Illinois Plumbing Code (77 Ill. Adm. Code 890)

Referenced in Sections 905.20, 905.140, 905.150 and Appendix A.~~:~~ Illustration C

B)~~C)~~ Recreational Area Code (77 Ill. Adm. Code 800)

Referenced in Section 905.150

C)~~D)~~ ~~Rules of~~ Practice and Procedure in Administrative Hearings (77 Ill. Adm. Code 100)

D) Plumbing License Law [225 ILCS 320]

2) Pollution Control Board administrative rules and statutes~~regulations~~

A) Introduction (35 Ill. Adm. Code 301)

Referenced in Section 905.110

B) Permits (35 Ill. Adm. Code 309)

Referenced in Sections 905.110 and 905.170

C) Waste Disposal (35 Ill. Adm. Code Subtitle G)

Referenced in Sections 905.20 and 905.140

D) Classification of Injection Wells (35 Ill. Adm. Code 704.106)

Referenced in Appendix A, Illustration D

3) Illinois Department of Transportation Specifications for Road and Bridge Construction (January 1, 2007~~2002~~) published by:

Illinois Department of Transportation
Manuals Office, Room 128~~012~~
2300 S. Dirksen Parkway
Springfield, Illinois 62764

Referenced in Section 905.95

4) Illinois Highway Code [605 ILCS 5/9-123]

Referenced in Section 905.110

c) All incorporations by reference of federal regulations and the standards of nationally recognized organizations refer to the regulations and standards on the date specified and do not include any amendments or editions~~additions or deletions~~ subsequent to the date specified.

d) All citations to federal regulations in this Part concern the specified regulation in the 2005~~1994~~ Code of Federal Regulations, unless another date is specified.

e) All materials incorporated by reference are available for inspection and copying at

the Illinois Department of Public Health~~Department's Central Office~~, Division of Environmental Health, 525 West Jefferson, Springfield, Illinois 62761.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.20 General Requirements

a) Rate of Flow for Domestic Sewage. Each unit of the private sewage disposal system shall be designed to treat the volume of domestic sewage discharged to it. The volume of sewage flow shall be determined from Appendix A, Illustration A ~~of this Part~~. For non-residential establishments, the Department will consider the use of actual flow volumes obtained from similar installations in lieu of the quantities contained in Appendix A, Illustration A~~ of this Part~~, when the flow data is documented. Examples of the documentation that could be accepted would be actual measurements of the quantity of wastewater, or water use receipts. In the design of a private sewage disposal system, peak flows shall be designed for ~~and/~~or attenuated. ~~When the sewage flow exceeds 1500 gallons per day, and there is a surface discharge, then approval shall be obtained from the Illinois Environmental Protection Agency.~~

b) Type of Waste. A private sewage disposal system shall be designed to receive all waste from the buildings served. ~~No cooling water, groundwater, discharge from roof drains, discharge from footing tile drains, swimming pool wastewater, or other clear water discharges shall be directed to the private sewage disposal system. Drains or fixtures receiving any product other than domestic sewage shall be discharged to a holding tank and not to a private sewage disposal system.~~

1) Prohibited Influent. No sub-soil drainage, discharge from roof drains, swimming pool wastewater or clear water discharges shall be directed to the private sewage disposal system.~~Backwash water from a water softener shall discharge to one of the following:~~

~~A) A septic tank followed by a seepage field, sand filter or waste stabilization pond.~~

~~B) A separate subsurface seepage system, provided the seepage field is designed to accommodate the flow from this device on a daily basis. A septic tank is not required in front of a seepage field receiving flow from this device.~~

2) Hot Tub Wastewater. Wastewater generated by a hot tub or ~~other~~ similar device shall be discharged to one of the following:

A) A separate subsurface seepage system, provided that the seepage field is designed to accommodate the liquid capacity of the hot tub on a daily basis. A septic tank is not required in front of a seepage field receiving flow from this device.

B) The seepage field serving the domestic wastewater flow, provided the seepage field is increased in size to accommodate the additional flow from the hot tub on a daily basis. This drainage shall be piped around the septic tank and directly into the seepage field.

3) Motorized Equipment. Waste products, such as automotive grease, oils, solvents~~,~~ and chemicals, shall not discharge to a private sewage disposal system. These waste products shall be handled according to rules for disposal of oil, gas and grease promulgated under the Environmental Protection Act, or according to 35 Ill. Adm. Code, Subtitle G, or shall be taken to an oil and gas reclamation center. The floor drain of any non-residential property that meets the requirements of subsection (b)(3)(A) or (B)~~ of this Section~~, and is connected to a public sewer, shall be connected to an approved gas and oil interceptor meeting the requirements of Section 890.520 of the Illinois Plumbing Code. Wastes from floor drains in areas where vehicles or motorized equipment are serviced and parked shall be treated in accordance with the following:

A) For any non-residential property in which a floor drain may receive fluids from vehicle or motorized equipment repair or maintenance activities, floor drains shall be connected to a public sewer or holding tank and not to a private sewage disposal system. Repair and maintenance facilities shall include, but shall not be limited to, service stations and auto body, muffler, transmission, small engine, and brake repair shops. Floor drains in any facility that performs vehicle or motorized equipment repair work shall be connected to a public sewer or holding tank. If the floor drain is connected to a public sewer, then the floor drain shall be connected to an approved gas and oil interceptor meeting the requirements of

Section 890.520 of the Illinois Plumbing Code. If the floor drain is connected to a holding tank, a gas and oil interceptor is not required. The holding tank shall be constructed of the same materials required for gas and oil interceptors.

B) For any non-residential property on~~in~~ which vehicles or motorized equipment are parked or stored and repair or maintenance is~~are~~ not performed, floor drains shall~~may~~ discharge to a public sewer or a private sewage disposal system, provided that floor drains are ~~only~~ used only to receive water from motorized equipment or vehicle washing or to drain melted snow. When floor drains in such properties are connected to a private sewage disposal system, the system shall~~must~~ be increased in size based upon the anticipated daily flow. When a maintenance area is adjacent to a parking area, physical barriers, such as a raised curb or recessed floor in the maintenance area, shall~~must~~ be provided to assure that oil and gas are not discharged to floor drains.

C) For any residential property with a garage of any size, floor drains shall~~may~~ discharge directly to a private sewage disposal system. No increase in size of the residential private sewage disposal system is required to handle this liquid waste.

4) Drains or fixtures receiving any product other than domestic sewage or wastewater specified in subsection (b)(2) shall be discharged to a holding tank and not to a private sewage disposal system.

5) Water Softener Wastewater. Backwash water from a water softener or similar device shall be discharged to one of the following:

A) A separate subsurface seepage system, provided that the seepage field is designed to accommodate the liquid capacity of the water softener on a daily basis. A septic tank is not required in front of a seepage field receiving flow from this device.

B) A separate building drain, in accordance with the Illinois Plumbing Code, that will discharge to a subsurface seepage system, provided that the seepage field is designed to accommodate the flow from

this device on a daily basis. A septic tank is not required in front of a seepage field receiving flow from this device.

c) Individual Service. The use of a private sewage system to serve more than one property is prohibited except where a common property is provided, under joint ownership of the users, or where the system is under public jurisdiction or managed by a district established for the maintenance of these~~such~~ systems.

d) Water and Sewer Line Separation. The following criteria shall govern the separation of water supply lines and sewer lines:

1) Horizontal Separation. Sewers shall be installed at least 10 feet horizontally from any existing or proposed water line. When local conditions prevent a lateral separation of 10 feet, a sewer may be laid closer than 10 feet to a water line provided that the elevation of the crown of the sewer is at least 18 inches below the invert of the water line.

2) Crossings. Where sewer lines must cross water lines, the sewer line shall be laid at ~~such~~ an elevation so that the crown of the sewer line is at least 18 inches below the invert of the water line. This vertical separation shall be maintained for that portion of the sewer line located within 10 feet horizontally of any water line it crosses. When sewer lines must cross above water lines, the sewer lines shall be Schedule 40 or equivalent material with watertight joints.

e) Sanitary Sewer. New or renovated private sewage disposal systems shall not be approved where a sanitary sewer operated and maintained under permit of the Illinois Environmental Protection Agency is available for connection. A sanitary sewer is available for connection when it is within 300~~200~~ feet of a residential property or a non-residential property with a sewage flow less than 1500 gallons per day, or within 1000 feet of a non-residential property with a sewage flow greater than or equal to 1500 gallons per day, unless a physical barrier or local ordinance exists that~~which~~ prevents connection to the sewer. If connection from the property to the sanitary sewer cannot be made with an individual line (i.e., 4" inch~~"~~ line), then a private sewage disposal system may be installed.

f) Acceptable Pipe Materials~~.~~

1) All piping located more than 5 feet from the building foundation, used to

convey wastewater to a private sewage disposal system, shall be considered a part of the private sewage disposal system and shall be watertight. This piping shall be ductile iron, vitrified clay~~,~~ or plastic pipe. Only vitrified clay or plastic pipe shall be used from the septic tank and after the distribution box (where used). Perforated pipe or open-jointed tile shall be used only as provided in this Part~~Code~~.

2) Use of plastic pipe and fittings shall comply with~~conform to~~ the uses designated in Appendix A, Illustration C~~ of this Part~~.

3) Piping used to carry domestic sewage under areas such as driveways, roads~~,~~ or parking areas shall be Schedule 40 equivalent or greater.

g) Pipe Size and Slope~~.~~

1) All solid pipes carrying domestic sewage by gravity flow shall have a nominal diameter of at least 4 inches and a minimum slope of 12 inches per 100 feet.

2) Solid header lines used for equal distribution shall be level.

3) Solid pipes carrying treated effluent by gravity shall have a nominal diameter of 4 inches and a minimum slope to ensure designed flow within the system.

4) An alternative design for pipe sizing and slope may be proposed by an Illinois licensed Professional Engineer.

h) Prohibited Discharges. There shall be no discharge of raw or improperly treated domestic sewage to the surface of the ground or to farm tiles, streams, rivers, ponds, lakes~~,~~ or other collectors of water. Improperly treated domestic sewage is sewage that does not meet the effluent requirements of Section 905.110(d~~b~~) or sewage that~~which~~ comes directly from a septic tank or building sewer. Domestic sewage or effluent from any private sewage disposal system or component shall not be discharged into any well, cistern~~,~~ or basement or into any underground mine, cave, sinkhole or tunnel.

i) Pipe Length. Building sewers in excess of 50 feet in length that~~which~~ carry wastewater from the buildings served to the septic tank, distribution box or

aeration treatment plant shall be provided with at least one clean-out every 50 feet that terminates at grade.

j) Private Sewage Disposal System Development. The following factors shall govern the development of a private sewage disposal system:

1) Drainage. A private sewage disposal system shall not be located in areas where surface water will accumulate. The~~Provisions shall be made to minimize~~ flow of surface water over the private sewage system shall be minimized, for example, by~~. Examples of such provisions would be~~ the use of dikes, embankments, ditches or flow diverters.

2) Distances. The location of the various components of a private sewage disposal system shall comply with Appendix A, Illustration D~~ of this Part~~.

3) Area Reserved for Sewage Disposal. The area to be used for a private sewage disposal system shall be selected and maintained so that it is free from encroachment by driveways, accessory buildings, swimming pools, parking areas, buried lawn sprinkling systems and underground utility services, patios, slabs, additions to the original structure, or any other structure that~~which~~ limits free access to the system for maintenance, servicing or proper operation. The designated area for the subsurface seepage system shall be secured prior to construction or modifications to the site and shall be protected throughout the site development or construction process. The property owner or licensed contractor shall secure this area to deter any traffic, compaction of the soil, removal or addition of soil, or encroachment on the area of the proposed subsurface seepage system. Temporary fencing, posts and roping or a similar restrictive barrier may be used to restrict access. The area of the proposed private sewage disposal system shall be protected throughout the site development or construction process.

4) Creviced Limestone Formations. A subsurface seepage system shall not be constructed in an area where there is less than 4 feet of soil between the lowest point in a subsurface seepage system and the top of a creviced limestone formation. In areas where creviced limestone is known to occur, a soil boring to a depth of at least 4 feet below the bottom of the subsurface seepage system shall be made to verify that creviced limestone is not present.

k) Electrical Devices. All electrical devices shall be wired in accordance with the National Electrical Code or a municipal, county or local electrical code, whichever is more stringent.

1) Any component of a private sewage disposal system that ~~which~~ is electrically activated shall be provided with a visible and audible warning device ~~placed within the building served~~. ~~All electrical devices shall be wired in accordance with the National Electrical Code or a municipal, county, or local electrical code, whichever is more stringent.~~

2) Alarms installed after January 1, 2014 shall be located outside of the building served. The power supply for the alarm shall be on a dedicated circuit. The design of the alarm shall meet the requirements specified in Section 5.8 of NSF International/ANSI Standard 40. The alarm shall be housed in a weatherproof box.

3) Electrical devices installed after January 1, 2014 shall be provided with an electrical disconnect that is located within sight of, and not more than 50 feet away from, the device.

l) Variances. If conditions exist at a proposed installation that~~which~~ make ~~impractical or impossible~~ compliance with the requirements of this Part impractical or impossible, a variance may be requested by submitting to the Illinois Department of Public Health, Division of Environmental Health, or appropriate local authority a written proposal that is to be used in lieu of compliance with this Part. The~~Such~~ written request shall include pertinent data to support the proposal, such as soil conditions, water table elevations, drainage patterns and distances to water supplies ~~in order to support the request~~. The capability of the system to comply with the intent of this Part will be the basis for approval or denial of the variances. The Department or local authority will notify the applicant in writing of its decision to either grant or deny the variance. Construction shall not begin before a variance is requested and approved.~~A variance shall be requested and approved before construction begins.~~

m) Experimental Use Permits. If a private sewage disposal system or component is of a new ~~and/~~or innovative type and does not comply with the requirements of this Part~~Code~~, the homeowner or private sewage contractor or manufacturer may

request an experimental use permit. A~~Such a~~ request shall be submitted in writing to the Illinois Department of Public Health, Division of Environmental Health, and~~prior to~~ construction or installation shall not begin before a permit is requested and approved. The request~~, and~~ shall meet the following requirements:

1) The request shall specify the type of proposed system or component to be used and shall be accompanied by plans, specifications~~,~~ and engineering data to support the system's compliance with the general requirements under Section 905.20 and with the effluent criteria under Section 905.110 for surface discharges, if applicable.

2) Information (such as topographical or plat maps) regarding the location of each installation shall be provided to the Department.

3) The homeowner, private sewage disposal system installation contractor~~, and/~~or manufacturer shall provide the Department with proof that sufficient area is available for installation of an approved system if~~should~~ the experimental system fails~~fail~~.

4) The homeowner, private sewage disposal system installation contractor~~, and/~~or manufacturer shall guarantee in writing that the ~~replacement of the~~ experimental system will be replaced with an approved system if the experimental system fails to perform in accordance with any of the Sections of this Part, or with criteria established as a condition of~~to~~ approval of the system.

5) The private sewage disposal system installation contractor ~~and/~~or the manufacturer shall notify the homeowner, or the person obtaining the experimental use permit, of the ~~aforementioned~~ guarantee required by subsection (m)(4), and of the minimum standards of this Part that shall~~the Illinois Private Sewage Disposal Code which must~~ be met, as determined through the process described in subsections (n)(3) and (4) ~~of this Section~~ for developing criteria to be used in the evaluation of the experimental system.

6) Upon receipt of the information required by this subsection (m), the Department will review the experimental system to determine whether the proposed system is~~the system's capability of being considered~~ equal to or more stringent than applicable Sections in this Part~~Code~~, and will notify

the applicant, in writing, of its decision to approve~~grant~~ or deny the request for an experimental use permit. If the request is approved, the Department will issue an "Experimental Use Permit" for each installation, up to 30 installations in the State.

n) Experimental Use Evaluation.

1) A minimum of 10 experimental installations shall be evaluated before an unconditional approval will~~may~~ be granted.

2) The experimental permit shall be valid for a period of up to 2 years, during which time the Department will evaluate the performance of the experimental system. At the end of the 2 year evaluation period, the Department will determine~~make a determination as to~~ whether the system will be approved.

3) The Department, in consultation with the experimental use permit applicant, will~~shall~~ develop a test method for the experimental system, which ~~that~~ will include the following information:

A) purpose of the test;

B) length of the test;

C) analytical methods to be used;

D) wastewater characteristics;

E) loading requirements; and

F) test criteria, including installation procedures, operating procedures, site evaluation criteria, control system criteria, start-up procedures, sampling procedures, and observation procedures.

4) The Department, in consultation with the permit applicant, will~~shall~~ develop performance requirements that will detail the criteria to be used to evaluate the product to determine its ability to become an approved private sewage disposal system. The~~Such~~ performance requirements shall include, but are not limited to, ponding in subsurface systems indicating

that failure of the system is imminent.

5) The experimental system will be deemed unacceptable:

A) when sewage erupts from the ground;

B) when effluent from the system does not meet the criteria of Section 905.110(d); or

C) when the experimental system does not comply with the requirements of subsections (n)(3) and (4)~~ of this Section~~.

6) If ~~acceptable,~~ the experimental system is acceptable, it shall become an approved private sewage system. If ~~found to be unacceptable,~~ the experimental system is unacceptable, it shall not be approved for use as a private sewage disposal system and shall be replaced with an approved private sewage disposal system. The Department shall notify the applicant, in writing, of its determination.

7) A homeowner, private sewage contractor or manufacturer whose experimental system has been denied approval for use as a private sewage disposal system may request a hearing to appeal the Department's determination. The request shall be submitted in writing within 10 days after receipt of the Department's determination. The Department's ~~Rules of~~ Practice and Procedure in Administrative Hearings rules~~(77 Ill. Adm. Code 100)~~ shall apply to all proceedings conducted under this Section.

8) When the Department has designated an experimental system ~~has been designated by the Department~~ as an approved private sewage disposal system, the Department will amend this Part to include design, construction, operation and maintenance criteria for the newly approved system and will add the system to its~~a~~ list of approved systems~~ maintained by the Department~~.

o) Garbage Grinders. When garbage grinders are used in residential property, solids shall be retained by one of the following methods:

1) A solids retention tank constructed in accordance with Section 905.40 shall be placed between the wastewater source and the septic tank to

intercept solids from the garbage grinder. This tank shall receive waste from the garbage grinders or the kitchen wastes only. No other fixtures shall discharge into this tank. The solids retention tank shall be at least 50% in liquid volume of the septic tank sized for the waste from the rest of the property; however, the minimum size tank to be used shall be 500 gallons.

2) A septic tank receiving all flows from the property sized in accordance with Appendix A, Illustration F~~ of this Part~~.

p) Whenever an existing private sewage disposal system is repaired or replaced, that portion of the system being repaired or replaced shall comply with all of the requirements of this Part.

q) Maintenance of Private Sewage Disposal Systems

1) After January 1, 2014, as a condition of applying for an installation approval required by Section 905.190, the signature by the property owners on the installation approval submission/construction permit for any private sewage disposal system being installed, repaired or renovated serves as written acknowledgement that the property owners are aware of and accept the responsibility to service and maintain the private sewage disposal system in accordance with the Act and this Part.

2) The property owner or the private sewage disposal system owner shall maintain all maintenance records on forms provided or approved by the Department and make records available upon request by the Department or its agent.

3) After January 1, 2014, private sewage disposal systems installed and permitted under Section 905.190 are required to be maintained and serviced to ensure proper operation in accordance with the following:

A) Septic tank to a subsurface seepage system or septic tank followed by a sand filter discharging to a subsurface seepage system.

i) Private sewage disposal system septic tanks serving residential properties shall be evaluated prior to or within 3 years after the date of installation of the system. The

system may be evaluated by the homeowner, a Private Sewage Disposal System Installation Contractor, a licensed Environmental Health Practitioner, an Illinois licensed Professional Engineer, a representative of the Department, or an agent of the Department or local health department. The evaluation shall determine whether the tanks and all of the compartments of the private sewage disposal system have layers of scum and settled solids greater than 33% of the liquid capacity of the tank. If the layers of scum and settled solids are greater than 33%, the tanks and compartments shall be pumped out and maintenance shall be performed. After the first evaluation, the system shall be evaluated a minimum of once every 5 years. Depending on the system's use, the tanks and compartments may need to be evaluated and pumped more frequently.

ii) Private sewage disposal system septic tanks serving non-residential property shall be evaluated within 3 years after the date of installation of the system. The system may be evaluated by a Private Sewage Disposal System Installation Contractor, a licensed Environmental Health Practitioner, an Illinois licensed Professional Engineer, a representative of the Department, or an agent of the Department or local health department. The evaluation shall determine whether the tanks and all of the compartments of the private sewage disposal system have layers of scum and settled solids greater than 33% of the liquid capacity of the tank. If the layers of scum and settled solids are greater than 33%, the tanks and compartments shall be pumped out and maintenance shall be performed. After the first evaluation, the system shall be evaluated at minimum once every 3 years. Depending on the system's use, the tanks and compartments may need to be evaluated and pumped more frequently.

B) An aerobic treatment unit (ATU) requires evaluation and maintenance at least once every 6 months. The system may be evaluated by a Private Sewage Disposal System Installation Contractor, a licensed Environmental Health Practitioner, an

Illinois licensed Professional Engineer, a representative of the Department, or an agent of the Department or local health department. The homeowner of an ATU may conduct the inspection and maintenance as defined within the Act, but the inspection and maintenance shall be performed per the manufacturer's requirements to assure proper operation. If the required inspections and maintenance are not performed, the system is in violation of the Act and this Part.

C) Sand filters and waste stabilization ponds with surface discharges require an evaluation to determine whether the tanks and all of the compartments of the private sewage disposal system have layers of scum and settled solids greater than 33% of the liquid capacity of the tank. If the layers of scum and settled solids are greater than 33%, the tanks and compartments shall be pumped out and maintenance shall be performed. The system shall be evaluated a minimum of once every year. The system may be evaluated by a Private Sewage Disposal System Installation Contractor, a licensed Environmental Health Practitioner, an Illinois licensed Professional Engineer, a representative of the Department, or an agent of the Department or local health department. Depending on the system's use, the tanks and compartments may need to be evaluated and pumped more frequently. The homeowner of a sand filter or waste stabilization pond may conduct the inspection and maintenance as defined within the Act, but the inspection and maintenance shall be performed per the requirements of this Part to assure proper operation.

D) All other private sewage disposal systems that are not listed in subsection (q)(3)(A) through (C) shall be maintained in accordance with the manufacturer's specifications or based on a maintenance interval approved by the Department.

E) The owner of a private sewage disposal system may submit an alternative maintenance interval to the Department for approval. The Department will evaluate the alternative interval on a case-by-case basis. The approval is not transferable from owner to owner. Change in ownership or use of the private sewage disposal system will void the approval.

4) A failure to properly operate, maintain and have routine service conducted on a private sewage disposal system is a violation of the Act and this Part.

r) Installation Contractor On Site. A licensed Private Sewage Disposal System Installation Contractor shall be present at the site during construction, installation, repair, modification or maintenance of a private sewage disposal system. Cleaning, pumping, disposing and hauling of waste from a private sewage disposal system shall be done by a licensed Private Sewage Disposal System Pumping Contractor. *A person who owns and occupies a single family dwelling and who constructs, installs, maintains, services or cleans the private sewage disposal system which serves his/her single family residence shall not be required to be licensed under* this Section; *however, such person shall comply with all other provisions of* the Act and this Part. (Section 4 of the Act)

s) Construction and Excavation. Any construction or excavation performed by any individual other than the person who owns and occupies a single family dwelling shall be performed by a licensed Private Sewage Disposal System Installation Contractor or an individual under the direct supervision of a licensed Private Sewage Disposal Installation Contractor.

t) Alternative Technology. The Department may issue approval for a private sewage disposal system or a system component that has been approved by another governmental body or an approved certification agency, based upon, but not limited to, the review of the following information: submittals to other governmental bodies; analysis from third party testing; testing results from other governmental bodies; and historical use within the jurisdiction of other governmental bodies.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.30 Approved Private Sewage Disposal Systems

a) The following systems are approved for private sewage disposal when designed, constructed, operated, and maintained in accordance with this Part~~Code~~:

1) Septic tank, Imhoff tank or aerobic treatment plants followed by:

A) Subsurface seepage field;

B) Seepage bed;

C) Sand filter (buried or re-circulating~~recirculating~~);

D) Waste stabilization pond;

E) 8 inch or 10 inch gravelless seepage system;

F) Chamber system; ~~or~~

G) Peat filter system; or~~.~~

H) Subsurface drip irrigation system.

2) Aerobic treatment plant and NSF International/ANSI Standard 40 wastewater treatment systems discharging to supplementary treatment or to the surface, as provided in Sections~~Section~~ 905.100 and 905.110.

3) Privies, chemical toilets, re-circulating~~recirculating~~ toilets, incinerator toilets or~~,~~ compost toilets.

~~4) Mounds designed in accordance with the requirements of the Private Sewage Mound Code (77 Ill. Adm. Code 906).~~

4)~~5)~~ Holding tanks installed in accordance with Section 905.140.

5)~~6)~~ Any other system for which a variance in accordance with Section 905.20(l) has been issued or for which an experimental permit in accordance with Section 905.20(m) has been issued.

6)~~7)~~ Illinois raised filter bed preceded by a batch treatment aeration system.

7) Technologies approved by the Department under Section 905.20(t).

b) The Department will maintain a list of alternative components and technologies that have been approved under the Act.~~All other systems or components are not approved.~~

c) All other systems or components are not approved.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.40 Septic Tanks

a) Septic Tank Approval. Manufacturers of prefabricated septic tanks shall submit a set~~3 sets~~ of plans for each size and configuration of septic tank to the Department for approval. Plans~~Such plans~~ shall be drawn to scale and show all dimensions, baffles, tees, cleanouts~~,~~ and material specifications. The Department will provide a~~A~~ written approval for each size tank ~~shall be provided by the Department~~ when the plans are found to conform to the requirements of this Part~~Code~~.

1) The Department will~~shall~~ issue an approval number to each manufacturer for each series of approved septic tanks~~,~~ and will~~shall~~ maintain a listing of the approved manufacturers and approved septic tank series.

2) No prefabricated septic tank shall be sold, offered for sale, or installed other than those which have been approved by the Department. The tank shall bear the manufacturer's approval number and the liquid capacity of the tank, in gallons, prominently displayed on the outside end wall of the tank above, or next to, the outlet pipe so that this information is readily visible after installation and prior to covering. The Illinois Department of Public Health approval number shall not be used on any tank other than the septic tank for which it is has been issued.

3) All persons who manufacture, sell, offer for sale or deliver septic tanks or aerobic treatment plants in or into the State of Illinois shall record the following information about each septic tank or aerobic treatment plant sold or delivered. This information shall be available for inspection by the Department or local authority upon request.

A) Name of purchaser ~~and/~~or property owner (if different);

B) Location of delivery (county and address, legal description or driving directions);

C) Date of sale and delivery; and

D) Size of septic tank or model of aerobic unit.

b) Septic Tank Construction. Septic tanks shall be designed and constructed in accordance with the following: (Appendix A, Illustration E ~~of this Part~~ is an illustration of these requirements.)

1) A septic tank shall be watertight and constructed of sound and durable materials not subject to excessive corrosion, decay, frost damage~~,~~ or cracking due to settling or backfilling.

2) Engineering Specifications~~.~~

A) The tank shall support a top-dead load of not less than 500 pounds per square foot, and concrete tanks shall have a minimum 28-day compressive strength of 3000 pounds per square inch (psi).

B) Tanks shall~~must~~ be designed and constructed so that they will not collapse or rupture when subjected to anticipated earth and hydrostatic pressures when the tanks are either full or empty. The manufacturer, design engineer~~, and/~~ or structural engineer shall certify in writing to the Department that the tank is designed and constructed to meet the load requirements of this Part. If additional loading is anticipated, the tank shall be strengthened to accommodate the additional loading.

3) Materials. Septic tanks shall be constructed of any of the following approved materials:

A) Poured-in-place reinforced concrete.

B) Precast reinforced concrete.

C) Concrete block, provided that the core is filled with concrete and reinforcing rods are inserted in the core prior to pouring.

D) Reinforced plastic.

E) Reinforced fiberglass.

F) Thermoplastic.

4) Depth. The minimum liquid depth of the tank shall be 42 inches, and the maximum liquid depth shall be 72 inches.

5) Inlet and Outlet Connections~~.~~

A) The invert elevation of the inlet shall be at least 2 inches above the liquid level in the tank.

B) The inlet and outlet openings of the septic tank shall be provided with cast-in watertight openings.

6) Baffles. Septic tank baffles shall meet the following requirements:

A) Inlet baffles shall be provided and shall extend at least 6 inches below the surface of the liquid.

B) Inlet baffles shall be located no farther than 12 inches from the inlet orifice.

C) Inlet and outlet baffles shall have a clearance of at least one inch but not greater than 3 inches of free space between the underside of the tank lid and the baffles.

D) Outlet baffles shall be provided and shall extend to a depth of 40% of the liquid depth.

E) Outlet baffles shall be located no farther than 6 inches from the outlet end wall.

F) Slip-in baffles shall extend the full width of the tank.

G) The sides of "V" or semi-circular type baffles shall fit tightly against the end wall of the tank.

H) Venting shall be provided through all baffles and a free vent area equal to the cross-sectional area of the building~~house sewer~~ shall be provided.

I) Submerged pipe T-branches or sanitary tees may be used at the inlets and outlets in lieu of baffles, provided that all of the above-stated distances and depths are maintained.

J) Submerged pipe T-branches or sanitary tees used as inlet baffles shall be 6 inches in diameter or larger. Outlet baffles shall be 4 inches in diameter.

K) Submerged pipe T-branches or sanitary tees shall meet the requirements of ASTM 2661, ASTM 2665 or ASTM 3034, ~~ASTM 3033,~~ or ASTM 2751, provided that the pipe does not have an SDR (Standard Dimension Ratio) number greater than 35.

L) When submerged pipe T-branches or sanitary tees are used as baffles, it shall be the responsibility of the septic tank manufacturer to assure proper location of components during initial installation.

M) When a single compartment septic tank is manufactured or used, a gas deflection baffle shall be provided below the outlet baffle of the tank configured to deflect rising gas bubbles away from the outlet structure and toward the interior of the tank. This baffle shall be constructed of a durable material not subject to corrosion or decay. (Appendix A, Illustration E, Exhibit C ~~of this Part~~ is an illustration.) An NSF International/ANSI Standard 46, Section 10 septic tank filter may be used in lieu of the gas deflector baffle. The septic tank filter baffle shall be installed so that it is extended or suspended to a depth equal to 40% of the liquid level of the tank. The tank access over the filter shall be provided with an access riser that extends to 3 inches above the ground surface or greater.

7) Access. Access shall be provided over the inlet and outlet of the tank to facilitate inspection and cleaning. The manhole or access opening shall have a fitted lid with a minimum dimension of 12 inches (width or diameter). Risers shall be watertight and constructed of a durable material. If the top of the tank is greater than 12 inches below the ground surface, a riser with a minimum dimension of 12 inches (width or diameter) shall be provided to bring access over the inlet and outlet to

within 12 inches of the ground surface. The joint between the septic tank and the risers shall be watertight. If a 2-compartment tank is used, and the tank has an opening over the wall between the compartments, the center opening shall have access provided within 12 inches of the ground surface.

c) Capacity.

1) Septic tanks for individual residences shall be sized in accordance with Appendix A, Illustration F of this Part. Septic tanks for any establishment other than residential property shall be sized in accordance with the estimated flow provided in Appendix A,; Illustration A of this Part and as provided in subsection (c)(2).follows:

2) The volume below the liquid level for flows up to 500 gallons per day shall be at least 750 gallons. For flows greater than 500 gallons per day, the volume shall be equal to at least 1½one and one-half times the estimated daily sewage flow. When the total flow exceeds 1,350 gallons per day, 2 or more tanks in series, or a multi-compartment tank, shall be installed.

d) Multiple Tanks or Compartments. When multiple compartment septic tanks or multiple septic tanks in series are used, the capacity of the first compartment or tank shall be ½ to ⅔ of the total required capacity. Two-compartment tanks shall also comply with the following:

1) The wall separating the first and second compartments shall be tight-fitting and designed to handle the differential in pressure if one side is pumped.

2) The wall separating the compartments shall extend to within 3 inches of the tank lid and shall have a free vent area equal to the cross-sectional area of the house sewer.

3) The center of the opening between compartments shall be in line with the center of the inlet and outlet openings.

4) The depth to the invert of the opening between compartments shall be 40% of the liquid depth.

5) A gas deflection baffle shall be provided below the outlet baffle of the tank configured to deflect rising gas bubbles away from the outlet structure and toward the interior of the tank. This baffle shall be constructed of a durable material that is not subject to corrosion or decay. An NSF International/ANSI Standard 46, Section 10 septic tank filter may be used in lieu of the gas deflector baffle. The septic tank filter baffle shall be installed so that it is extended or suspended to a depth equal to 40% of the liquid level of the tank. The tank access over the filter shall be provided with an access riser that extends to 3 inches or more above the ground surface.

6) For a 2-compartment tank, openings with a minimum dimension of 18 inches shall be located over the inlet and outlet of the tank or 12-inch openings as follows:

A) One~~one~~ located over the inlet;~~,~~

B) One~~one~~ over the outlet; and~~, and~~

C) One~~one~~ centered over the compartment wall.

e) Septic Tank Installation~~.~~

1) The septic tank shall be set level and backfilled to prevent floatation or drifting of the tank. Level shall mean plus or minus ½ inch in any direction (length or width or diameter of the tank).

2) If the inlet, outlet or access openings are to be set at or below the seasonal high water table, all openings in the tank shall be made watertight using mastic, tar, silicone caulk, etc.

3) There shall be no connections, such as joints, splices~~,~~ or fittings, within the area of overdig around the septic tank.

f) Abandoned Treatment Units. Septic tanks, cesspools, pit privies, aerobic treatment plants and seepage pits that are no longer in use shall be completely pumped. The floor and walls shall be cracked or crumbled so that the tank will not hold water, and the tank shall be filled with sand or soil. If the tank is removed from the ground, the excavation shall be filled with soil.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.50 Distribution Boxes

a) General. Distribution boxes may be installed between a septic tank, ~~or~~ aerobic treatment plant, NSF International/ANSI Standard 40 wastewater treatment system, and a subsurface seepage system or buried sand filter. If a distribution box is used, it shall be installed level on unexcavated earth, and shall provide equal distribution of flow to the subsequent disposal system.

b) Connecting Pipe. The pipe connecting the pre-treatment or primary treatment component~~septic tank~~ to the distribution box and the pipe connecting the distribution box to the disposal system shall be watertight.

c) Construction. Distribution boxes shall be constructed of a durable, watertight, non-corrosive material. They shall be designed to accommodate the necessary distribution lines.

d) Access. Distribution boxes shall be provided with an opening that~~which~~ will serve as a ready access for inspection, cleaning~~,~~ and general maintenance.

e) There shall be no connection such as joints, splices or fittings within the area of the overdig around the distribution box.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.55 Subsurface Seepage System Design Requirements

After January 1, 2014, when designing a subsurface seepage system, the absorption capacity of the soil shall be determined by subsection (a). After January 1, 2014, subsection (b) shall not be used to determine design requirements for a subsurface system. ~~When designing a subsurface seepage system the absorption capacity of the soil shall be determined by subsection (a) or (b) of this Section as follows:~~

a) Soil Investigation~~.~~

1) Soil investigations shall be conducted in the following manner:

A) Determination of soil characteristics on sites proposed for development with private sewage disposal systems shall be based on soil boring data collected by a soil classifier or an Illinois licensed Professional Engineer~~professional engineer~~.

B) There shall be a minimum of 3 borings per soil absorption system site. The soil borings shall be at least 50 feet apart, and the proposed subsurface seepage system shall be located within the area where the soil borings were located. More soil borings may be necessary for accurate and appropriate evaluation of a site where there is some concern about the consistency of the soil materials. One of the borings shall be made at the lowest elevation of the proposed absorption field area. Borings shall extend a minimum of 60 inches below the natural ground surface. An observation pit shall be used in gravelly materials.

C) Observation and determination of soil characteristics may also be ~~also~~ determined from a pit dug by a backhoe or other excavating equipment. The Department or local authority may require soil pits (backhoe excavation) in cases where ground is frozen, where the soil materials are considerably varied in texture, where there has been previous or current fill material or~~,~~ cutting of soils, or where gravelly soils are encountered. Soil~~Such soil~~ pits shall be prepared at the perimeter of the expected soil absorption area to minimize damage to natural soil structure. Soil pits shall extend a minimum of 60 inches below the natural ground surface.

D) Site characteristics to be described include zones of seasonal and permanent water saturation, United States Department of Agriculture (USDA)~~U.S.D.A.~~ soil textural changes; USDA~~,~~ ~~U.S.D.A.~~ soil structural features for each horizon, slope, compaction and depth;~~,~~ soil coloration; consistence; coatings;~~,~~ depth of limiting layer;~~,~~ depth of soil mottling; ~~(depth to low chroma equal to or less than 2 and a value of 4 or more - Munsell Color System),~~ internal drainage classification;~~, and~~ permeability range;~~,~~ and other limiting soil characteristics that may reduce permeability. The following reference materials shall be used as a guide for describing and classifying soil: Field Book for Describing and Sampling Soils, Soil Taxonomy, and Soil Survey

Manual.

2) The following persons are qualified to conduct soil investigations:

A) any person who meets the definition of soil classifier in Section 905.10;

B) an Illinois licensed Professional Engineer~~a licensed professional engineer~~;

C) an employee of a local health department who has 3 years of experience in designing or approving private sewage disposal systems using soil classification information and 6 semester hours of soils-related coursework;

D) an employee of a local health department with 5 years of experience reviewing the design and~~designing or~~ approving private sewage disposal systems using soil classification information under the direct supervision of those persons listed in subsection (a)(2)(A), (B) or (C)~~ of this subsection (a)(2)~~.

~~A list of qualified persons will be available from the Department upon request.~~

3) If conflicting soils investigation information is provided about a given site, a third Soil Classifier~~an NRCS soil scientist~~ may be requested to provide additional~~professional~~ information or help to resolve the conflict. A National Resources Conservation Service (NRCS) Soil Scientist who is also a Soil Classifier may be contacted for technical information or interpretation.

b) Percolation Tests~~.~~

1) Performance of Percolation Tests. At least 3 separate percolation tests, a minimum of 50 feet apart, shall be performed at the site of each proposed subsurface seepage system.

2) Procedure for Performing Percolation Tests. Percolation tests shall be performed in accordance with the procedure outlined in Appendix A,~~;~~

Illustration G~~ of this Part~~. Alternate procedures for performing percolation tests may be submitted to the Department for review. If determined to be as stringent as that described in Appendix A.~~:~~ Illustration G~~ of this Part~~, the alternate procedure will~~shall~~ be approved.

3) The Department or its agent may choose not to accept percolation data results and may require a soil investigation if soils information, permits for private sewage disposal systems in proximity to the proposed site, direct observation or other information shows conditions that will have an impact on the design, construction, installation, modification or performance of the private sewage disposal system.~~If soils information, permits for private sewage disposal systems in close proximity to the proposed site, direct observations or other information show conditions which will impact the design, construction, installation, modification or performance of the private sewage disposal system, the Department or local authority shall cause the determination of the seasonal high water table, fill, soil compaction, poor soil structure, high bulk density, dense unleached glacial till, fragipans, sodic horizons or other limiting soil characteristics that may reduce permeability or impact on design, construction or location of a subsurface seepage system.~~

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.60 Subsurface Seepage System Construction Requirements

a) Seepage Field Requirements – Gravel, Gravelless and Chamber Systems. Subsurface seepage fields shall be designed and constructed in accordance with Appendix A, Illustrations H, I~~,~~ and J ~~of this Part~~ and the following:

1) All subsurface seepage systems using soils information for sizing shall use the soil suitability table in Appendix A, Illustration M ~~of this Part~~ to determine the size requirements of the subsurface seepage system. The least permeable soil layer~~profile~~ between the top of the gravel or gravelless pipe or chamber system and 2 feet below the bottom of the trench~~the limiting layer~~ shall be used to determine the size of the subsurface seepage system. For mound or at-grade systems, the least permeable soil layer in the upper 2 feet of the soil shall be used to determine system size.

2) The bottom of the subsurface seepage field, each trench and its distribution line shall be level. Level for this Part shall mean plus or minus ½ inch in any direction over the entire area of the subsurface seepage system.

3) There shall be a minimum of 6 inches and a maximum of 24 inches of earth backfill over the bedding materials, gravelless pipe or chamber system.

4) There shall be a minimum of 5 feet of undisturbed earth between the septic tank and the nearest trench.

5) If precipitation falls onto the excavation and evidence of soil washing into the excavation of the subsurface seepage system exists, the damaged~~that~~ portion of the seepage system ~~damaged~~ shall be reconstructed to comply~~conform~~ with this Section.

6) The top of the gravel, gravelless pipe, or chamber system in the subsurface seepage field shall be at least one inch below the invert of the outlet pipe from the septic tank or distribution box in a gravity flow system.

7) Site Evaluation~~evaluation~~ for Subsurface Seepage Systems~~subsurface seepage systems~~. Subsurface seepage systems receiving septic tank effluent shall~~should~~ have at least 2 feet of vertical separation distance between the bottom of the subsurface seepage system and the top of the limiting layer. For soils in Design Group I-VI or with a loading rate of greater than 0.62 gallons per day per square foot, there shall~~should~~ be at least a vertical separation distance of 3 feet between the bottom of the subsurface seepage system and the top of the limiting layer. When the limiting layer is the estimated seasonal high water table, artificial drains, which are designed to lower the estimated seasonal high water table, may be installed to achieve the specified vertical separation distances.

8) Sizing of a Seepage System in Fill Soil~~seepage system in fill soil.~~

A) The least permeable soil layer~~profile~~ between the top of the gravel, gravelless pipe~~,~~ or chamber system and 2 feet below the bottom of the trench~~the limiting layer~~ shall be used to determine the size of the subsurface seepage system.

B) The use of fill for installing subsurface seepage systems shall not be approved for lots platted after March 15, 1996.

C) Fill soils may be used to cover a private sewage disposal system, provided that no part of the system is located in the fill and the fill material is at least equal to or better than the original soil or meets the requirements in subsection (a)(9)~~ of this Section~~.

9) Soil Criteria for Use of Fill in Subsurface Seepage Systems~~criteria for use of fill for subsurface seepage systems.~~

A) Soils to be used~~utilized~~ for fill shall be identified by a soil classifier or licensed Professional Engineer~~professional engineer~~ and a report submitted to the Department or local authority. The report shall contain specific information on the fill soil, including location, depth, permeability, and texture. Soils that can be used as fill are those identified in Appendix A, Illustration M ~~of this Part~~ as 2A, 2B, 2K, 3A, 3B, 3C, 3K, 3L, 4B, 4D and 4K (Design Group II, III and IV).

B) In addition to the ~~above~~ requirements in subsection (a)(9)(A), fill soil shall not contain extraneous material such as tires, concrete, brick, reinforcing bar, demolition material, etc.

C) All of the following conditions shall be met for a subsurface seepage system to be installed in fill.

i) Satisfactory original soil shall be at least 3 feet above bedrock.

ii) A maximum of 2 feet of fill soil shall be used.

iii) Fill shall not be placed on original soil with a slope greater than 10%.

iv) The fill shall be placed at the site so that a minimum of compaction occurs, and the fill shall be allowed to settle undisturbed for a period of at least 12 months. Soils in

Design Group II, when used for fill, shall not be required to settle for a period of at least 12 months.

v) After the fill has been settled, a percolation test shall be conducted in accordance with the procedure outlined in Appendix A, Illustration G ~~of this Part~~ and a percolation rate of not greater than 270 minutes/6 inch fall or less than 60 minutes/6 inch fall shall be achieved.

10) Site Preparation for Use of Fill Soil~~use of fill soil.~~

A) Excess vegetation shall be cut and removed. The site shall be plowed with a mold board plow 7 to 8 inches deep with the plowing done perpendicular to the slope. It shall not be done with the furrow running up and down the slope. Chisel plowing may be used in place of mold board. Roto-tilling is prohibited.

B) Once the site is plowed, all traffic shall~~must~~ be kept off the site. The fill material can be deposited on the top with a backhoe or pushed on from the side, preferably the upslope side, using a track type tractor, keeping 6 inches of fill beneath the tracks. At no time shall ruts be made in the plowed area. The fill shall be placed immediately after site preparation to avoid the possibility of precipitation falling on the plowed area.

C) Traffic on the downslope side of the fill area shall be minimal to reduce compaction. All work shall be performed from the ends and upslope side. Compaction of the natural soil downslope will reduce the lateral movement of the effluent.

D) The fill shall not be placed on frozen ground or when the soil is wet. Moisture content of the soil is very important when filling. Site preparation shall not take place when the soil is too wet. To check moisture content, ~~take~~ a soil sample may be taken from the plow layer (7 to 8 inches) and rolled~~roll it~~ between the palms of the hands. If the soil rolls into a ribbon, it is too wet to prepare. If the soil crumbles, site preparation can then proceed.

b) Gravel Seepage Field Requirements~~.~~

1) Bedding Material. The bedding material shall be clean gravel or clean stone that is free of mud, silt, or clay, with particle size ranging from ¾ inch minimum to 4 inches maximum. The bedding material shall extend the full width of the trench and to a depth of at least 6 inches below the bottom of the distribution line. The bedding material shall extend at least 2 inches above the top of the distribution line.

2) Distribution Lines. Distribution lines shall be constructed of materials as approved in Section 905.20(f). The lines shall be perforated or open-joint tile. Where open joint tile is used, the tile sections shall be spaced not less than ¼ inch or more than ½ inch apart. Perforated piping with the exception of 8-inch or 10-inch gravelless seepage beds shall have ½- to ¾-inch diameter openings on 3- to 5-inch centers with a minimum of 2 rows. The openings in the pipe shall be placed downward.

3) Separation Material. Bedding materials shall be covered by straw, newspaper, untreated building paper, geotextile fabric or other permeable or biodegradable material to support the backfill as the laying of the distribution line proceeds. Tar paper, plastic, or other impervious material shall not be used between the bedding material and the earth backfill.

4) The ends of a gravel seepage field shall be looped except in serial distribution systems.

c) Gravelless Seepage Field Requirements. In addition to Section 905.20(f), 8-inch or 10-inch gravelless seepage systems shall comply with the following specifications:

1) 8-inch and 10-inch inside diameter (I.D.) corrugated polyethylene tubing shall meet the requirements of ASTM F667-06~~84~~, Standard Specification for Large Diameter Corrugated Polyethylene Tubing with the following exceptions:

A) Perforations shall be uniformly spaced along the length of the tubing as follows: 2 rows of holes ⅜ inch in diameter for 8-inch tubing and ½ inch in diameter for 10-inch tubing, located 120° to 140° apart along the bottom half of the tubing, each row 60° to 70° up from the bottom center line. The perforations shall be staggered

so that there is at least one hole in each corrugation.

B) The pipe shall be marked to indicate the top of the pipe.

2) All gravelless drainfield pipe shall be encased at the point of manufacture with a filter wrap having the following characteristics:

Physical Properties	Minimum Value
Grab Strength, lbs. (~~ASTM D1682-64 – Reapproved 1975 or~~ ASTM D4632)	
Machine Direction	19
Traverse Direction	11
Burst strength, psi (ASTM D3786-09~~80a~~)	26
Air Permeability, cfm per sq. ft. (ASTM D737-08~~75, Reapproved 1980~~)	500

Particle Size Distribution (ASTM F662-86~~80~~)
Polyethylene particles in water and alcohol solution, coulter counter analysis, single pass:

Particle Size (Microns)	% Retained
70	80
60	68
50	56
40	40
30	22
20	5

3) 8-inch or 10-inch gravelless seepage trenches shall comply with the following Illustrations in~~all requirements that apply to standard gravel trench systems as stated in~~ Appendix A unless otherwise stated in this Part:~~.~~

A) Illustration D

B) Illustration H, Exhibit B

C) Illustration I, Exhibit C

D) Illustration I, Exhibit D

E) Illustration J, Exhibit C

F) Illustration J, Exhibit D

G) Illustration K, Exhibits E through H

H) Illustration M, Exhibit A

4) Bedding Material. 8-inch and 10-inch gravelless seepage systems or chamber systems may be bedded with material excavated to construct the system. The backfill material shall not contain large clods of earth, demolition material or other extraneous material.

5) Separation Material. No straw, newspaper or untreated building paper shall be placed between the gravelless seepage system or chamber system and the earth backfill.

6) Bending. 8-inch and 10-inch gravelless pipe shall not be bent around corners on a radius of less than 5 feet. If a sharper radius is required, a tee shall be used.

7) Gravelless seepage systems or chamber systems are not required to be looped. Gravelless seepage systems or chamber systems that are not looped shall be capped on the end.

d) Serial Distribution. Serial distribution shall be used in areas where the slope of the terrain prohibits the installation of conventional subsurface seepage systems. The following criteria shall be used in the design and construction of a serial distribution system~~:~~ (see Appendix A, Illustration K~~ of this Part~~):

1) The bottom of each trench and its distribution line shall be level.

2) There shall be a minimum of 6 inches of earth backfill over the bedding material or chamber system or the gravelless pipe in the trenches.

3) The trench shall follow the ground surface contours so that variation in trench depth will be minimized.

4) There shall be a minimum of 5 feet of undisturbed earth between the septic tank and the nearest trench.

5) Adjacent trenches shall be connected with a relief line or a drop box arranged so that each trench is completely filled to the full depth of the gravel or gravelless pipe or chamber system before effluent flows to the succeeding trench.

6) The relief lines connecting the trenches shall have watertight joints and direct connections to the distribution lines in adjacent trenches. Tight joint T's and 45° ells, or a drop box arrangement shall be used to connect adjacent trenches.

7) Where the relief pipe trench connects with the higher trench, it shall not be deeper than the top of the gravel or gravelless pipe or chamber system in the higher trench. Relief lines shall rest on undisturbed earth and the backfill shall be carefully tamped.

8) The invert of the first relief line shall be at least one inch lower than the invert of the septic tank or aerobic treatment plant outlet. (See Appendix A, Illustration K~~ of this Part~~.)

9) All other construction features of the serial distribution field shall comply with subsections (a) through (d)~~ of this Section~~.

e) Seepage Beds. The total bottom area of the seepage bed shall be 1½ times the area specified in Appendix A, Illustration H, Exhibit A or Illustration M, Exhibit A~~ of this Part~~. Construction features shall conform to subsections (a) and (b)~~ of this Section~~. Distribution lines shall be spaced no farther~~further~~ than 6 feet center to center and shall be equally spaced. Lines adjacent to the bed sidewalls shall be 18 inches from the bed sidewall. (See Appendix A, Illustration L~~ of this Part~~.) Seepage beds shall be constructed so that construction equipment does not drive over the bottom of the bed.

f) Chamber Systems. Chamber systems shall be sized and installed in accordance

with~~wit~~ the following:

1) Center-to-center spacing for chamber systems shall be in compliance with Appendix A, Illustration I, Exhibit D~~The minimum center to center spacing of chambers shall be 7 feet~~.

2) Chamber systems shall be sized in accordance with Appendix A, Illustration I, Exhibit E.

3) Chamber systems shall be designed to support all weight of earth backfill without collapsing.

4) Chamber systems shall be designed to prevent earth backfill from restricting flow within the chamber.

g) Subsurface Drip Irrigation Systems. Subsurface drip irrigation systems shall be designed, installed and maintained in accordance with the following:

1) The drip irrigation system shall be designed, installed and operated as a subsurface seepage system, and no portion of the drip irrigation system shall have a surface discharge.

A) Pre-treatment

i) The drip irrigation system shall be preceded by a pre-treatment process designed to reduce the $CBOD_5$ (carbonaceous 5-day biochemical oxygen demand) to a maximum concentration of 25 mg/L and total suspended solids to a maximum concentration of 30 mg/L. Drip irrigation systems shall not be installed following a septic tank.

ii) The total flow from the property plus the backwash water from the drip irrigation system shall not exceed the treatment capacity of the pre-treatment device.

iii) The installation contractor, designer or homeowner, in consultation with the manufacturer or the manufacturer's

representative, shall assure that the pre-treatment process meets the requirements of this Part.

B) Dosing Tank

i) A minimum liquid capacity of 1,000 gallons shall be provided below the inlet in the dosing tank for a residential or non-residential site.

ii) For homes larger than three bedrooms and non-residential systems with a daily design flow greater than 667 gallons/day, a dosing tank with a minimum capacity of 1.5 days design flow shall be provided.

C) Dosing Pump

i) A high head/low volume pump shall be used.

ii) The pump shall be sized based upon the design flow rate of the drip irrigation field, which shall be based on the number of emitters times the flow rate of each emitter in gallons per minute.

iii) The minimum head requirement of the pump shall be based upon the pressure requirements for the operation and flushing of the drip field plus the total static and friction head requirements of the supply lines and manifolds.

iv) Pump specifications used for drip irrigation systems shall be provided by the pump manufacturer.

v) The installation contractor, designer or homeowner, in consultation with the manufacturer or the manufacturer's representative, shall assure that the pump used is in compliance with this Part.

D) Time Dosing

i) Drip irrigation systems shall be provided with a timer to activate the dosing pump equally throughout a 24-hour period.

ii) Systems shall be dosed a minimum of 6 equal doses over a 24-hour period and shall be capable of delivering the maximum daily design flow to the drip irrigation system in a 24-hour period. More frequent doses of 8 to 24 equal doses over a 24-hour period are recommended and shall be required in soils that have a loading rate of less than 0.5 gallons/square foot/day.

iii) The dosing frequency shall be such that the soil surrounding the drip irrigation system does not become saturated.

iv) The dosing specifications shall be provided by the drip irrigation manufacturer or the manufacturer's representative in accordance with this Part.

E) Effluent Filtration

i) Wastewater effluent shall be filtered to the drip tubing manufacturer's specifications to ensure proper operation of the distribution system.

ii) The effluent filtration device shall be easily accessible for maintenance and inspection.

F) Drip Distribution System

i) The drip distribution tubing manufacturer or the manufacturer's representative shall provide written specifications for all components used in conjunction with the drip irrigation system.

ii) The manufacturer or the manufacturer's representative shall assure that all manufacturer specifications for the drip irrigation system are in compliance with this Part.

iii) The manufacturer shall incorporate measures to prevent root intrusion into the emitters.

G) Drip Emitters and Flow Rates

i) The manufacturer of the drip tubing shall specify the number of drip emitters per lineal foot and the flow rates through each emitter for different pressures.

ii) The installation contractor or homeowner, in consultation with the manufacturer or the manufacturer's representative, shall assure that the number of emitters to be used in a drip irrigation system and the types of emitters used, flows and flow rates into the soil comply with all of the manufacturer's specifications and requirements and with this Part.

H) Absorption Field Sizing

i) A soil investigation shall be conducted in accordance with Section 905.55(a).

ii) The soil loading rate (gallons/square foot/day) shall be based upon the least permeable soil condition encountered within 24 inches below the proposed depth of the drip irrigation tubing.

iii) The system size shall be based upon Appendix A, Illustration M, Exhibits A and B.

I) Drip Tubing Installation and Configuration

i) The drip tubing shall be installed in the natural soil using installation equipment and procedures specified by the manufacturer.

ii) Drip irrigation tubing shall be installed at a depth of 6 inches to 12 inches below the final graded surface.

iii) Drip irrigation tubing shall be installed on a minimum of 2-foot centers.

iv) When the drip irrigation piping is installed on slopes exceeding 20%, the spacing between the drip irrigation piping shall be 3 feet or greater.

v) The drip irrigation system shall be configured so that the length of the area of the drip irrigation tubing system is at least two times its width. If this is not possible, the drip irrigation tubing trench separation distance shall be doubled.

vi) The length of individual drip distribution tubing shall not exceed the manufacturer's specifications and shall be installed at a uniform depth that follows the contour of the site.

vii) The drip irrigation tubing shall be installed a minimum of 12 inches above a limiting layer.

J) Considerations to Prevent Freezing

i) The distribution and return manifolds shall be installed to drain back to the pre-treatment tank after the field has been dosed.

ii) If the elevations of the pre-treatment tank and dosing tank do not allow gravity flow to the pre-treatment tank, the lines shall be installed to drain back to the dosing tank.

iii) All piping and components shall be installed to allow water to drain back to the pre-treatment tank or dosing tank.

iv) To allow for drain back, a check valve shall not be installed in the supply and return lines.

K) Fill Soils

Fill soils may be used in accordance with subsection (a), except that the soil surface shall not be plowed.

L) Pressure Requirements

i) The manufacturer of the drip tubing shall specify the operating pressure requirements of the drip irrigation system and provide the specifications of any pressure regulator that may be required with the drip irrigation system.

ii) A pressure gauge shall be provided or a method of connecting a pressure gauge shall be provided on the distal end of the drip irrigation system to ensure that field pressure can be checked during inspection, evaluation and maintenance. The installation contractor or manufacturer shall ensure that the irrigation system is operating at the required specifications.

M) Flush Valves

i) An automatic or manual flush valve shall be provided on the filter and drip distribution system to allow for periodic flushing of both the drip distribution system and the filter.

ii) The drip distribution system manufacturer shall provide the specifications for the flush valves that are acceptable to use with the system. The manufacturer shall also provide specifications on the number of flush valves to be used and their location, with specifications about how this is to be determined and the backwash velocity required to clean the drip tubing piping.

iii) A chemical injection port shall be installed to facilitate cleaning and flushing the drip distribution system.

iv) Backwash water shall be directed into the building sewer at the inlet end of the pre-treatment system.

N) Air Relief

i) The manufacturer of the drip tubing shall specify the air relief requirements of the drip distribution system and provide the specifications of any air relief devices that may be required with the drip irrigation system to ensure that the distribution piping can drain back to the dosing chamber when the system is not pressurized.

ii) The air relief device shall be installed at the highest point of the feed and return manifolds.

O) Alarm

i) An audible and visual alarm shall be provided to warn of a high water condition in the dosing tank.

ii) The alarm shall be on a separate dedicated circuit.

iii) The alarm control device shall be a sealed float or diaphragm switch and shall be located to activate 2 to 3 inches above the pump turn-on level or siphon activation level.

iv) The alarm shall be located outside of the structure served by the system and shall be provided with an electrical disconnect that is located within sight of and not more than 50 feet away from the device.

v) If an alarm is being used by another component within the private sewage disposal system, is compliant with subsections (g)(1)(O)(i) through (iv), and is able to connect additional devices, it may be used without the need for an additional alarm.

P) Access

i) Access openings to the pre-treatment system, effluent filtration system, and dosing tanks shall have a minimum

inside dimension of 18 inches, shall be watertight and shall extend to 3 inches or more above the ground surface.

ii) Access openings to all other system components shall be large enough to allow easy access from the ground surface.

Q) Maintenance

i) The manufacturer shall provide specifications for the maintenance of all components within the drip irrigation system.

ii) The manufacturer shall provide a maintenance plan to ensure that maintenance is conducted as required to achieve the proper function of the system.

2) The installation contractor or manufacturer shall provide the following information to the owner of the system:

A) An operation manual;

B) The maintenance plan for the drip irrigation system;

C) The manufacturer of the components and a description of the function of the components;

D) The service contract information;

E) A troubleshooting repair guide;

F) A list of safety concerns;

G) Manufacturer's cut sheets for all electrical and mechanical components; and

H) An as-built drawing of the system.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.70 Buried Sand Filters

a) General. Buried sand filters may be used, provided that the effluent is discharged in accordance with the requirements of Section 905.110.

b) Size. Buried sand filters shall be sized as follows:

1) Residential. The sand filter surface area for residential property shall be 200 square feet per bedroom. Where a sand filter is used in conjunction with an approved aerobic treatment plant, the surface area of the sand filter may be reduced by 50 percent.

2) Non-Residential. All of the following shall be met when a buried sand filter is to be installed on non-residential property.

A) The surface area of the sand filter shall be designed for one square foot per gallon per day for waste with an influent Biochemical Oxygen Demand (BOD) not to exceed 300 parts per million (ppm).

B) A sand filter with flows of 801 gallons or more per day shall have the influent~~effluent~~ distributed into the sand filter by a ~~pressure~~ dosing system designed according to subsection (l)~~ of this Section~~. The sand filter shall be dosed 4 times per day with equal flows not to exceed the design capacity of the filter.

~~C) The sand filter shall be dosed 4 times per day with equal flows not to exceed the design capacity of the filter.~~

c) A single individual sand filter shall be used to treat flows from a wastewater source. Splitting flows prior to treatment or the use of multiple sand filters shall be prohibited unless subsurface disposal of the effluent is used. Where allowed, splitting of flows shall be done by pumps.

d) Minimum Size. The minimum size buried sand filter shall be designed to treat at least 100 gallons of waste per day.

e) Sand Filter Media. The depth of filter media shall be a minimum of 24 inches. The sand shall have an effective size of 0.5 to 2.0 millimeters, and a uniformity coefficient of less than 3.5. It shall be clean and free of clay and silt.

f) Alternate Media. Other filter media may be used in a subsurface filter provided that they meet~~it meets~~ the criteria of subsection (e) ~~of this Section~~ and comply~~complies~~ with the following requirements:~~.~~

1) Are~~Is~~ chemically and biologically inert;~~.~~

2) Will support biological growth; and~~.~~

3) Have~~Has~~ a hardness equivalent to, or greater than, that of sand.

g) Filter Media Cover. The filter media shall be covered with a minimum of 10 inches of clean coarse gravel or clean stone that~~which~~ is free of mud, silt or clay, ranging in size from ¾ to 2½ inches in diameter. The gravel or stone shall be covered with straw, untreated building paper, or other permeable material prior to backfilling. A minimum of 12 inches of earth cover shall be provided. (See Appendix A,~~:~~ Illustration N~~ of this Part~~.)

h) Distribution and Collection Lines. The distribution and collection lines shall conform to the requirements for distribution lines~~ as given~~ in Section 905.60(b)(2). The distribution lines shall be level, shall be located 18 inches from sidewalls, and shall be spaced on 3-foot centers. There shall be solid pipe to the filter media. The collection lines shall have a slope of 6 inches per 100 feet, and one collection line shall be provided for each 10 feet of width or fraction of 10 feet, and shall be equally spaced~~thereof~~. The upper end of the collection line shall be capped.

i) Bedding Material. The bedding material for the collection lines shall be placed as shown in Appendix A,~~:~~ Illustration N~~ of this Part~~, and shall be clean gravel or clean stone that~~which~~ is free of mud, silt or clay. The coarse gravel shall range in size from ¾ to 2½ inches in diameter, and pea gravel shall range from ⅛ to ⅜ inches in diameter. A minimum of 2 inches of coarse gravel shall be placed on the excavation before placement of the collection lines.

j) Venting. A minimum of one vent shall be placed on the downstream end of the distribution lines as shown in Appendix A,~~:~~ Illustration N~~ of this Part~~. These vents shall be placed as close as possible to the corners on the downstream distribution lines. The vents shall extend above the ground surface and be screened with ~~1/4~~¼-inch mesh screen or equivalent.

k) Drainage. Surface drainage shall be directed away from the filter. If conditions prohibit gravity drainage of the filter effluent, a pumping chamber shall be installed. The chamber shall be constructed of a watertight, non-corrosive material and shall be provided with a removable lid, which will serve as an access for inspection, cleaning~~,~~ and general maintenance. An access port or extension collar shall extend at least 6 inches above the ground surface, and the access shall have a minimum dimension of 12 inches. The chamber shall have sufficient depth and the pump controls shall be set in a manner to allow for complete drainage of the filter to eliminate any ponding of effluent within the filter. (See Section 905.125, Pumps, Pumping/Dosing~~Pump~~ Chambers, and Ancillary Equipment.)

l) Distribution of Effluent. Buried sand filters designed to treat non-residential property with flows of 801 gallons or more per day shall have the effluent distributed into the sand filter by pumping. The pumps, pumping chamber and ancillary equipment shall comply with Section 905.125 and the following:

1) Dosing Volume~~volume~~. ~~Dosing shall not exceed 4 times a day.~~ The dosing volume is the amount of liquid pumped or siphoned during each cycle minus the amount that~~which~~ drains back from the sand filter~~system~~ after each dose.

2) Pump Selection. The pump shall be a submersible pump designed for corrosive liquids.

3) Siphons. Siphons can be designed where elevation exists between the sand filter and the siphon chamber. However, the siphon shall be designed to deliver the same flow rate at the same head at the distribution system as a pump system. The distribution system consisting of manifold and laterals shall be designed so that it will drain after each siphon. This shall be accomplished by placing the manifold above the laterals.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.80 Re-circulating~~Recirculating~~ Sand Filter

a) General. The re-circulating~~recirculating~~ sand filter system (Appendix A,~~:~~ Illustration O~~ of this Part~~) consists of a septic tank, recirculation tank, open sand

filter~~,~~ and flow splitter. It may be used provided that the effluent is discharged in accordance with the requirements of Section 905.110.

b) Septic Tank. The septic tank shall be sized and installed as described in Section 905.40.

c) Re-circulation~~Recirculation~~ Tank. The re-circulation~~recirculation~~ tank volume shall be 500 gallons, and the tank shall be equivalent in strength and materials to the septic tank as provided in Section 905.40. No baffles are necessary. An access manhole, as described in Section 905.40(b)(7), shall be provided for pump maintenance or replacement.

d) Sand Filter. The sand filter shall be sized at one square foot of filter surface for every 3 gallons per day of domestic sewage flow. Appendix A,~~:~~ Illustration P ~~of this Part~~ has a size chart for residences based on numbers of bedrooms. Unless otherwise stated in Appendix A,~~:~~ Illustration P, ~~of this Part~~ the sizes shown are required. The filter media shall comply with requirements of Section 905.70(e) and (f) and shall be 30 inches in depth.

e) Bedding Material. The bedding material for the collection lines shall be the same as that in a buried sand filter. The coarse gravel shall be ¾ to 2½ inch diameter, and the pea gravel shall be from ⅛ to ⅜ inches diameter. A minimum of 2 inches of coarse gravel shall be placed on the excavation prior to placement of collection lines.

f) Distribution and Collection Lines. The collection lines shall be constructed of materials as approved in Section 905.20(f) and shall be 4 inches inside diameter perforated piping laid with perforations facing downward. The distribution piping shall have an inside diameter of 1½ inches. The perforated pipe shall have ½ to ¾ inch~~inches~~ diameter openings on 3-inch to 5-inch centers with 2 rows at 120° from each other. Distribution piping shall be spaced on 3-foot centers and shall be located a minimum of 1½ feet from sidewalls.

g) Pumps. The pump shall be a submersible pump designed for corrosive liquids and shall have a capacity of 15 to 25 gallons per minute at the 10-foot total dynamic head (TDH). The pump shall be controlled by a time clock that~~which~~ can be set to activate the pump at one hour or longer intervals. Pump shut-off shall be controlled by a low level float switch that~~which~~ allows the entire contents of the re-circulation~~recirculation~~ tank to be pumped during each pump cycle. A

high level float switch shall be provided that energizes a visible and audible alarm to indicate pump failure or malfunction. (See Appendix A, ~~:~~ Illustration Q ~~of this Part~~.)

h) Flow Splitter. The flow splitter shall be designed so that re-circulation ~~recirculation~~ rates can be controlled between no re-circulation ~~recirculation~~ and a 5:1 re-circulation~~5 to 1 recirculation~~ ratio. An example of one type of splitter is shown in Appendix A, ~~:~~ Illustration O ~~of this Part~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.90 Waste Stabilization Ponds

General. Waste stabilization ponds may be used if designed and constructed in accordance with the following criteria and provided that the effluent is discharged in accordance with the requirements of Section 905.110 (see~~See~~ Appendix A, ~~:~~ Illustration R ~~of this Part~~ as an illustration of these requirements). A septic tank sized according to ~~905.~~Appendix A, ~~:~~ Illustration F ~~of this Part~~ or an aerobic treatment plant shall precede a waste stabilization pond.

a) Location: A waste stabilization pond shall be located as distant as practical from residences, but in no case closer than the distances shown in Appendix A, ~~:~~ Illustration D ~~of this Part~~, and in an area where trees will not interfere with sunlight on the surface.

b) Dimensions. Ponds shall have a length not exceeding 3 times the width.

c) Capacity. When domestic sewage from a septic tank is to be discharged to the waste stabilization pond, the capacity of the pond shall be equivalent to 60 times the average daily flow. When preceded by a Class II aerobic treatment plant, the capacity of the pond shall be equivalent to 18 times the average daily flow.

d) Depth. The wastewater depth for a waste stabilization pond shall be uniform and 3 feet to 5 feet.

e) Freeboard. A minimum freeboard of 2 feet shall be provided.

f) Embankments. Embankments shall be constructed of impermeable materials and shall be compacted. Embankment slopes shall be in one~~1~~ to 2 (vertical to horizontal) below the water line and one~~1~~ to 3 or flatter above the water line. The

top width of the embankment shall be a minimum of 2 feet. Embankments shall be seeded or rip-rapped from the outside toe to the high water line. Perennial, low growing, spreading grasses that withstand erosion and can be kept mowed are most satisfactory for seeding of embankments.

g) Inlet. The inlet line shall be placed 12 to 24 inches above the bottom of the pond at a point opposite the overflow structure and shall be supported at no greater than 10-foot intervals along its length. It shall discharge at least 10 feet from the water's edge. The inlet line shall be sloped in accordance with Section 905.20(g).

h) Outlet. The outlet structure shall be designed to prevent the discharge of floating solids. This shall be accomplished through baffling. The baffle shall consist of a sanitary T or 90° elbow. If the 90° elbow is used, a ¼ inch hole shall be drilled into the top of the elbow to provide an air break. The outlet baffle shall extend 12 inches below the invert of the overflow. The outlet baffle shall be 3 to 5 feet from the embankment.

i) Bottom. The bottom of the waste stabilization pond shall be cleared and leveled to the required elevation and shall be lined with an impermeable natural or man-made material. The pond shall be kept free of vegetation that would grow to or above the water surface.

j) Drainage. All surface water shall be diverted away from the waste stabilization pond.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.95 Illinois Raised Filter Beds

a) Illinois raised filter bed disposal systems shall have a filter loading rate of 4 gallons per square foot per day for residential systems of up to 1,500 GPD flows. Non-residential systems of any size or residential systems in excess of 1,500 GPD shall use a filter loading rate of 2.5 gallons per square foot per day. The system shall be designed in accordance with Appendix A, Illustration X, Exhibits A through E.

b) An aeration batch treatment system that has been approved by NSF in accordance with NSF Standard 40 shall be used. The aeration tank volume shall hold at least 2 times the average daily wastewater flow for residential use (including the use of

a garbage disposal). Non-residential systems shall have a tank volume size of 3 times the daily wastewater flow. Multiple tanks shall be used to achieve the volume required. Multiple tanks require connection at the bottom of each tank for flow equalization.

c) Filter beds shall not exceed 600 square feet. If a larger area is needed, multiple beds shall~~must~~ be used, separated by a minimum distance of 15 feet, using a common mantle. The filter beds can be placed at any point on the mantle ~~in order~~ to accommodate existing ground contours.

d) The filter length shall not exceed 3 times the width.

e) The sand filter media shall have an effective size of 0.5 to 2.0 millimeters, a uniformity coefficient of less than 3.5, and a 30-inch depth.

f) The mantle shall be sized in accordance with the formula A = QT/25, where A = Mantle Area, Q = Quantity of wastewater per day, and T = Percolation time of the original soil in minutes per inch. (See ~~Section 905.~~Appendix A, Illustration X, Exhibit E to convert soil investigation information to T (percolation time).)

g) The mantle shall be at least equal to the area of the filter bed. The mantle shall not be designed for percolation rates that exceed 120 minutes per inch.

h) The mantle area is to be cut into original soil to a depth of 6 inches and back-filled with 12 inches of torpedo sand that is graded as FA1-FA8 in accordance with Standard Specifications for Road and Bridge Construction~~, adopted January 1, 2002 by the~~ (Illinois Department of Transportation).

i) The slope of the bottom of the mantle shall be level, plus or minus one~~1~~ inch. The slope of the earth sidewalls of the filter shall be a maximum of 3 feet horizontal to one~~1~~ foot vertical.

j) The mantle area shall~~must~~ be at least 12 inches deep. If the maximum high groundwater table is less than 6 inches from the bottom of the filter bed, additional torpedo sand shall~~must~~ be used to increase the isolation distance between the bottom of the filter bed and the high groundwater table to at least 6 inches. Other separation distances (e.g., well, property line~~, etc.~~) shall be measured from the toe of the filter bed.

k) The distribution piping (4-inch perforated pipe) shall be placed level to 15-inch centers in 12 inches of ¾-inch stone.

l) Sod shall be placed over the filter beds and mantle.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.96 Peat Filter Systems

a) General. Peat filter systems shall be preceded by a septic tank, Imhoff tank, or aeration system meeting the requirements of Section 905.30, 905.40 or 905.100, and the effluent from the system shall be discharged into a subsurface system approved in Section 905.60. The size of the subsurface system may be reduced by ⅓,~~one-third~~ provided that the effluent quality meets the requirements of Section 905.110(d)(1)(A) and (B).

b) Design. The system shall be sized in accordance with the manufacturer's requirements as approved by the Department.

c) Approval of Systems. Manufacturers of peat systems shall present information to the Department documenting that effluent from their system meets the requirements of subsection (a). The~~Such~~ information shall be in the form of independent test data or reports. The Department will~~shall~~ grant approval and maintain a list of those systems meeting the requirements of this subsection and only approved systems may be installed.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.100 Aerobic Treatment Plants and NSF International/ANSI Standard 40 Wastewater Treatment Systems

a) General. Aerobic treatment plants and NSF International/ANSI Standard 40 wastewater treatment systems shall be tested and listed by NSF International or a laboratory approved by ANSI and certified compliant with the International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) Guide 65 to determine compliance with the requirements of ~~ANSI/~~NSF International/ANSI Standard 40, Residential Wastewater Treatment Systems~~, July 12, 2000~~. To assure compliance with certification requirements and the Act and this Part, the Department will obtain and retain from NSF

International a complete list of approved systems, approved components and approved component parts for each NSF International/ANSI Standard 40 wastewater treatment system installed or currently existing within the State. Until the Department receives the NSF approval information, the system shall not be considered approved in accordance with the Act and this Part. Standard 40 is a standard that covers an organized and coordinated system of components that functions to treat wastewater generated by individual residences. This Part shall allow approved aerobic treatment plants and NSF International/ANSI Standard 40 wastewater treatment systems to serve residential property that is occupied on a year-round or full-time basis. Aerobic treatment plants shall not be used to serve residential property that is used as a seasonal, weekend or part-time residence.

b) Class II Effluent. Aerobic treatment systems~~plants~~ listed by NSF International or a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40 for Class II effluent shall discharge to one of the following:

1) A subsurface seepage system designed and constructed in accordance with the requirements of Section 905.60.

2) A sand filter designed and constructed in accordance with the requirements of Section 905.70 or 905.80.

3) A waste stabilization pond designed and constructed in accordance with the requirements of Section 905.90.

c) Class I Effluent. NSF International/ANSI Standard 40 wastewater treatment systems~~Aerobic treatment plants~~ listed by NSF International or a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40 for Class I effluent shall discharge to one of the following:

1) A subsurface seepage field designed and constructed to be at least ⅔ the size determined necessary by Section 905.60. The subsurface system shall be installed as shallow as possible while maintaining a minimum of 6 inches of cover. There shall be at least 12 inches between the bottom of the subsurface seepage system (soil interface) and the shallowest limiting layer.

2) A~~To a~~ surface discharge in accordance with Section 905.110.

d) Sizing. Aerobic treatment plants that are listed by NSF International or a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40 as Class I and rated at 500 gallons per day will be allowed for the treatment of sewage from residential property having up to and including 4 bedrooms. Other aerobic treatment plants that are listed by NSF International or a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40 as Class I shall be sized as follows:

Bedrooms	Minimum Rated Treatment Capacity-Gallons
1	400
2	400
3	500
4	500
5	750
6	900
7	1000
8	1200
9	1350
10	1500

e) Installation. All components of aerobic treatment plants shall be installed at the time of the original installation. If this is not possible, a solid end cap shall be securely placed over the end of the discharge line until the system can be completed. This will prevent the discharge of raw sewage to the ground surface.

f) Accessibility for Inspection~~inspection~~ and Maintenance~~maintenance~~. The aerobic treatment plants or NSF International/ANSI Standard 40 wastewater treatment systems~~plant~~ shall be equipped with one or more grade-level access manholes having a minimum inside dimension of 18 inches that extend to 3 inches or more above the ground surface. The manhole shall be equipped with a lid that is secured in compliance with Section 5.7.2 of NSF International/ANSI Standard 40. These manholes shall be located to permit periodic physical inspection and maintenance of all compartments and component parts. Component parts include submerged bearings, moving parts, tubes, intakes, slots, filters, and other devices. ~~Grade level access manholes shall be installed in a manner to prohibit the entry of soil, water and dirt into the unit.~~

g) Service. Devices falling within the scope of NSF International/ANSI Standard 40 require periodic maintenance to achieve performance consistent with demonstrated capabilities. Implicit in NSF International/ANSI Standard 40 is the recognition that assured professional service is imperative. NSF International/ANSI Standard 40 and this Part require a 2-year service policy to be provided as part of the initial service agreement. (Note: The following initial service policy includes items not included in the NSF International/ANSI Standard 40 service policy.)

1) Initial service policy.~~:~~ The~~A 2-year policy shall be furnished to the purchaser by the~~ private sewage disposal installation contractor, through the manufacturer or the distributor of the aerobic treatment unit, shall furnish a 2-year initial service policy to the purchaser. This policy shall provide for:

A) Four inspection/service calls, at least one every 6 months, that ~~which~~ include~~includes~~ inspection, adjustment~~,~~ and servicing of the mechanical and the applicable component parts to ensure proper function;

B) An~~For an~~ effluent quality inspection consisting of a visual check for color, turbidity, scum overflow, and an examination for odors;

C) Reporting to the owner immediately any~~For~~ improper operation that~~which~~ cannot be corrected at the~~that~~ time of the inspection or service call~~, to be reported to the owner immediately~~. This shall be followed by~~with~~ a written report to the owner that includes the date by which~~for~~ the condition will~~to~~ be corrected.

2) Continuing service policy.~~:~~ Each manufacturer shall make available for purchase by the owner a continuing service policy with terms equal to the initial service policy.

3) Standby parts.~~:~~ The local distributor shall stock standby~~Standby~~ mechanical and electrical component parts ~~shall be stocked by the local distributor~~ for use when the plant's mechanical or electrical components must be removed from the site for repairs.

4) Component parts.~~:~~ The mechanical and electrical component parts shall be guaranteed against any defects in materials and workmanship as warranted.

5) Service.~~:~~ Service shall be available within 2 working days following a request.

6) Owner's manual.~~:~~ The manufacturer shall provide an~~An~~ owner's manual ~~shall be provided by the manufacturer~~ with each unit. The manual shall include the following information:

A) Model numbers;~~.~~

B) Functional description of unit, including a statement of minimum performance requirements as established by test;~~.~~

C) Design and flow diagrams;~~.~~

D) Warranty;~~.~~

E) Replacement policy and service policy;~~.~~

F) Installation instructions;~~.~~

G) Detailed operation and maintenance requirements (including user responsibility, parts and service);~~.~~

H) Rated service flow in GPM (gallons per minute) or GPD (gallons per day);~~.~~

I) Energy source and energy required for proper operation of the plant; and~~.~~

J) Specification of models tested under ~~ANSI/~~NSF International/ANSI Standard 40.

7) Service label.~~:~~ A clearly visible, permanently attached label or plate giving instructions for obtaining service shall be placed at the audible and visual alarm.

8) Responsibility of property owner.~~:~~ The property owner shall be responsible for maintaining and operating the plant in accordance with this Part and the manufacturer's specifications.

h) Operation. Aerobic treatment plants and NSF International/ANSI Standard 40 wastewater treatment systems shall produce an effluent meeting the physical, chemical and biological requirements of Section 905.110. Under normal operation and, if~~In the event of~~ an electrical or mechanical failure or other performance failure or malfunction occurs, the design and construction of the aerobic treatment plant or NSF International/ANSI Standard 40 wastewater treatment systems shall prevent the discharge of wastewater from any opening that is not part of the designed flow path of the entire treatment process and shall prevent the discharge of wastewater that is not in compliance with Section 905.110.

i) Maintenance. If~~In the event that~~ a routine service call indicates an electrical, mechanical or performance failure or malfunction or if routine laboratory test results indicate improper treatment, the property owner shall immediately take action to bring the aerobic treatment plant or NSF International/ANSI Standard 40 wastewater treatment systems into compliance with this Part.

j) Non-residential Use~~use~~. Aerobic treatment plants and NSF International/ANSI Standard 40 wastewater treatment systems that are listed by NSF International or a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40 as Class I will be considered for use to serve a non-residential property, provided that all of the following are met:

1) Total daily flows from the wastewater source into the plant are at least 75% of the rated hydraulic capacity and do not exceed the rated hydraulic capacity of the plant.

2) Wastewater influent shall not exceed the manufacturer's design specifications for BOD5 loading as established by NSF International or a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40 during testing of the plant.

3) Hourly flows from the wastewater source into the plant are less than or equal to the treatment capacity of the plant divided by 24. This may

require the installation of a flow equalization device.

4) A buried sand filter sized with a surface area equal to 2 gallons per square foot per day and dosed at least once but not more than 4 times per day shall immediately follow the aerobic treatment plant.

k) Splitting of Flows~~Any wastewater source shall be served by a single individual aerobic treatment plant~~. Splitting of flows from a wastewater source or the use of multiple aerobic treatment plants or NSF International/ANSI Standard 40 wastewater treatment systems shall be prohibited unless subsurface disposal of the effluent is used. Where allowed, splitting of flows shall be done by pumps.

l) Private sewage disposal installation contractors or homeowners who maintain or service aerobic treatment plants and NSF International/ANSI Standard 40 wastewater treatment systems shall be required to maintain the integrity of the NSF International seal or the seal of a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40. Only component parts approved for use in an individual plant may be used. No design changes or component part changes may be made that will void the NSF International seal or the seal of a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40. Any person who voids the NSF International seal or the seal of a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF International/ANSI Standard 40 shall be responsible for repairing the plant so it can bear the NSF International seal or the seal of a laboratory approved by ANSI to determine compliance with ~~ANSI/~~NSF ~~Standard~~ International/ANSI Standard 40 or shall replace the plant with an approved private sewage disposal system.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.110 Effluent Discharges

a) General. Buried sand filters, re-circulation~~recirculating~~ sand filters, waste stabilization ponds, ~~and~~ aerobic treatment plants and NSF International/ANSI Standard 40 wastewater treatment systems listed by NSF International/ANSI Standard 40 as~~for~~ Class I effluent (see~~See~~ Section 905.100(a) and (c)) or any Department approved or accepted system may be discharged to any one of the following 3 options:

1) A receiving stream, river, lake~~,~~ or pond that~~which~~ provides greater than a 5:1~~5 to 1~~ dilution of the effluent, based on the 7-day, 10-year low flow rate. A discharge within 10 feet of one of these receiving bodies of water~~the above~~ shall be considered to be a discharge to the receiving body of water. Discharges greater than 10 feet from the receiving body of water shall comply with subsection (a)(2) or (3)~~ of this Section~~. Discharges to a lake or pond shall be limited to 2 discharges per surface acre of water. More than 2 discharges may occur per individual surface acre of water;~~,~~ however, the total number of discharges to total surface acres of water shall not exceed a ratio of 2:1~~2 to 1~~. An example of this is as follows: In a 20-acre lake, several discharges may enter the lake in a ½-acre cove; however, the total discharges entering the lake would be limited to 40. Where discharges are not equally distributed around a lake or pond, the Department or local authority shall be consulted to assure that nuisance conditions are not created.

2) A common collector, provided that the collector does not discharge within one mile upstream from a public water supply intake, public bathing beach, or to any public use area. A public use area is any area that~~which~~ is frequently used by the public. Examples of a public use area are playgrounds and picnic areas. Discharges from lots platted (e.g., individual lots, subdivisions, commercial developments) after January 1, 2014 are not eligible to discharge into a common collector. ~~Common collectors used to carry treated effluent for 2 or more discharging systems with a combined design flow of less than 1500 gallons per day shall be constructed of materials as listed in Appendix A: Illustration C of this Part, and shall discharge in accordance with subsections (a)(1) and (3) of this Section. If the flow from any number of discharging systems is combined and exceeds 1500 gallons per day, then the owner of the property shall provide a copy of the construction permit obtained in accordance with 35 Ill. Adm. Code 309.202(a) and (b) and a National Pollutant Discharge Elimination System (NPDES) permit issued by the Illinois Environmental Protection Agency to the Department or local authority to demonstrate that the effluent from this private sewage disposal system can discharge to this location.~~

3) The ground surface, where the discharge points of private sewage disposal systems with surface discharges do~~does~~ not exceed an average of one per acre and the effluent does not pond or create a nuisance condition.

b) Whenever a subdivision is platted that does not provide private sewage disposal systems in compliance with Section 905.60 or subsection (a) of this Section, then a sewage system in compliance with 35 Ill. Adm. Code 301 shall be provided.

c) When~~Where~~ lots have been platted prior to March 15, 1996, the applicant for plan approval or local authority approval may apply for a variance to this Section in accordance with the provisions of Section 905.20(l).

d) Effluent Limitations~~Standards.~~

1) Surface discharging private sewage disposal systems shall not exceed the following effluent standards~~All surface discharges from private sewage disposal systems shall comply with United States Environmental Protection Agency Secondary Treatment Guidelines for BOD5 and Suspended Solids~~:

A) The system shall comply with NSF International/ANSI Standard 40, Section 8.5.2.1.1 for carbonaceous 5-day biochemical oxygen demand ($CBOD_5$) and Section 8.5.2.1.2 for total suspended solids (TSS).~~BOD5~~

~~i) Arithmetic mean of all effluent samples collected in a period of 30 consecutive days; 30 mg/1 (milligrams per liter) and 85 percent removal.~~

~~ii) Arithmetic mean of all effluent samples collected in a period of 7 consecutive days; 45 mg/1.~~

~~B) Suspended Solids:~~

~~i) Arithmetic mean of all effluent samples collected in a period of 30 consecutive days; 30 mg/1 and 85 percent removal.~~

~~ii) Arithmetic mean of all effluent samples collected in a period of 7 consecutive days; 45 mg/1.~~

B)~~C)~~ No effluent shall contain settlable solids.

C)~~D)~~ Color, odor~~,~~ and turbidity shall~~must~~ be reduced to below discernable levels.

D)~~E)~~ No effluent shall contain floating debris, visible oil, grease, scum~~,~~ or sludge solids.

E)~~F)~~ Fecal~~A fecal~~ coliform bacteria concentration shall not exceed ~~exceeding~~ 400 organisms per 100 ml ~~(milliliter) except where chlorination is not required~~.

F) Sample Ports. After January 1, 2014, any surface-discharging system installed, repaired, renovated or replaced shall have a sample port of at least 4 inches in diameter or free-fall discharge of at least 12 inches located after the disinfection component, which extends to 3 inches or more above the ground surface. A sample port is not required if a free-fall discharge is within 200 feet of the disinfection device. The sample cannot be taken from a common collector or drainage tile, but must be taken from a discharge point that discharges only the treated effluent from the surface-discharging private sewage disposal system.

G) A surface-discharging system installed after January 1, 2014 shall not discharge to a roadside ditch as stipulated in the Illinois Highway Code [605 ILCS 5/9-123].

2) Samples shall be analyzed in accordance with the ~~"~~Standard Methods for the Examination of Water and Wastewater~~"~~.

e) Private sewage disposal systems designed to be compliant with subsection (d) can be discharged to a subsurface seepage field designed and constructed to be at least ⅔ the size determined necessary by Section 905.60. The subsurface system shall be installed to be as shallow as possible while maintaining a minimum of 6 inches of cover and one foot of separation from the bottom of the trench to the shallowest limiting layer.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.115 NPDES Permit Compliance

For those surface discharging private sewage disposal systems that require a general NPDES permit, a permit can be obtained from the US Environmental Protection Agency (USEPA) or the Illinois Environmental Protection Agency (IEPA). Systems permitted under the general NPDES permit shall be in compliance with the terms and conditions of the general NPDES permit. A surface discharging private sewage disposal system that is required to be permitted under an individual NPDES permit shall be in compliance with the terms and conditions of the individual NPDES permit. Information about the applicability of the NPDES permit for surface discharging private sewage disposal systems shall be obtained from USEPA or IEPA.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 905.120 Disinfection

a) As of January 1, 2014, the effluent from any new, repaired or replaced private sewage disposal system that is designed and approved to have a discharge point shall be disinfected prior to discharge.~~General. Surface discharges shall be disinfected with a chlorine solution under the following conditions:~~

~~1) When the effluent is discharged to the ground surface and the effluent leaves the property.~~

~~2) When an individual effluent or the effluent from a common collector is discharged to a pond, lake, or stream in which swimming, water skiing, or other water contact recreation occurs.~~

b) Chlorine Feeders. Chlorination equipment shall have a means of removal of solids. Appendix A, ~~:~~ Illustration S ~~of this Part~~ provides an example of a typical chlorine feeder. All chlorine feeders shall meet the requirements of Appendix A, ~~:~~ Illustration S ~~of this Part~~. Other feeders that~~which~~ meet the requirement of this Section are also acceptable.

c) Chlorine Contact Tanks. Chlorine contact tanks shall be baffled and shall provide a contact time of at least 30 minutes based on 2½ times the average flow. The minimum contact tank capacity shall be 30 gallons. Access to the distribution feeder shall extend to the ground surface.

~~d) Sample Port. A sampling port at least 4 inches in diameter shall be provided on the effluent line or into the chlorine contact tank, unless a free-fall discharge from~~

~~the system is easily accessible within 200 feet of the system.~~

d)~~e)~~ Chlorine Residual. A final effluent free chlorine residual of 0.2 to 1.5 mg/1 shall be maintained.

e)~~f)~~ Chlorine products used for the disinfection of treated wastewater effluent shall be used according to the product's labeling.

f) After January 1, 2014, any disinfection process or equipment that does not meet the requirements of NSF International/ANSI Standard 46, Section 11 or does not provide proper disinfection as determined by adequate third party testing will not be approved for installation.

g) When effluent reduction trenches are used, the disinfection device shall be the last component prior to the discharge point.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.125 Pumps, Pumping/Dosing Chambers, and Ancillary Equipment

a) Pumps shall meet the following requirements:

1) The pump shall be submersible.

2) The pump shall be designed to handle wastewater and a minimum of ½-inch diameter solids.

3) The pump shall be capable of delivering the required flow at the design total dynamic head. The discharge pipe shall be the same size or larger than the discharge of the pump.

4) The pump shall be constructed of corrosion-resistant materials.

5) Performance curves and specification sheets indicating that the ~~above~~ criteria of this subsection (a) have been met shall be submitted with the plan review application when pumps are to be used in a system.

b) Pumping~~Pump~~ Chambers

1) ~~Pumping Chamber.~~ The pumping chamber shall be watertight, meaning that all joints shall be sealed. ~~Watertight shall consist of sealing all joints.~~ The pumping chamber shall be filled with water after being installed and backfilled to prevent the pumping chamber from floating out of position because of~~due to~~ hydrostatic pressures, unless the tank is installed in dry soil.

2) The volume of the pumping chamber shall be sufficient to provide the desired dosing volume, space for controls, space for setting the pump, reserve capacity malfunction and flow-back after the pump shuts off (volume of manifold and laterals).

3) A reserve capacity above the active pumping volume equal to ½~~one-half~~ day's design flow shall be provided if single pumps are used. A reserve volume is not needed if siphons or dual pumps are used.

4) An access riser shall extend at least 6 inches above the ground surface.

5) ~~Dosing Volume.~~ The dosing volume shall be at least 5 times the pipe volume of the dosing network and~~plus~~ provide for filling and drainback of the network. The average flow shall be used to determine the dosing volume.

6) ~~Pump and Alarm Control.~~ The pump control device shall be adjustable so that the required dosing volume is discharged during each pumping cycle. The control system for the pumping chamber shall consist of a control for operating the pump and an alarm system to detect when the system is malfunctioning. Pump controls shall allow flexibility in adjusting the on-off depth. An example of acceptable controls is shown in Appendix A,~~:~~ Illustration Q~~ of this Part~~.

7) ~~Electrical and Alarm System.~~ A high water alarm shall be provided with audible and visual signals and a test function. The alarm shall be on a separate circuit~~ and located in the home or facility served~~. The alarm control device shall be a sealed float or diaphragm switch and shall be located to activate 2 to 3 inches above the pump turn-on level or siphon activation level. After January 1, 2014, all electrical devices for new and repaired private sewage disposal systems shall comply with Section 905.20(k).

c) Ancillary Equipment

1) A quick disconnect device shall be included in the discharge piping to facilitate removal of the pump for inspection, repair~~,~~ or replacement. The disconnect device shall be a threaded union, pitless adapter~~,~~ or lift-out rail system.

2) A corrosion-resistant rope or cable of adequate strength shall be affixed to the pump to facilitate installation and removal so that personnel need not enter the chamber to disconnect the pump.

3) A pump control device shall~~must~~ be adjustable so that the desired dosing volume can be discharged during each pumping cycle. The control device may consist of one or more sealed float or diaphragm switches that~~which~~ may cooperate with a relay or contact. Separate control panels located outside the chamber shall~~must~~ be protected from the weather and shall~~must~~ provide no air path between the panel and the pumping~~pump~~ chamber.

4) A check valve between the pump and the piping network shall not be allowed unless this piping system is below the frost line.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.130 Human Waste Disposal

a) General. Privies, portable toilets, recirculation toilets, incinerator toilets~~,~~ and compost toilets are approved for private sewage disposal of human wastes. Other domestic wastes shall be disposed of in a conventional system (see Section 905.30); however, the size of all components, as designed in accordance with Appendix A, Illustration A, may be reduced 25 percent (except that septic tanks may not be smaller than 750 gallons). Note: Compost toilets may be used to dispose of other organic domestic wastes.

b) Privy Construction. All privies shall be constructed and maintained in accordance with the following and Appendix A,~~:~~ Illustration T~~ of this Part~~:

1) Pit Construction. The pit shall be constructed of materials and in ~~such~~ a

manner so as to be able to endure the anticipated load and use and to withstand the local environmental conditions without deteriorating. The pit shall be constructed so~~such~~ that there shall be access to the pit for pumping and cleaning~~ purposes~~.

2) Pit Size. The pit shall have a minimum capacity of 50 cubic feet per seat.

3) Floor and Seat Riser. The floor and seat riser shall be constructed of an impervious material and in a manner to exclude insects and rodents. The seat riser shall be bonded to the floor to prevent seepage through the riser onto the floor.

4) Seat Cover. The seat opening shall be covered with a hinged lid that~~which~~ forms a tight seal.

5) Vent. Each pit or vault privy shall be provided with a vent to the outside that creates airflow out of the building through the vent. The vent opening shall be screened with 16 mesh screen to prevent the entry of flies and shall terminate through the roof.

6) Maintenance~~ and Abandonment~~. When any privy is ~~abandoned or~~ filled to within 18 inches of the bottom of the riser, it shall be pumped by a private sewage disposal system pumping contractor. ~~Any abandoned privy pit shall be filled with earth.~~

7) Abandonment. Privies that are no longer in use shall be completely pumped. The floor and walls shall be cracked or crumbled so that the tank or pit will not hold water, and the tank or pit shall be filled with sand or soil. If the tank or walls are removed from the ground, the excavation shall be filled with soil.

c) Vault Privy. Watertight, non-metal vaults are required where privies are used in areas where the groundwater or limestone formations are within 4 feet of the bottom of the pit. The vault shall be provided with a readily accessible cleanout that~~which~~ prohibits the entry of rodents, insects~~,~~ and surface water. (See Appendix A,~~:~~ Illustration T~~ of this Part~~.)

d) Septic Privy. The vault of a septic privy shall be watertight. The subsurface seepage field shall consist of a minimum of one 10-foot distribution line placed in

a 2-foot wide trench constructed in accordance with Section 905.60 and Appendix A, ~~:~~ Illustration U ~~of this Part~~.

~~e) Standards for the Construction and Servicing of Non-Sewered (Portable) Toilet Systems. A portable toilet is a self-contained unit equipped with a waste receiving holding container. Non-sewered toilet systems shall be constructed and maintained in the following manner:~~

~~1) Rooms, buildings or shelters housing toilets shall be of solid construction, easy to clean, providing shelter and privacy. The toilet room shall be ventilated to the outside, with the vent covered with 16 mesh screen. Internal latches shall be provided to prevent inadvertent entry.~~

~~2) Waste containers shall be fabricated from impervious materials such as plastic, steel, fiberglass or their equivalents. Containers shall be watertight and capable of containing the waste. Containers shall be adequate in size to be used by the number of persons anticipated without filling the container to more than half of its volume before regularly scheduled service.~~

~~3) Servicing shall include removing waste from containers, recharging containers with an odor controlling solution, installing a supply of toilet tissue based on the system's intended use, and cleaning urinals and seats. Employers and event sponsors are responsible for contracting service intervals frequent enough to ensure clean, sanitary facilities.~~

~~4) Any defective or inadequate toilet unit shall be repaired or withdrawn from service by locking or removal.~~

~~5) Removal of waste shall be handled in a sanitary manner by means of a vacuum hose and discharge to a leak-proof tank truck. All ports on the tank shall be valved and capped.~~

~~6) Service trucks shall have access to the toilets to be serviced.~~

~~7) Disposal of waste from tank trucks shall be in accordance with Section 905.170(g).~~

e)~~f)~~ Re-circulating~~Recirculating~~ Toilets~~.~~

1) Self-contained toilets that~~which~~ treat and re-circulate~~recirculate~~ the flushing liquid shall be constructed of an impervious, easily cleanable material and vented to the outside air through a screened pipe. The effluent, if any, from the re-circulating~~recirculating~~ toilet shall discharge into a subsurface seepage field or into a disposal bag. The subsurface seepage field shall consist of a minimum of one 10-foot long distribution line placed in a 2-foot wide trench constructed in accordance with Section 905.60. The owner of a re-circulating~~recirculating~~ toilet shall dispose of any residual from the unit in an approved public or private sewage disposal system.

2) Re-circulating~~Recirculating~~ toilets shall comply with the requirements of the ~~National Sanitation Foundation (~~NSF International/ANSI~~)~~ Standard 41 and shall bear the NSF International or the approved certification agency seal.

f)~~g)~~ Incinerator Toilets~~.~~

1) Incinerator toilets shall be designed and operated to provide complete incineration of the contents without production of odors. The owner of an incinerator toilet shall maintain the toilet and dispose of the contents in accordance with Section 905.170(e).

2) Incinerator toilets shall comply with the requirements of ~~the National Sanitation Foundation (~~NSF International/ANSI~~)~~ Standard 41 and shall bear the NSF International or the approved certification agency seal.

g)~~h)~~ Compost Toilets~~.~~

1) Compost toilets shall be designed in accordance with the manufacturer's recommendations to serve the anticipated number of persons. The owner of a compost toilet shall maintain the toilet and dispose of the contents in accordance with Section 905.170.

2) Compost toilets shall comply with the requirements of ~~the National Sanitation Foundation (~~NSF International/ANSI~~)~~ Standard 41 and shall bear the NSF International or the approved certification agency seal~~Seal~~.

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.135 Portable Sanitation

a) Any person operating in Illinois who sells, rents, leases, transports, services, cleans, sanitizes or maintains a portable toilet or portable potable hand washing unit or pumps, transports or disposes of waste from portable toilets or portable potable hand washing units shall be licensed as a portable sanitation business.

b) Only a portable sanitation technician or portable sanitation technician trainee certified by the Department as working for a portable sanitation business may service, clean, sanitize or maintain a portable toilet or portable potable hand washing unit, or pump, transport or dispose of waste from portable toilets or portable potable hand washing units.

c) Any person licensed as a private sewage disposal system pumping contractor on or after January 1, 2014 may submit to the Department a completed application and fee, within 6 months after January 1, 2014, requesting to be licensed as a portable sanitation business. A person licensed as a private sewage disposal system pumping contractor on January 1, 2014 may submit to the Department a completed application and fee to be certified as a portable sanitation technician without taking the examination or initial training required for the portable sanitation technician certification. After July 1, 2014, all persons wanting to become certified as a portable sanitation technician shall complete the training requirements of this Section.

d) Any person wishing to obtain a license as a portable sanitation business shall:

1) Submit to the Department a completed application on forms provided by the Department;

2) Provide a copy of the business' education and training materials and protocol for educating and training for all employees requiring certification by the Department;

3) Provide a written statement signed by the owner or authorized representative specifying that only certified portable sanitation technicians and portable sanitation technician trainees will be transporting, servicing, cleaning, sanitizing or maintaining portable toilets or portable potable

hand washing units, or pumping, transporting or disposing of waste from portable toilets or portable potable hand washing units for the business; and

4) Submit a non-refundable fee for the license as established in Section 905.200.

e) A portable sanitation business license shall expire on June 30 of each year, except that a license issued after April 1 and before June 30 shall expire on June 30 of the following year.

f) Certification of Employees

1) A portable sanitation business shall submit the following materials to the Department as part of the certification process of a portable sanitation technician trainee:

A) A completed application on a form provided by the Department;

B) A non-refundable fee as established in Section 905.200; and

C) For initial application, a copy of the individual's certificate of completion from an approved training course; and for annual renewal of the certification, documentation of attendance at an approved continuing education course.

2) A portable sanitation business shall submit the following materials to the Department as part of the certification process of a portable sanitation technician:

A) A completed application on a form provided by the Department;

B) A non-refundable fee as established in Section 905.200; and

C) For initial application, a copy of the individual's certificate of completion from an approved training course; and for annual renewal of the certification, documentation of attendance at an approved continuing education course.

g) Portable Sanitation Technician Trainee

1) To become certified as a portable sanitation technician trainee, an individual shall:

A) Be an owner or employee of a licensed portable sanitation business; and

B) Complete an initial training or an education course provided by the portable sanitation business and approved by the Department.

2) The application shall be submitted on forms provided by the Department and accompanied by the fee established in Section 905.200.

3) The portable sanitation technician trainee certification is valid for only one year. A portable sanitation technician trainee certification shall expire on June 30 of each year, except that a certification issued after April 1 and before June 30 shall expire on June 30 of the following year.

h) Portable Sanitation Technician

1) To become certified as a portable sanitation technician, an individual shall:

A) Be an owner or employee of a licensed portable sanitation business;

B) Complete training and an education course provided by and specific to the portable sanitation business; this training shall be pre-approved by the Department; and

C) For the original certification, provide a copy of the employee's documentation of attendance and passing grade for the training and examination offered by the Department or a training and testing program approved by the Department. For renewal of the certification, the employee shall provide copies of the employee's documentation of attendance at a continuing education course in accordance with Section 905.200.

2) The application shall be submitted on forms provided by the Department and accompanied by the fee established in Section 905.200.

i) For the attendee to receive credit to be used for obtaining or renewing certification, education courses and continuing education course curricula shall have Department approval prior to the attendee's attending the course. Courses not pre-approved by the Department shall not be counted toward training or continuing education.

j) The examination for a portable sanitation technician certification shall test the applicant's knowledge of safely pumping, cleaning and sanitizing portable toilets and portable potable hand washing units and hauling and disposing of wastes removed from portable toilets and portable potable hand washing units.

k) An individual shall achieve a grade of 70% or higher to pass an examination for a portable sanitation technician certification.

l) The portable sanitation technician certification shall be renewed annually. A portable sanitation technician certification shall expire on June 30 of each year, except that an original certification issued after April 1 and before June 30 shall expire on June 30 of the following year. If a renewal application is mailed or received after June 30, a non-refundable reinstatement fee will be required as provided in Section 905.200.

m) The portable sanitation business is accountable for the following work conducted by individuals certified by the business:

1) Cleaning, servicing and replenishing required items or chemicals for each portable toilet or portable potable hand washing unit serviced, inspected or maintained;

2) Pumping, transporting or disposing of waste from portable toilets or portable potable hand washing units.

n) Standards for Constructing and Servicing Portable Toilets or Portable Potable Hand Washing Units
Portable toilets or portable potable hand washing units shall be constructed and serviced in the following manner:

1) Rooms, buildings or shelters housing portable toilets shall be of solid construction, easy to clean and providing shelter and privacy. The portable toilet room shall be ventilated to the outside, with the vent covered with 16-mesh screen. Internal latches shall be provided for the doors to the portable toilets to prevent inadvertent entry.

2) Waste containers and portable potable water containers shall be fabricated from impervious materials such as plastic, steel, fiberglass or their equivalents. Containers shall be watertight and capable of containing the waste and portable potable water.

3) Number of Portable Toilets and Portable Potable Hand Washing Units at a Site

A) An adequate number of portable toilets or portable potable hand washing units shall be provided to be used by the number of persons anticipated.

B) The portable toilets and portable potable hand washing units shall be serviced at a frequency that maintains the units in a sanitary condition and free of odors.

C) The employer, property owner or event coordinator shall acquire more units or adjust the service and maintenance frequently to ensure sanitary conditions.

D) The property owner's failing to provide a sufficient number of portable toilets or portable potable hand washing units or a frequency of service and maintenance capable of ensuring a sanitary condition is a violation of the Act and this Part.

4) Servicing shall include removing waste from containers; recharging containers with an odor-controlling solution; installing a supply of toilet tissue, sanitary single use towels, and liquid soap and refilling hand sanitizing solution, based on the unit's intended use; and cleaning and sanitizing the portable toilets and hand washing units.

A) Each portable toilet and portable potable hand washing unit shall be thoroughly cleaned and sanitized after each pumping or as part

of the routine service. Areas that shall be cleaned and sanitized include all internal parts of the unit, which include the urinal, seat, counters, shelves, tank, walls, floor, door and ceiling, in addition to the exterior of the door and handle.

B) The portable toilet system contractor shall have 2 separate sets of cleaning equipment, which shall be labeled and stored so that they are physically separated from each other. One set shall be used to clean and sanitize the walls, counters, shelves, handle, door and ceiling of the portable toilets and the portable potable hand washing units. The second set of cleaning and sanitizing equipment shall be used for the floors, urinals, seat and tank of the portable toilet. If the units are cleaned and sanitized with a power washer, separate sets of cleaning equipment are not needed.

C) Anti-bacterial hand sanitizer shall be provided at each unit and shall be refilled at each pumping, as needed. One portable potable hand washing unit with a supply of sanitary single-use towels and soap may be provided for up to 5 portable toilets in lieu of refilling anti-bacterial hand sanitizer at each unit. The hand washing facility shall be located within 20 feet of the portable toilets. The dispensers and hand washing facilities shall be cleaned and sanitized after each pumping, and then refilled with potable water from an approved source.

5) After a unit is cleaned and sanitized, it shall be inspected by the person designated by the business to ensure that the unit is in compliance with this Section and all other applicable Sections of this Part.

6) Any defective portable toilets or portable potable hand washing units shall be repaired or withdrawn from service by locking or removal.

7) Waste shall be removed in a sanitary manner by means of a vacuum hose and discharged to a leak-proof tank truck. All ports on the tank shall be valved and capped.

8) Service trucks shall have access to the toilets to be serviced.

9) The service trucks and disposal of waste from tank trucks shall be in accordance with Section 905.170(g).

10) A business shall designate at least one representative who shall be responsible for ensuring that each unit maintained by the business meets the standards of cleanliness set forth in the Act and this Part.

11) Persons engaged in cleaning and sanitizing units shall wear protective equipment and be trained in proper procedures for cleaning, sanitation and self-protection.

12) All portable sanitation businesses shall certify that the portable sanitation technicians and portable sanitation technician trainees are capable of properly cleaning and sanitizing a portable toilet and portable potable hand washing unit. At a minimum, the business shall annually inspect each portable sanitation technician's and portable sanitation technician trainee's work to ensure that he or she is capable and can effectively clean and sanitize the portable toilets and portable potable hand washing units to be serviced.

o) Violations of the Act or any Section of this Part may result in prosecution and suspension, revocation or refusal to issue a license or certification for both the portable sanitation business and the certified portable sanitation technician or portable sanitation technician trainee.

(Source: Added at 37 Ill. Reg. _____, effective _____)

Section 905.140 Holding Tanks

a) General. Holding tanks are approved for private sewage disposal only under the following circumstances:

1) Site conditions are not suitable to achieve compliance with this Part by installing a private sewage disposal system. ~~To serve a seasonal use, single family residence, such as a cabin used only on weekends, short vacations, and other similar situations.~~

2) As a temporary measure while awaiting the availability of a municipal sewer extension. This temporary condition shall not exceed one~~1~~ year in

length.

3) As a sanitary dumping station to receive the discharge from holding facilities on recreational vehicles.

4) To receive the discharge from fixtures or drains that receive waste products such as automotive grease, oils, solvents and chemicals that are not allowed to be discharged into a private sewage disposal system. These waste products shall be handled according to rules for the disposal of oil, gas and grease promulgated under the Environmental Protection Act, or according to 35 Ill. Adm. Code Subtitle G, or shall be taken to an oil and gas reclamation center. ~~Note:~~ (Also see the Illinois Plumbing Code ~~(77 Ill. Adm. Code 890)~~.) Holding tanks to be used as described in this Section shall be Underwriters Laboratories, Inc. certified, constructed of materials approved for gas and oil interceptors as specified in 77 Ill. Adm. Code 890.520, and properly anchored to prevent flotation.

b) Approval. Approval for holding tanks shall be obtained in writing from the Department or local authority prior to installation. Approval~~Such approval~~ shall be based on compliance with this Section.

c) Construction and Location. Holding tanks shall be designed and constructed in compliance with Section 905.40~~,~~ (~~"~~Septic Tanks)~~"~~, except that the outlet shall be permanently sealed. Holding tanks shall be located to comply with the requirements for septic tanks and aerobic treatment plants (see~~"Septic Tanks or Aerobic Treatment Plants" as listed in~~ Appendix A,~~:~~ Illustration D~~ of this Part~~).

d) Conversion to Conventional Private Sewage Disposal Systems. Holding tanks installed under subsection (a)(2) ~~of this Section~~ shall be converted to a conventional private sewage disposal system within one year after the original installation if a municipal sewer has not been extended to serve the property ~~within one year of the original installation~~.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.180 Examinations for Licensure

a) Applications

1) Each person who desires to apply for admittance to the examination for a Private Sewage Disposal System Installation Contractor license or a Private Sewage Disposal System Pumping Contractor license shall file an application for examination on forms provided by the Department. These forms may be obtained by writing to the Illinois Department of Public Health, Division of Environmental Health.

2) The Department will establish examination~~Examination~~ dates and locations~~ shall be established by the Department~~. A completed application, a photograph of the applicant, and a fee of $100 for each examination shall~~$25.00 must~~ be filed with the Department at least 30 days prior to the examination date.

b) Examination Requirements and Results

1) Installation License Examination. The examination for a Private Sewage Disposal System Installation Contractor license shall test the applicant's knowledge of the design, installation, operation, maintenance, repair~~repairing~~ and service~~servicing~~ of private sewage disposal systems.

2) Pumping Licensing Examination. The examination for a Private Sewage Disposal System Pumping Contractor license shall test the applicant's knowledge of ~~the~~ pumping, hauling~~,~~ and disposing~~disposal~~ of wastes removed from private sewage disposal systems.

3) Individuals desiring both the installation contractor license and pumping contractor license shall~~must~~ pass the examination for each license.

4) Passing Grade. The examination shall consist of questions with a combined grade value of 100 points. To~~In order to~~ successfully pass the examination, a grade of not less than 70 shall~~75 must~~ be obtained.

5) Failure to Attend an Examination. Any person who fails to notify the Department in writing by letter, fax or e-mail at least 2 working days prior to the date of the examination and fails to attend the examination will be required to resubmit an application and fee to be eligible to take an examination on another date. If an emergency or severe weather conditions do not allow an individual to attend an examination, the individual may make a written request to the Department explaining why

the individual was unable to attend. The Department will review the request and, if the request is accepted, the individual will not be charged a new application fee to reschedule the examination.~~Failure to Pass. Any person who fails to pass the examination shall be admitted to a subsequent regularly scheduled examination after filing a new application and fee with the Department in accordance with subsection (a) of this Section. However, persons who fail to pass the exam 2 times in a calendar year shall be required to wait at least one calendar year from the date of the last examination before taking the examination again.~~

c) Regulator Exemption

1) Currently employed staff of the Department or an agent of the Department, local health department or municipalities administering the Private Sewage Disposal Program may apply to take an examination. The fee for the examination will be waived, but in waiving the fee the individual, upon passing the examination, will not be able to act as a licensee or perform the duties empowered under the Act and this Part for the specific license. Taking the examination will only verify and evaluate the individual's knowledge of this Part.

2) If an individual is employed by the Department or is an agent of the Department, local health department or municipality and is licensed as a private sewage disposal installation contractor, private sewage disposal pumping contractor, portable sanitation technician or portable sanitation technician trainee, the individual may not perform the duties empowered under the license or certification within the State. This subsection (c)(2) applies to individuals employed at the Department or as agents that evaluate and approve construction permits for private sewage disposal systems, inspect private sewage disposal systems or enforce the Act and this Part within their jurisdiction.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.190 Installation Approval

a) Plan approval shall be obtained from the Department or local authority prior to beginning any construction of a new private sewage disposal system. A new private sewage disposal system shall consist of, but not necessarily be limited to,

the following:

1) A system where a septic tank is replaced or where a major component of the system is removed or added. Examples of major components would be the replacement or addition of an aeration unit, re-circulating ~~recirculating~~ sand filter, sand filter, seepage pit, seepage bed or waste stabilization pond.

2) A system where the size of the absorption field is increased ~~in size~~ by 25% or more or where 25% or more of the existing absorption field is removed and replaced with new piping and backfill material.

b) Requests~~Submittal~~ for approval shall be submitted~~made~~ on the forms provided by the Department or local authority. At a minimum, the necessary information that shall~~which must~~ be submitted to the Department or local authority for approval shall consist of:

1) Plans or drawings to scale indicating lot size with dimensions showing the location of the system and~~,~~ type of system to be constructed;~~,~~ the dimensions and the length of lateral pipe to be installed, showing type of backfill material if applicable;~~,~~ distances to water lines, water wells, potable water storage tanks and buildings;~~,~~ site elevations and ground surface elevations sufficient to determine the elevation of system components and the slope of the ground surface;~~,~~ location of sanitary sewer, if available, within 300~~200~~ feet of the property; and typical cross-section of the system.

2) Number of bedrooms or design volume.

3) Soil investigation results or percolation test results and the separation distance from the trench bottom to a limiting layer. The private sewage disposal system installation contractor or homeowner shall submit information with the plan approval application or local authority permit application that a limiting layer does not exist within the distances provided in Section 905.60(a)(7)~~(A) of this Part~~.

4) Owner's name and address.

5) Name and signature of applicant.

c) The applicant's signature serves as written acknowledgement that the property owners are aware of and accept the responsibility to service and maintain the private sewage disposal system in accordance with the Private Sewage Disposal Licensing Act and this Part. If the owner of the site is a developer or contractor, he or she shall notify the purchaser and the Department or the Department's agent of the transfer of ownership and responsibility for maintenance.

d)~~c)~~ Persons who construct, install, repair or modify a private sewage disposal system shall notify the Department or local authority at least 48 hours prior to commencement of the work.

e)~~d)~~ If any person constructs, installs, repairs or modifies a private sewage disposal system without complying with the requirements of subsections (a) through (d)~~(c)~~ of this Section and backfills any portion of the system or covers any portion of the system with earth, cinders, gravel, shale or any other material that will prevent the Department or local authority from viewing the system to determine compliance with this Part, the property owner ~~and/~~or private sewage disposal installation contractor shall uncover the backfilled or covered portions of the system.

f)~~e)~~ Contractor Responsibility. The private sewage disposal installation contractor is responsible for percolation test results and the sewage disposal system that is designed and constructed using those results. Acceptance of percolation tests from other sources does not relieve the installation contractor from responsibility. The private sewage disposal system installation contractor is also responsible for the following:

1) Constructing, installing, repairing, modifying, or maintaining the private sewage disposal system in accordance with this Part;~~.~~

~~2) Percolation test results and the sewage disposal system that is designed and constructed using those results. Acceptance of percolation tests from other sources does not relieve the installation contractor from responsibility.~~

2)~~3)~~ Providing the results of soil classification information ~~and/~~or percolation tests used to design a private sewage disposal system to the property owner and retaining copies of this information for at least 5 years;~~.~~

3)~~4)~~ Providing service to aerobic treatment plants at least equal to Section 905.100(g); and~~.~~

4)~~5)~~ Assuring compliance with all codes that may apply to the system, including the National Electrical Code.

g)~~f)~~ Soil Classifier Responsibility. The soil classifier or Illinois licensed professional engineer shall be responsible for the accuracy of the information from~~in~~ soil investigations used to design private sewage disposal systems.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.200 Licenses and Fees

a) An individual may obtain a license as a private sewage disposal system pumping contractor~~Private Sewage Disposal System Pumping Contractor~~ or a private sewage disposal system installation contractor~~Private Sewage Disposal System Installation Contractor~~ upon successfully passing the examinations given for each, then applying~~, making application~~ on forms provided by the Department and submitting the annual license fee of $100~~$50.00~~ to the Department.

b) *Each person who holds a currently valid plumbing license issued under the Illinois Plumbing License Law* [225 ILCS 320] *shall~~is~~ not be required to pay the~~an~~ annual license fee, but shall~~must~~ comply with all other provisions of* the Act and this Part, *including the requirement for examination for licensure.* (Section 5(a) of the Act)~~*.the Act and this Part.* [225 ILCS 225/5(a)]~~

c) The fee to be paid for the annual renewal of either a private sewage disposal system pumping contractor or a private sewage disposal system installation contractor~~Private Sewage Disposal System Pumping Contractor or a Private Sewage Disposal System Installation Contractor~~ license shall be $100~~$50.00~~.

d) The fee to be paid for the reinstatement of a private sewage disposal system pumping contractor~~Private Sewage Disposal System Pumping Contractor~~ license or a private sewage disposal system installation contractor~~Private Sewage Disposal System Installation Contractor~~ license that~~which~~ has expired for a period of less than 3 years shall be $50~~$20.00~~, plus all lapsed renewal fees.

e) A license that~~which~~ has expired for more than 3 years may be restored only by

passing the written examination and paying the required fees.

f) A person who does not obtain a license within 2 years after successfully completing the appropriate examination shall be required to file a new application and fee with the Department in accordance with Section 905.180(a) and again successfully pass the examination prior to applying for a license.

g) *The Department shall reinstate a license* that *expires while a licensee is in the active military service of the United States upon application to the Department by the former licensee within two years after termination of military service, payment of the annual license fee and submission of evidence of military service.* The *license shall be reinstated without examination and without payment of the reinstatement fee.*(Section 5(b) of the Act) ~~*No reinstatement fee will be charged and no examination will be required of an applicant who is seeking reinstatement within two years of terminating military service, upon payment of annual license fee and submission of evidence of military service.* [225 ILCS 225/5(b)]~~

h) As of January 1, 2014, all individuals licensed as a private sewage disposal system pumping contractor or a private sewage disposal system installation contractor or certified as a portable sanitation technician shall be required to obtain 3 hours of continuing education prior to the renewal of the license. The Department will review and approve continuing education hours, based on whether the content of the course is current and pertinent to the advancement and knowledge level of the industry. For individuals to receive credit for education, continuing education courses shall be approved by the Department prior to the course being offered. The contractor shall submit the certificate of completion of the required education to the Department for approval prior to the reissuance of the licenses.

i) The fee to be paid for the original license of a portable sanitation business and for the annual renewal of a license of a portable sanitation business shall be $250.

j) The original and annual renewal fee to be paid for the certification of a portable sanitation technician shall be $50.

k) The fee to be paid for the certification of a portable sanitation technician trainee shall be $50.

l) The fee to be paid for the reinstatement of a portable sanitation business license that has expired for a period of less than 3 years shall be $100, plus all lapsed renewal fees.

m) The fee to be paid for the reinstatement of a portable sanitation technician certificate that has expired for a period of less than 3 years shall be $50, plus all lapsed certification fees.

n) Private sewage disposal system installation contractor or private sewage disposal pumping contractor licenses shall be renewed by November 30 of each calendar year. Individuals who fail to renew a private sewage disposal system installation contractor or private sewage disposal pumping contractor license prior to December 1 will be required to pay the reinstatement fee of $50. A license cannot be issued until all fees have been paid.

o) Portable sanitation business licenses shall be renewed by April 30 of each calendar year. Businesses that fail to renew a license prior to June 1 will be required to pay the reinstatement fee of $100. A license cannot be issued until all fees have been paid.

p) Portable sanitation technician licenses shall be renewed by April 30 of each calendar year. Individuals who fail to renew a license prior to June 1 will be required to pay the reinstatement fee of $50. A license cannot be issued until all fees have been paid.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 905.205 Civil Penalties and Time Allowances for Corrective Action

a) Amount of Penalty

1) The Department may assess civil fines against any person or licensee who constructs, installs, repairs, modifies, ~~or~~ maintains or fails to provide for required maintenance of a private sewage disposal system, or any person or licensee who pumps, hauls or disposes of wastes from a private sewage disposal system in violation of any Section of the ~~Private Sewage Disposal Licensing~~ Act or this Part.

2) The Department shall determine the amount of the fine based upon the

seriousness of the violation. The seriousness of the violation will be determined as follows:

A) Type A – violations considered the most grievous, which shall be grounds to assess a larger fine, shall be activities that create a health hazard, unlicensed activities and repeat violations. Examples of these activities include violations of vertical or horizontal separation distances, falsifying information on permits or reports, addition of prohibited materials to a private sewage disposal system, use of improper septage disposal methods and prohibited discharges. The amount of the fine shall not exceed $1,000 for each violation in addition to $100 per day for each day the violation continues.

B) Type B – violations relating to improper construction practices, the use of improper materials, failure to install a system according to the approved plan and pumper equipment violations shall be considered more serious. The maximum fine shall not exceed $750 for each violation in addition to $100 per day for each day the violation continues.

C) Type C – administrative violations involving paperwork, such as failure to obtain a permit or improper pumping truck lettering, shall be considered the least serious. The maximum fine shall not exceed $500 for each violation, in addition to $100 per day for each day the violation continues.

D) For the purposes of determining a repeat violation, an initial violation means the first violation of a particular Section of the Act or this Part within the previous 3 years. An identical or~~If the same or a~~ similar violation (example: a violation of vertical or horizontal separation distance or septage disposal) that occurs within a 3 year period~~, it~~ will be considered a repeat violation.

b) Correction of Violation. Correction of violations that are considered serious health hazards as determined by the Department or local health department shall begin immediately and be completed within 7 days. Other violations shall be corrected within 30 days after notification by the Department or the local health department. An exception to this requirement may be authorized by the

Department or local health department when extenuating circumstances prevent correction in a timely manner. Examples of extenuating~~such~~ circumstances include weather, physical conditions that prevent construction or repair, or lack of adequate materials~~, etc~~. The Department or local health department may also grant an extension of time for correction, based on the type and seriousness of the violation~~,~~ and the violator's demonstrated progress~~effort on the part of the violator to make progress~~ in correcting the violation.

c) Any violation may be referred to the State's Attorney of the county in which it occurs or to the Attorney General for prosecution.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION C List of Approved Plastic Pipe for Private Sewage Disposal System

TYPES OF PIPES		ASTM STANDARD	BUILDING SEWER [1] OR COMMON COLLECTOR 5 ft. from building to septic-aeration tank to 5 ft. beyond the septic tank, aeration tank or distribution box	SEWER LINES [1] Additional treatment facilities and sand filter distribution lines and collection lines	ALL SUBSURFACE SEEPAGE SYSTEMS
~~PVC~~	~~(Type PS-46)~~	~~F789-82~~	~~x~~	~~x~~	~~x~~
ABS	(DWV Schedule 40)	F628-06~~85~~	x	x	x
ABS	(DWV Schedule 40)	D2661-06~~78~~	x	x	x
ABS		D1527-99~~77~~ (2005)	x	x	x
ABS	(Sewer Pipe)	D2751-05~~80~~	x[2]	x[2]	x[2]
PVC		D1785-06~~76~~	x	x	x
PVC	(DWV Schedule 40)	D2665-07~~78~~	x	x	x
PVC	(DWV Schedule 40)	F891-04~~86~~	x	x	x
PVC	(Type PSM) (SDR 35)	D3034-06~~80~~	x[2]	x[2]	x[2]
~~PVC~~	~~(Type PSP) (SDR 35)~~	~~D3033-81~~	~~x[2]~~	~~x[2]~~	~~x[2]~~
PVC	(Sewer & Drain PS-50)	F891-04~~86~~	x	x	x
PVC	(Sewer & Drain PS-25)	F891-04~~86~~	x	x	
PVC	(Corrugated-Smoothwall)	F949-06~~85~~	x	x	

PVC	(Std. or Perforated)	D2729-03~~80~~	x	x
PE	(Smoothwall)	R810-07~~83~~	x	x
		AASHTO Standard M252-06~~851~~		
PE	(Corrugated-Perforated)	F405-05~~82~~ (Heavy Duty Only)		x
PE	(Corrugated-(Perforated)	F667-06~~84~~		x

x – Indicates approved use.

[1] Plastic~~Commingling of plastic~~ materials shall not be co-mingled~~done~~ within this area except through the use of proper adapters. (See Illinois Plumbing Code~~ (77 Ill. Adm. Code 890)~~.) When the building sewer is of a type of material that is different from the building drain, proper transition fittings shall be used.

[2] Pipe shall be SDR (Standard Dimension Ratio) 35 only.

Note: The last 2 numbers of the ASTM Standard indicate the date of the edition.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION D Location of Components of Private Sewage Disposal Systems

	MINIMUM DISTANCE ALLOWABLE FROM [1,2]					
COMPONENT PART OF SYSTEM	Cistern Well, or Suction Line from Pump To Well	Water Supply Line[3] Pressure	Lake, Stream In ground Swimming Pool or Other Body of Water	Property Dwelling	Property Line[4]	Artificial Drain
	FEET	FEET	FEET	FEET	FEET	FEET
Building Sewer [5~~2~~]	50	10	25	–	–	–
Septic Tank or Aerobic Treatment Plant	50	10[9]	25	5	5	–
Distribution Box	75	10	25	10	5	–
Subsurface Seepage System	75	25	25	10	5	10
Sand Filter	75	25	15	10	5	10
Privy	75	25	25	20	5	10
Waste Stabilization Pond	75	25	25	20	5	10
Surface Discharge Effluent Line [~~2~~]	50	10	–	–	5	–
Effluent Receiving Trench	75	25	15	10	5	10
Treated Effluent Discharge Point[6]	50	10	–	20	25	25
Class V Injection Wells[7]	200[8]	25	25	10	5	10

[1] These distances have been determined for use in clay, silt and loam soils only. The minimum distances required for use in sand or other types of soil shall be determined for the proposed private sewage disposal system and approved by the~~this~~ Department. Approval~~Such approval~~ will be given if~~where~~ the Department determines that the soil will provide treatment of the sewage.

[2] For separation distances to closed loop wells, see 77 Ill. Adm. Code 920.180.~~The building sewer or surface discharge effluent line may be located to within 10 feet of a well or suction line from the pump to the well when cast iron pipe with mechanical joints or Schedule 40 PVC pipe with watertight joints is used for the building sewer or surface discharge effluent line.~~

[3] See Section 905.20(d) for additional details on water line and sewer separation.~~ This includes lawn irrigation piping~~.

[4] If a common property is used, the boundary of the common property shall be used.

[5] The building sewer or surface discharge effluent line may be located to within 10 feet of a well or suction line from the pump to the well when cast iron pipe with mechanical joints or Schedule 40 PVC pipe with watertight joints is used for the building sewer or surface discharge effluent line.

[6] Any surface discharging system installed, repaired or renovated after January 1, 2014.

[7] Class V Injection Wells are defined in Illinois Pollution Control Board rules. They are typically a shallow well used to place fluids directly below the land surface. See, e.g., 35 Ill. Adm. Code 704.105, 704.106 and 704.280.

[8] A lesser separation distance may be obtained with approval or a waiver from IEPA.

[9] There shall be 25 feet separation from public water supply water mains and water service lines. The terms public water supply, water main and water service line shall have the same meaning as in the Illinois Pollution Control Board's Public Water Supplies rules. See, e.g., 35 Ill. Adm. Code 653.118 and 653.119.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION I Seepage Field Construction

Section 905.EXHIBIT D Spacing − Gravelless and Chamber Systems

SPACING FOR SEEPAGE FIELD CONSTRUCTION
(GRAVELLESS AND CHAMBER SYSTEMS)

Gravelless and Chamber Dimensions	Minimum Center to Center Spacing of Distribution Lines
8 Inch Inside Diameter of Gravelless Pipe System	7.0 feet
10 Inch Inside Diameter of Gravelless Pipe System	7.0 feet
12 Inch Wide Chamber System	7.0 feet
18 Inch Wide or Wider Chamber System	9.0 feet

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION I Seepage Field Construction

Section 905.EXHIBIT E Chamber Sizing Requirements

Example: Chamber systems shall be sized~~size~~ on the absorption area of the chamber that is equivalent to the bottom area of a gravel system. The equivalent chamber absorption area per lineal foot is equal to the average inside width of the chamber times an equivalency factor of 2.5. For example, a chamber that has an average inside width of 1.25 feet provides an equivalent absorption area of 3.125 square feet per lineal foot. (1.25 feet times the 2.5 equivalency factor equals 3.125 square feet per lineal foot.

To determine the length of chambers required, first calculate the absorption area required for a gravel system based on Appendix A, Illustration H, Exhibit A or Appendix A, Illustration M, Exhibit A. Then divide this area by the equivalent chamber absorption area per lineal foot. For example, if a 3 bedroom house requires 870 square feet of absorption field and chambers 1.25 feet wide are being used, then the length of chambers needed is 278 feet. (870 square feet divided by 3.125 square feet per lineal foot equals 278 feet~~).~~.)

Chamber systems with an average inside dimension equal to or greater than 20 inches shall not be designed to receive an equivalent absorption area of greater than 54 square feet per lineal foot.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

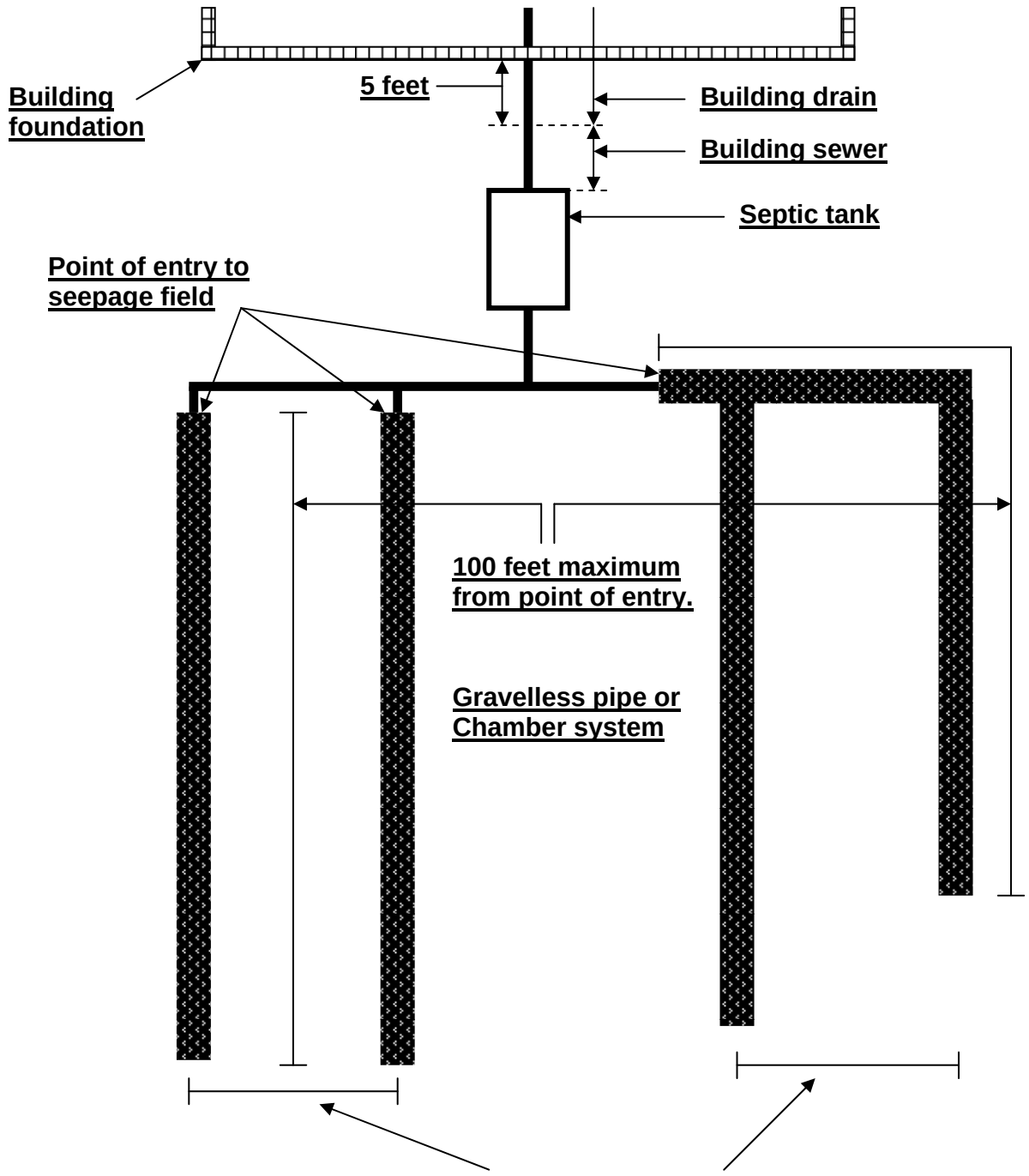
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION J Septic Tank Subsurface Seepage Field

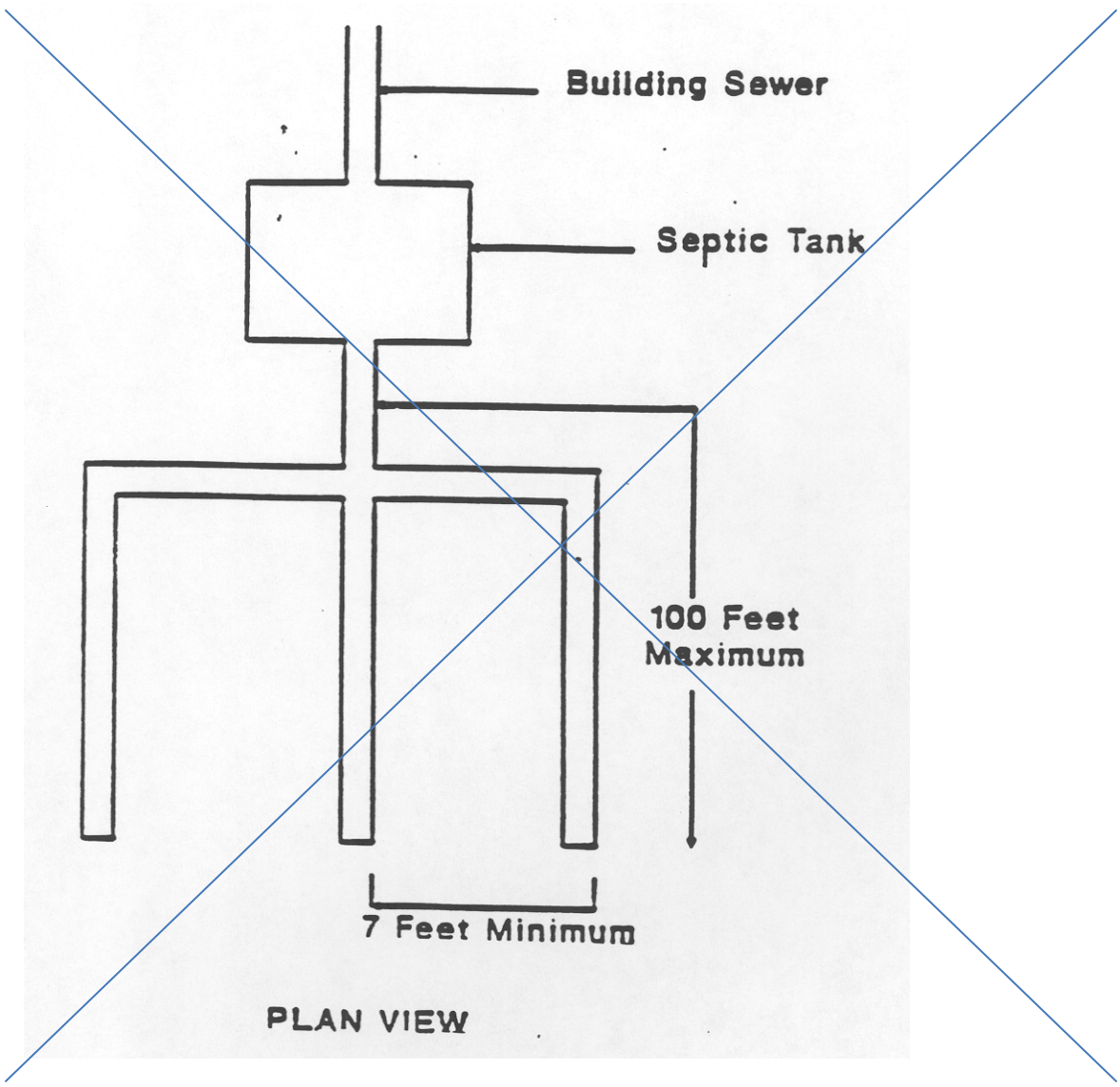
Section 905.EXHIBIT C Plan View – Gravelless and Chamber System


Building foundation
5 feet
Building drain
Building sewer
Septic tank
Point of entry to seepage field
100 feet maximum from point of entry.
Gravelless pipe or Chamber system
7 to 9 Feet minimum separation distance see Appendix A, Illustration I, Exhibit D

Plan view

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS



(Source: Amended at 37 Ill. Reg. _____, effective _____)

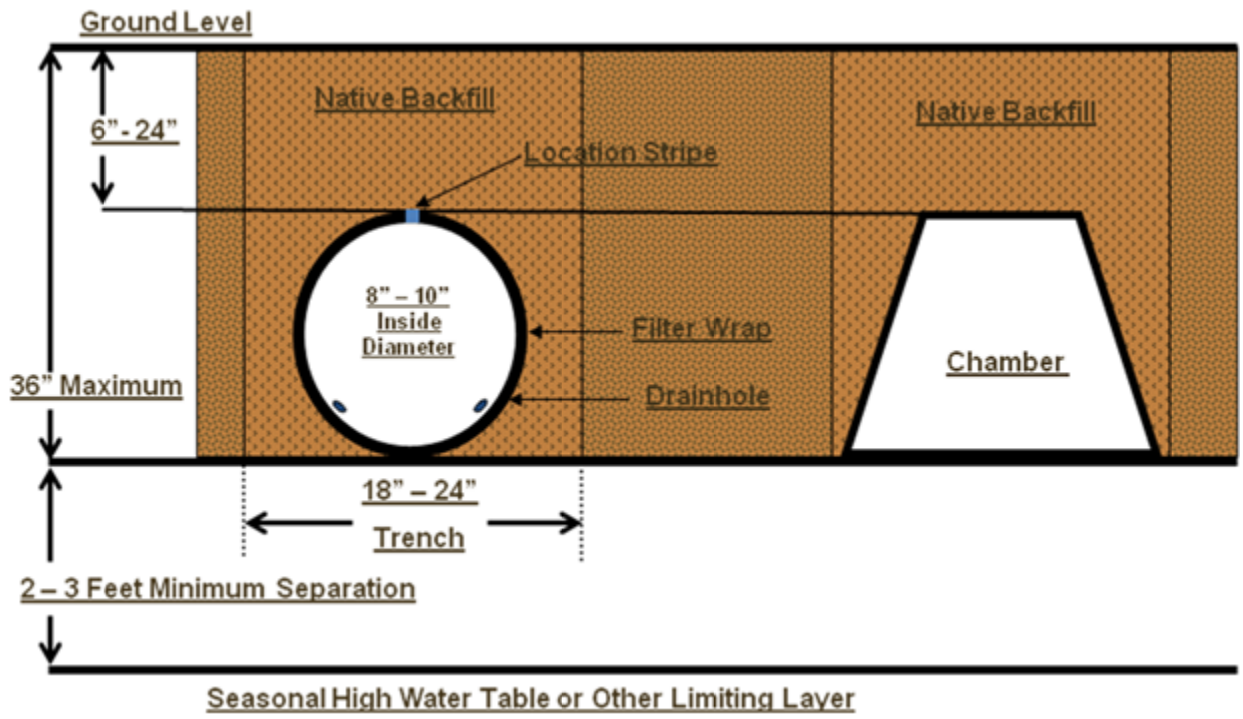
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

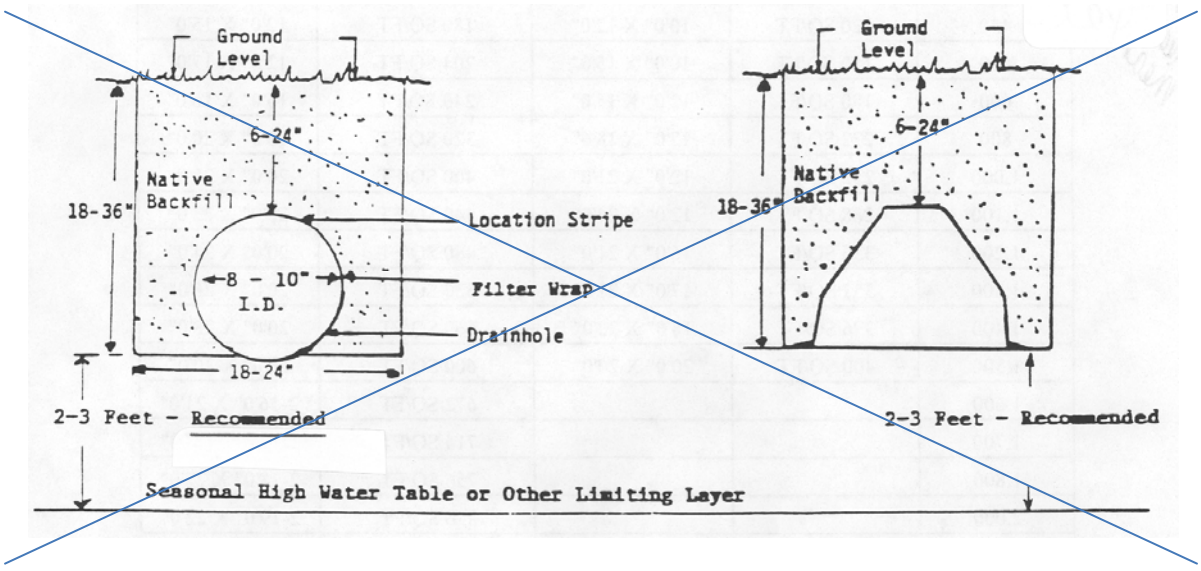
Section 905.ILLUSTRATION J Septic Tank Subsurface Seepage Field

Section 905.EXHIBIT D Section View – Gravelless and Chamber System



DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS



(Source: Amended at 37 Ill. Reg. _____, effective _____)

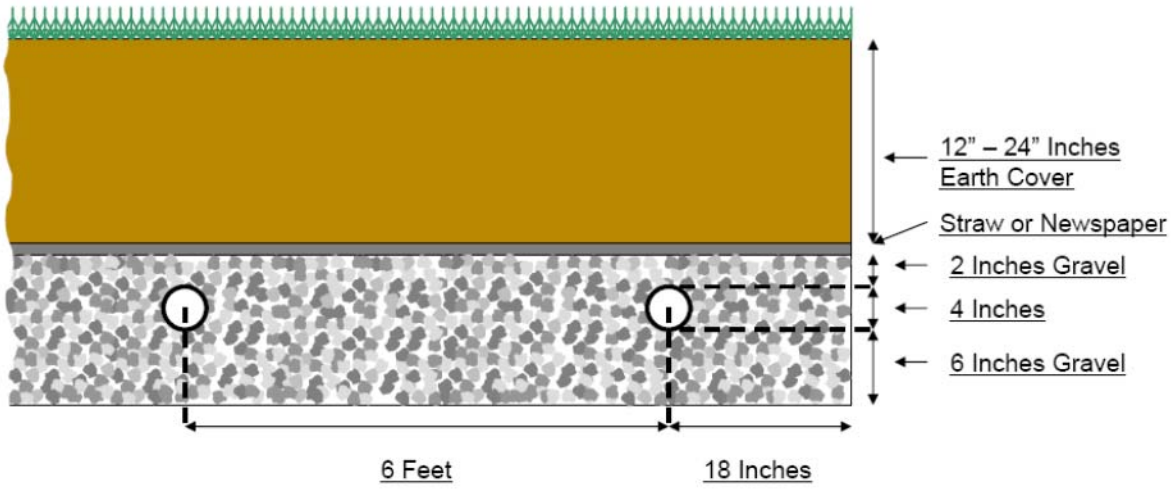
DEPARTMENT OF PUBLIC HEALTH

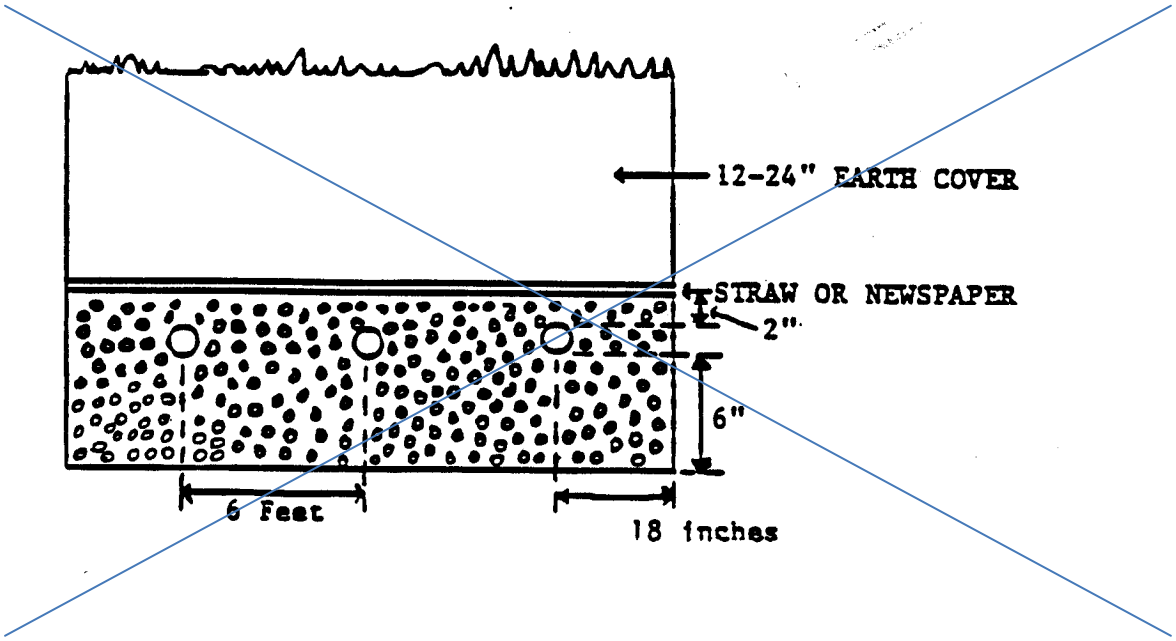
NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION L Seepage Bed

Section 905.EXHIBIT C End View





DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION M Soil Suitability for On-Site Sewage Design

Section 905.EXHIBIT A Loading Rates in Square Feet Per Bedroom and Gallons/Square Feet/Day

Design Group	Soil Group (Most Limiting~~limiting~~ Layer)	Minimum Separation To Limiting Layer~~(1)~~	Permeability Range	Size of System	
				Residential Reg. Absorption (ft^2/bedroom)	Institutional/Commercial Allowable Application Rate (GPD/ft^2)
I	1A	NR[3]~~N/A~~	Very Rapid	NR[3]~~N/A~~	NR[3]~~N/A~~
II	2A; 2B; 2K	3 feet	Rapid	200	1.0
III	3B; 3K	3 feet	High Moderately Rapid	220	0.91
IV	3A; ~~3C;~~ 3L; 4D~~B~~; 4K	3 feet	Low Moderately Rapid	240	0.84
V	4A; ~~4C~~; 4B~~D~~; 4H; 4L; ~~4M; 5B;~~ 5D	3 feet	Very High Moderate	265	0.75
VI	4F; 4M; 5B~~5C; 5E; 5K; 6F~~	3 feet	High Moderate	290	0.69
VII	4N; 5A; 5C; 5H; 5K; 6D	2 feet	Moderate	325	0.62
VIII	4O~~N~~; 5E; 5I; 5L; 6A; 6B; 6E; 6H~~G~~; 6K	2 feet	Low Moderate	385	0.52
IX~~(2)~~	5F~~J~~; 5M; 6C; ~~6H;~~ 6L; ~~7A;~~ 7D; 7F	2 feet	High Moderately Slow	445	0.45
X~~(2)~~	5G; 6F; 6I; 7E; 7C~~G~~; 7H~~8A~~	2 feet	Low Moderately Slow	500	0.40
XI~~(2)~~	5N; 6G; 6J; 6M; 7F; 7I~~; 7K~~	2 feet	Slow	740	0.27
XII~~(2)~~	7G; 7J; 7L; 8E; 8I	2 feet	Very Slow	1000	0.20
XII~~(2)~~	5O; 6N; 6O; 7M; 7N; 7O; 8J; 8M; 8O~~8N~~	NR[3]~~N/A~~	NR[3]~~N/A~~	NR[3]~~N/A~~	0.00

XIII	9	**SUBSURFACE DISPOSAL NOT RECOMMENDED**

NOTES:

~~(1)~~ Limiting layers include fragipans; bedrock; compact glacial tills; seasonal high water table or other soil profile features that will materially affect the absorption of liquid from the disposal field.

~~(2)~~ Soils in this group are less than the minimum percolation rate established in Appendix A, ~~Section 905.~~Illustration H ~~of this Part~~ as suitable for subsurface seepage systems.

3 NR = Subsurface disposal system not recommended.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION M Soil Suitability for On-Site Sewage Design

Section 905.EXHIBIT B Key for Determining Sewage Loading Rates (Gallons/Square FootFeet/Day)

Structure and Parent Material	Single grain; Weak Granular; Platy[2]	Granular, Angular and Subangular Blocky; Prismatic									Structureless or Massive				
		Loess: Outwash; Alluvium; Lacustrine[8]						Till[3]; Lacustrine			Loess; Outwash; Alluvium; Lacustrine[8]			Till[3]; Lacustrine	
		Week		Moderate; Strong		Strong		Moderate; Strong							
Moist Consistence	lo vfr fr	lo vfr fr	fr fi	vfr	fi	vfr fr	fi	fr	fi	vfi	vfr	fr	fi	vfr fr	fi vfi
Texture	A	B	C	D	E	F	G	H	I	J	K	L	M	NM	ON
1. Fragmental; Ext. or Very gravelly sand; Gravelly sand; Coarse sand; Gravelly loamy sand	> 1.00[4]	N/A[5]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2. Medium sand; Sand; Loamy course sand; Loamy sand; Gravelly sand; Coarse sand; Gravelly loamy sandCoarse sandy loam	1.00	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	N/A	N/A	N/A	N/A
3. Fine sand; Loamy fine sand; Coarse sandy loam	0.84	0.91	N/A 0.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.91	0.84	N/A	N/A	N/A
4. Sandy loam; Fine sandy loam; Gravelly sandy loam; Gravelly loam; Gravelly silt loam	0.75	0.75 0.84	N.A 0.75	0.84 0.75	N/A	0.69 N/A	N/A	N/A	0.75 N/A	N/A	0.84	0.75	0.69	0.62 0.75	0.52
5. Loam; Silt loam; Very fine sandy loam; Sandy clay loam; Silt; Very fine sand; Loamy very fine sand; Gravelly clay loam	0.62	0.69 0.75	0.62 0.69	0.75	0.52 0.69	0.45[6] N/A	0.40[6] N/A	0.62	0.52	N/A 0.45[6]	0.62 0.69	0.52	0.45[6]	0.27[6] 0.45[6]	N/R[7] 0.27[6]

6. Silty clay loam (<35% c); Clay loam (< 35% c)	.052	0.52 ~~N/A~~	0.45[6]	0.62	0.52	0.40[8] ~~0.69~~	0.27[6] ~~0.52~~	0.52 ~~0.45[6]~~	0.40[6]	0.27[6]	0.52	0.45[6]	0.27[6]	N/R ~~0.27[6]~~	N/R ~~0.00[6]~~
7. Silty clay loam (>35% c); Clay loam (>35% c)~~; Sandy clay (<40% c)~~	N/A~~0.45[6]~~	N/A	0.40[6] ~~N/A~~	0.45[6]	0.40[6]	0.27[6] ~~0.45[6]~~	0.20[6] ~~0.40[6]~~	0.40[6] ~~N/A~~	0.27[6]	0.20[6]	N/A ~~0.27[6]~~	0.20[6]	N/R	N/R ~~0.00[6]~~	N/R ~~0.00[6]~~
8. Sandy clay; ~~Clay (>40% c) Silty clay~~	N/A~~0.40[6]~~	N/A	N/A	N/A	0.20[6,9] ~~N/A~~	N/A	N/A	N/A	0.20[6,9]	N/R ~~0.00[6]~~	N/A	N/A	N/R	N/A	N/R ~~0.0[6]~~
9. ~~Clay;~~ Organics; Fragic; ~~Fragipan;~~ Lithic; Paralithic	——SOIL PROPERTIES HAVE VERY SEVERE LIMITATIONS; SUBSURFACE DISPOSAL NOT RECOMMENDED———														

FOOTNOTES:

[1] Disturbed soils are highly variable and require special on-site investigations.

[2] Moderate or strong platy structure for the soil textures in Groups 4,~~Group~~ 5 and 6 have a loading rate of 0.40 g/sq.ft/d~~/ft~~. Platy structure having firm or very firm consistency ~~and/~~or caused by mechanical compaction has a loading rate of 0.0 g/sq.ft~~d~~/d~~sq. ft~~.

[3] Basal ~~Weakly structured BC horizons and basal~~ glacial tills structured by geogenic processes have the same loading rates as structureless glacial till.

[4] This soil group is estimated to have very rapid permeability and exceeds the maximum established rate in ~~Section 905.~~Illustration H, Exhibit A ~~of this Part~~.

[5] N/A means not applicable.

[6] These soil groups are estimated to have moderately slow to very slow permeability and are less than the minimum established rate in ~~Section 905.~~Illustration H, Exhibit A ~~of this Part~~.

[7] N/R means not recommended. These soils have loading rates considered too low for conventional subsurface disposal.

[8] In some areas, lacustrine material may have physical properties similar to glacial till and should be placed in the glacial till columns.

[9] Non-swelling (1:1 lattice) clays formed in bedrock residuum have a loading rate of 0.27 g/sq.ft/d. Swelling (2:1 lattice) clays are not recommended for subsurface disposal.

(Source: Amended at 37 Ill. Reg. _____, effective _____)

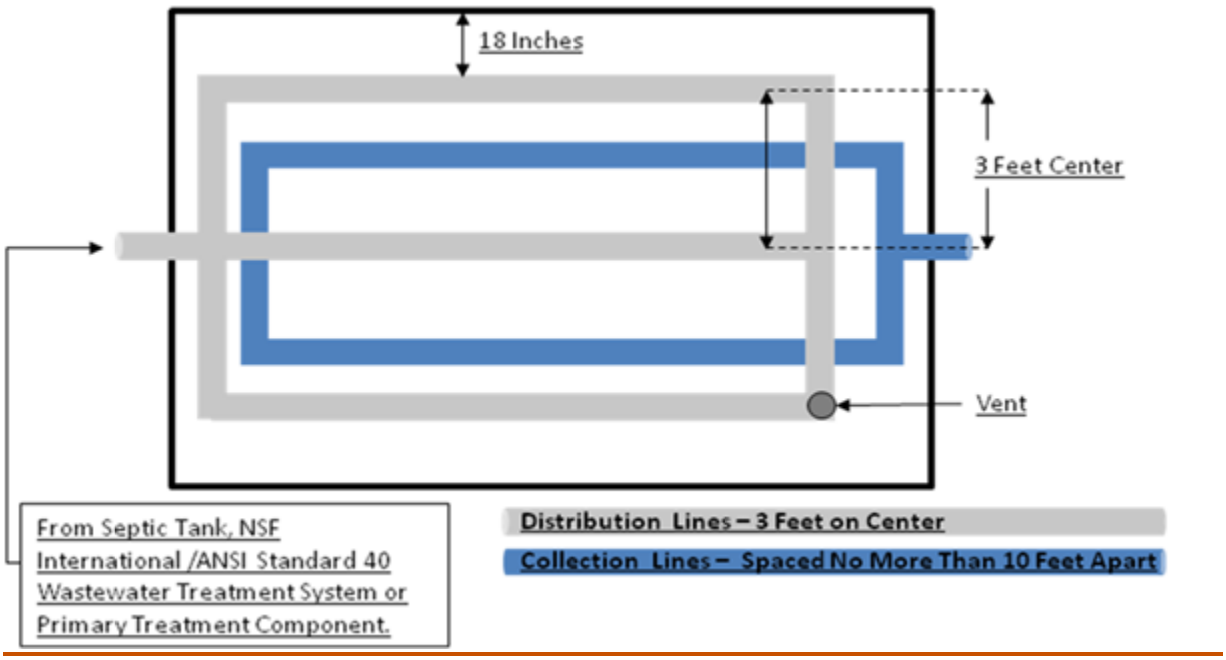
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

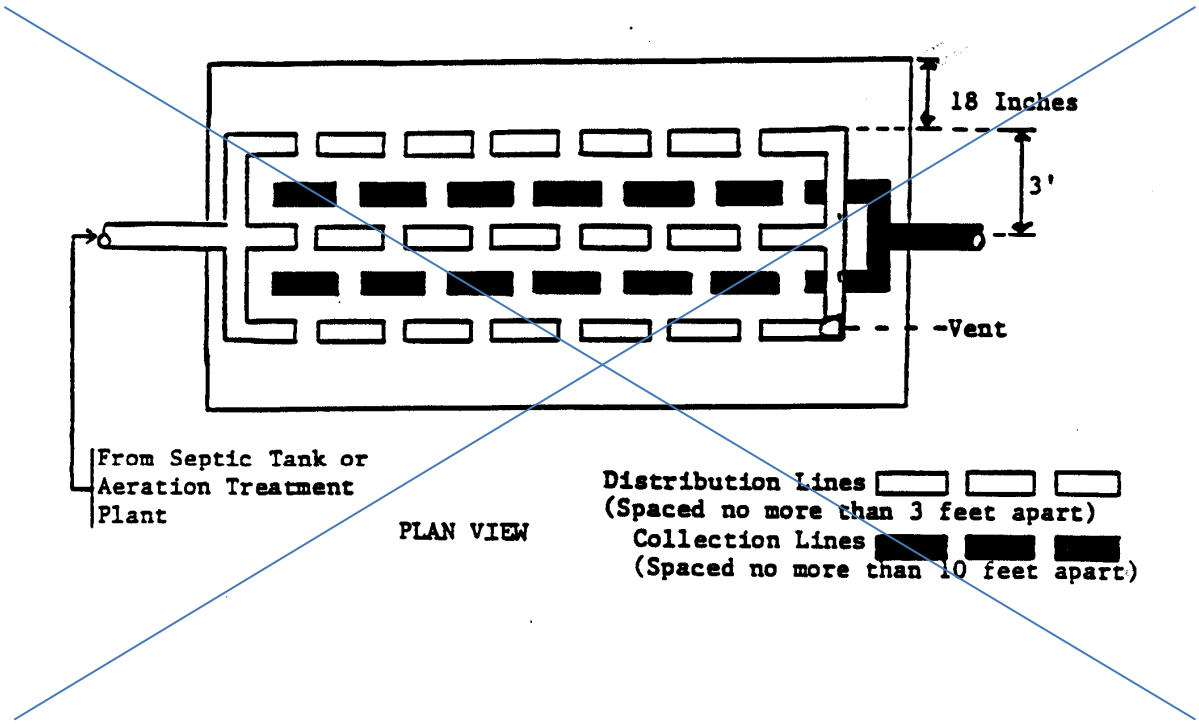
Section 905.ILLUSTRATION N Buried Sand Filter

Section 905.EXHIBIT A Plan View



DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS



(Source: Amended at 37 Ill. Reg. _____, effective _____)

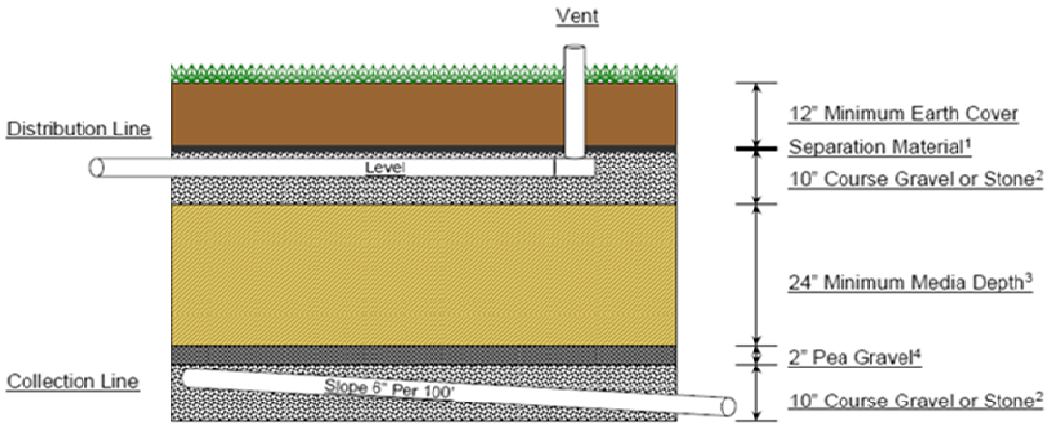
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION N Buried Sand Filter

Section 905.EXHIBIT B Section View



[1] Separation materials to support the backfill: straw, newspaper, untreated building paper, geotextile fabric or other permeable or biodegradable material.
[2] Course Gravel or Stone: 3/4" to 2 1/2" diameter.
[3] Sand Filter Media: The sand shall have an effective size of 0.5 to 2.0 millimeters and a uniformity coefficient of less then 3.5.
[4] Pea Gravel: 1/8" to 3/8"diamter.

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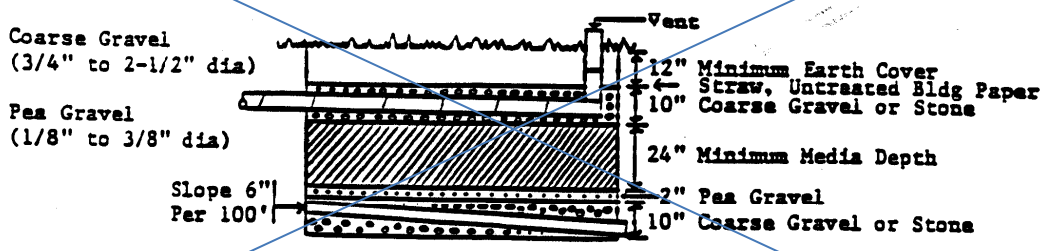
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS



(Source: Amended at 37 Ill. Reg. _____, effective _____)

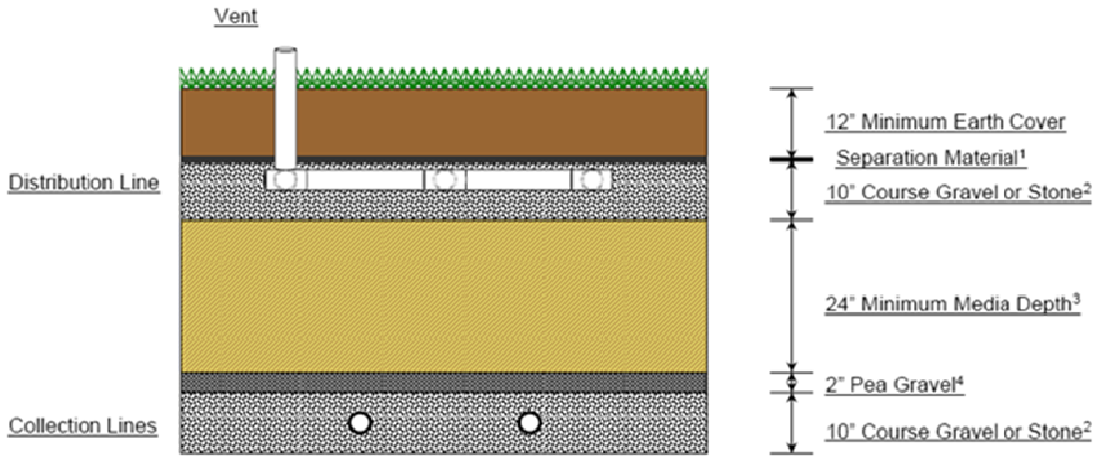
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX A Illustrations and Exhibits

Section 905.ILLUSTRATION N Buried Sand Filter

Section 905.EXHIBIT C End View



[1] Separation materials to support the backfill: straw, newspaper, untreated building paper, geotextile fabric or other permeable or biodegradable material.
[2] Course Gravel or Stone: 3/4" to 2 1/2" diameter.
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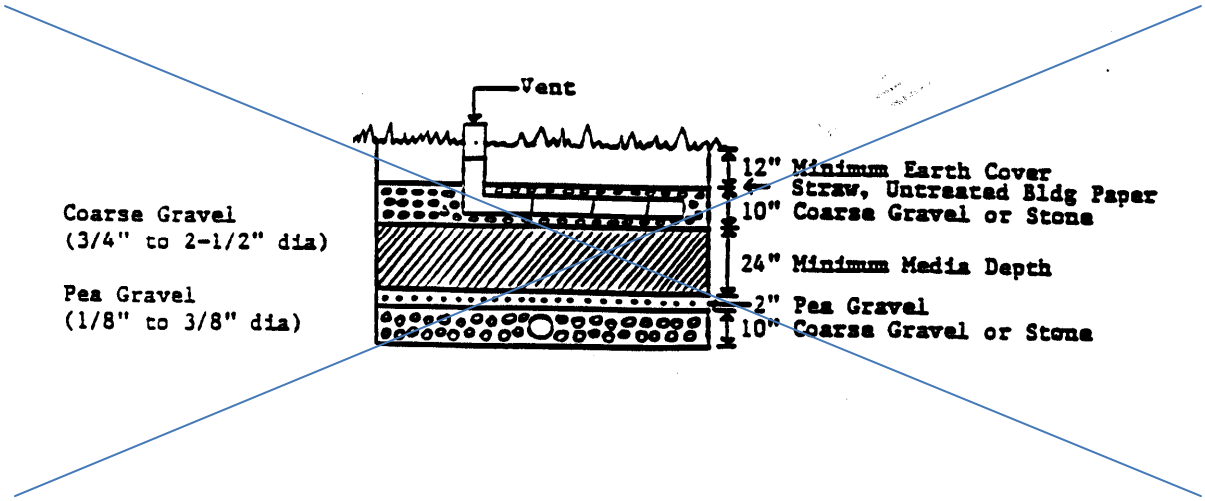
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS



(Source: Amended at 37 Ill. Reg. _____, effective _____)

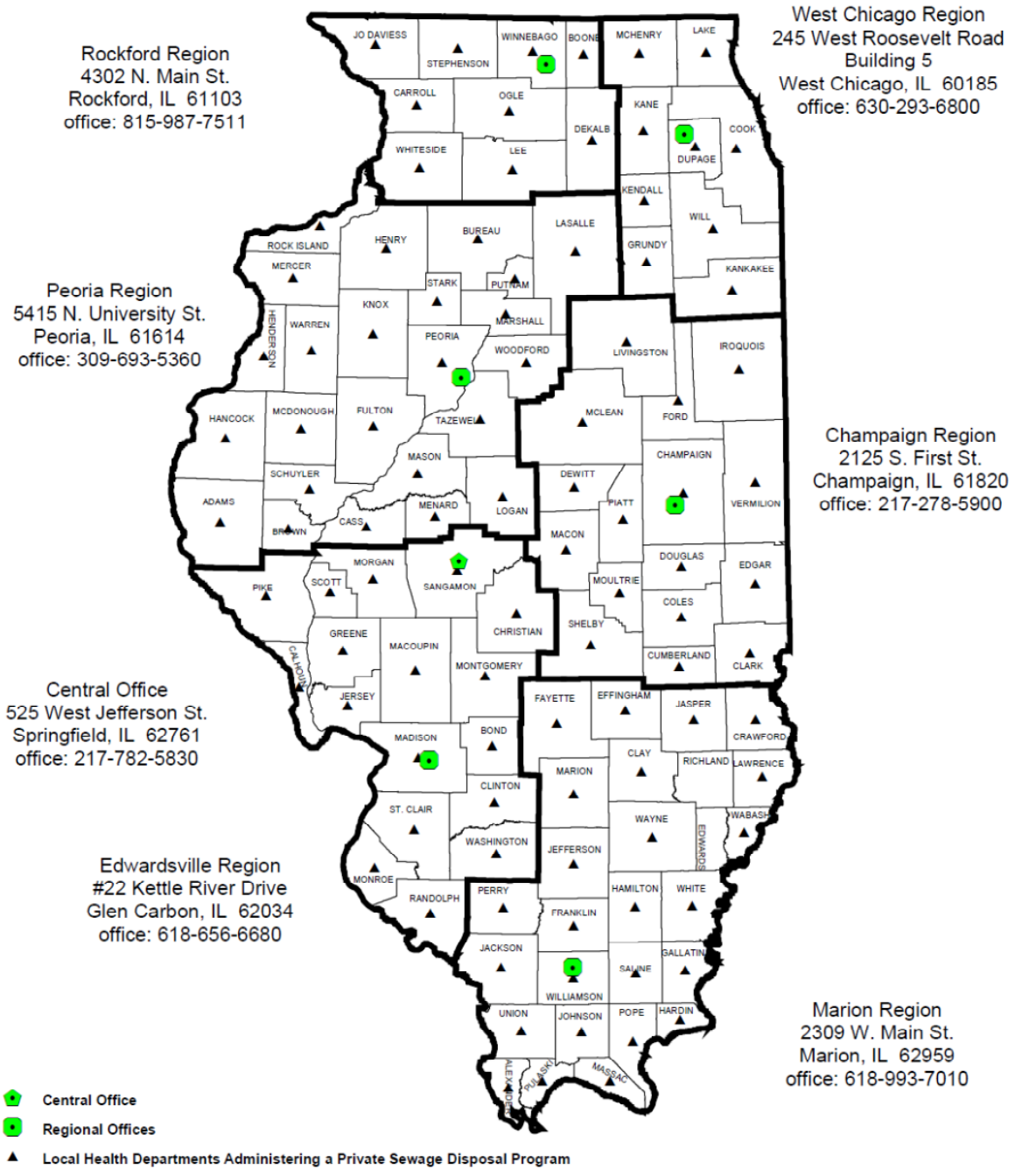
DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

Section 905.APPENDIX B **Contact Information for the Central and Regional Offices**~~**Telephone or Address Inquiries to the Regional Office**~~

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS



DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
Division of Engineering and Sanitation
TELEPHONE OR ADDRESS INQUIRIES TO THE
REGIONAL OFFICE SERVING YOUR AREA

REGION 1 - Rockford
Roger Ruden, R.E.
Ill. Dept. of Public Health
4302 N. Main Street
Rockford, IL 61103
Phone 815/987-7511

REGION 2 - Peoria
Frank F. Alai, R.E.
Ill. Dept. of Public Health
5415 North University
Peoria, IL 61614
Phone 309/691-2200

REGION 3 - Springfield
Merle L. King, R.E.
Ill. Dept. of Public Health
4500 S. Sixth Street Road
Springfield, IL 62706
Phone 217/786-6882

REGION 4 - Edwardsville
Fred L. Crawford, R.E.
Ill. Dept. of Public Health
Cottonwood Road
Edwardsville, IL 62025
Phone 618/288-5761

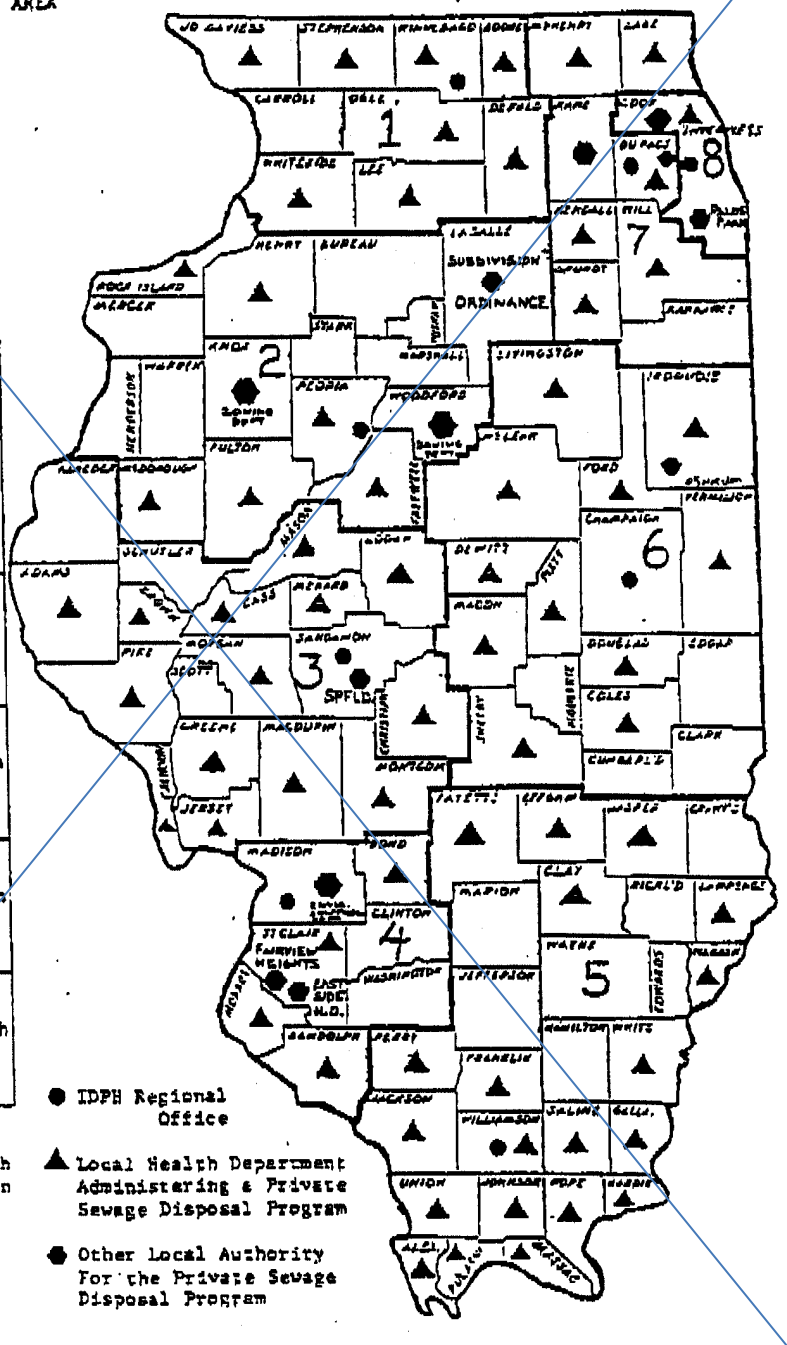
REGION 5 - Marion
Earl Teske, R.E.
Ill. Dept. of Public Health
2209 West Main Street
Marion, IL 62959
Phone 618/997-4371

REGION 6 - Champaign
Mark Kuechler, R.E.
Ill. Dept. of Public Health
2125 South First Street
Champaign, IL 61820
Phone 217/333-6914

REGION 7 - West Chicago
Robert Flygare, R.E.
Ill. Dept. of Public Health
245 Roosevelt Rd. Bldg. #5
West Chicago, IL 60185
Phone 312/293-6800

REGION 8 - Berkeley
Paul Levin, R.E.
Ill. Dept. of Public Health
5813 Elm Avenue
Berkeley, IL 60163
Phone 312/449-2777-9, 2870

CENTRAL OFFICE
Ill. Dept. of Public Health
Office of Health Regulation
Division of Eng. & San.
535 West Jefferson Street
Springfield, IL 62761
Phone 217/782-5830



● IDPH Regional Office

▲ Local Health Department Administering a Private Sewage Disposal Program

⬢ Other Local Authority For the Private Sewage Disposal Program

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF PROPOSED AMENDMENTS

(Source: Amended at 37 Ill. Reg. _____, effective _____)

DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY

NOTICE OF ADOPTED AMENDMENTS

1) Heading of the Part: Enterprise Zone and High Impact Business Programs

2) Code Citation: 14 Ill. Adm. Code 520

3)

Section Numbers:	Adopted Action:
520.510	Amend
520.930	Amend
520.1030	Amend
520.1630	Amend
520.1730	Amend

4) Statutory Authority: Illinois Enterprise Zone Act [20 ILCS 655]

5) Effective Date of Amendments: October 26, 2012

6) Does this rulemaking contain an automatic repeal date? No

7) Does this rulemaking contain incorporations by reference? No

8) A copy of the adopted amendments, including any material incorporated by reference, is on file in the agency's principal office and is available for public inspection.

9) Notice of Proposal Published in Illinois Register: 36 Ill. Reg. 12181; August 3, 2012

10) Has JCAR issued a Statement of Objection to this rulemaking? No

11) Differences between proposal and final version: Grammatical and stylistic changes were made.

12) Have all the changes agreed upon by the agency and JCAR been made as indicated in the agreements issued by JCAR? No agreements were necessary.

13) Will this rulemaking replace any emergency rulemaking currently in effect? No

14) Are there any amendments pending on this Part? No

15) Summary and Purpose of Amendments: The primary purpose of the proposed amendment is to revise the Section of the Enterprise Zone rules dealing with High Impact Service Facility Machinery and Equipment Sales Tax Exemption certification. Instead of

allowing for one renewal of the term of the certification for ten years after an initial certification period of ten years (for a maximum of 20 years), DCEO would be authorized to make multiple five year renewals of the certification not to exceed the life of the Enterprise Zone. Also, the reference to the audit standards publication is being updated.

16) Information and questions regarding this rulemaking shall be directed to:

Ms. Jolene Clarke
Rules Administrator
Illinois Department of Commerce and Economic Opportunity
500 East Monroe
Springfield, IL 62701

217/557-1820

The full text of the Adopted Amendments begins on the next page:

DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY

NOTICE OF ADOPTED AMENDMENTS

TITLE 14: COMMERCE
SUBTITLE C: ECONOMIC DEVELOPMENT
CHAPTER I: DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY

PART 520
ENTERPRISE ZONE AND HIGH IMPACT BUSINESS PROGRAMS

SUBPART A: ENTERPRISE ZONES IN ILLINOIS

Section
520.100 Definitions

SUBPART B: ENTERPRISE ZONE: APPLICATION FOR CERTIFICATION

Section
520.200 Eligible Applicants
520.210 Eligibility Criteria
520.220 Form of Application
520.230 Application Procedures
520.240 Joint Application
520.250 Application Evaluation and Ranking

SUBPART C: ENTERPRISE ZONE:
AMENDMENT AND DECERTIFICATION

Section
520.300 Application to Amend an Ordinance
520.310 Application to Change Boundaries
520.315 Application to Change Incentives, Alter Termination Date, and Make Technical Corrections
520.320 Decertification

SUBPART D: ENTERPRISE ZONE: LOCAL RESPONSIBILITIES

Section
520.400 Zone Administration
520.410 Reporting and Monitoring by Zone Administrators
520.420 Business Cessation Notification

DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY

NOTICE OF ADOPTED AMENDMENTS

SUBPART E: ENTERPRISE ZONE:
DESIGNATED ZONE ORGANIZATIONS

Section
520.500 General
520.510 Project Eligibility and Approval
520.520 Charitable Contributions

SUBPART F: HIGH IMPACT BUSINESSES IN ILLINOIS

Section
520.600 Definitions
520.610 Eligible Applicants
520.620 Eligibility Criteria
520.630 Form of Application
520.640 Application Approval Process
520.650 Revocation of High Impact Business Designation

SUBPART G: TAX INCENTIVES FOR ENTERPRISE ZONES
AND HIGH IMPACT BUSINESSES

Section
520.700 List of Available Tax Incentives
520.710 Eligible Applicants (Repealed)
520.720 Eligibility Criteria (Repealed)
520.730 Form of Application (Repealed)
520.740 Application Review and Approval (Repealed)
520.750 Revocation of the High Impact Business Designation (Repealed)

SUBPART H: INVESTMENT TAX CREDIT

Section
520.800 General
520.810 Eligibility Criteria (Repealed)
520.820 Form of Application (Repealed)
520.830 Application Review and Approval Process (Repealed)

SUBPART I: UTILITY TAX EXEMPTION

Section

DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY

NOTICE OF ADOPTED AMENDMENTS

520.900 Definitions
520.910 Eligibility Criteria
520.920 Form of Application
520.930 Application Approval Process

SUBPART J: MACHINERY AND EQUIPMENT/POLLUTION CONTROL FACILITES SALES TAX EXEMPTION

Section
520.1000 Definitions
520.1010 Eligibility Criteria
520.1020 Form of Application
520.1030 Application Approval Process

SUBPART K: BUILDING MATERIAL SALES TAX EXEMPTION

Section
520.1100 General
520.1110 Eligibility Criteria (Repealed)
520.1120 Form of Application (Repealed)
520.1130 Application and Approval Process (Repealed)
520.1140 Use Tax Exemption (Repealed)

SUBPART L: JOBS TAX CREDIT

Section
520.1200 General

SUBPART M: DIVIDEND INCOME DEDUCTION

Section
520.1300 General

SUBPART N: INTEREST INCOME DEDUCTION FOR FINANCIAL INSTITUTIONS

Section
520.1400 General

SUBPART O: TELECOMMUNICATIONS EXCISE TAX EXEMPTION

DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY

NOTICE OF ADOPTED AMENDMENTS

ON ORIGINATING CALLS

Section
520.1500 General

SUBPART P: HIGH IMPACT SERVICE FACILITY MACHINERY AND EQUIPMENT SALES TAX EXEMPTION

Section
520.1600 Definitions
520.1610 Eligibility Criteria
520.1620 Form of Application
520.1630 Application Approval Process
520.1640 Use Tax Exemption
520.1650 Revocation of the High Impact Service Facility Designation
.

SUBPART Q: AIRCRAFT SUPPORT CENTER SALES TAX EXEMPTION

Section
520.1700 Definitions
520.1710 Eligibility Criteria
520.1720 Form of Application
520.1730 Application and Approval Process
520.1740 Revocation of an Aircraft Support Center Designation

AUTHORITY: Implementing the Illinois Enterprise Zone Act [20 ILCS 655]; Section 201(f), (g) and (h) of the Illinois Income Tax Act [35 ILCS 5/201(f), (g) and (h)]; Sections 1d-1f, 1i-1j and 1o of the Retailers' Occupation Tax Act [35 ILCS 120/1d-1f, 1i-1j, and 1o]; and Sections 9-221, 9-222, and 9-222.1 of the Public Utilities Act [220 ILCS 5/9-221, 9-222 and 9-222.1]; and authorized by Section 605-95 of the Civil Administrative Code of Illinois [20 ILCS 605/605-95].

SOURCE: Adopted at 9 Ill. Reg. 11790, effective July 24, 1985; emergency amendments at 10 Ill. Reg. 4936, effective March 11, 1986, for a maximum of 150 days; amended at 10 Ill. Reg. 7323, effective April 18, 1986; amended at 10 Ill. Reg. 12563, effective July 7, 1986; amended at 10 Ill. Reg. 12915, effective July 22, 1986; amended at 10 Ill. Reg. 15200, effective September 8, 1986; amended at 10 Ill. Reg. 16580, effective September 24, 1986; amended at 10 Ill. Reg. 19718, effective November 6, 1986; amended at 11 Ill. Reg. 11054, effective June 5, 1987; emergency amendments at 11 Ill. Reg. 11174, effective June 8, 1987, for a maximum of 150 days; amended at 11 Ill. Reg. 16091, effective September 29, 1987; amended at 12 Ill. Reg.

4115, effective February 8, 1988; amended at 12 Ill. Reg. 11201, effective June 17, 1988; amended at 12 Ill. Reg. 17823, effective October 21, 1988; emergency amendment at 13 Ill. Reg. 16117, effective October 2, 1989, for a maximum of 150 days; amended at 13 Ill. Reg. 19936, effective December 7, 1989; amended at 14 Ill. Reg. 3445, effective February 27, 1990; amended at 15 Ill. Reg. 8683, effective May 30, 1991; amended at 16 Ill. Reg. 89, effective December 20, 1991; amended at 17 Ill. Reg. 1837, effective February 1, 1993; amended at 18 Ill. Reg. 5172, effective March 21, 1994; amended at 27 Ill. Reg. 3282, effective February 14, 2002; amended at 27 Ill. Reg. 6165, effective March 28, 2003; amended at 35 Ill. Reg. 13125, effective August 1, 2011; amended at 36 Ill. Reg. 16067, effective October 26, 2012.

SUBPART E: ENTERPRISE ZONE: DESIGNATED ZONE ORGANIZATIONS

Section 520.510 Project Eligibility and Approval

A business entity may receive a deduction against income subject to State taxes for a contribution to a DZO if the project for which the contribution is made has been specifically approved by the designating municipality or county, and by the Department. Any DZO seeking to have a project approved for contribution must submit an application to the Department describing the nature and benefit of the project and its potential contributors.

a) Standard Applications. The Department shall provide a standard application to any DZO seeking to qualify a project for contributions eligible for tax deductions in accordance with Section 11 of the Act. The~~Such~~ applications shall be processed in accordance with Section 11(e) of the Act.

b) Project Approval Period. Applications shall be approved for a period of one project fiscal year. Continuation of project approval and eligibility for contributions in future years shall require a new application and current documentation including:

1) Project Balance Sheet. A project balance sheet showing assets and liabilities, in accordance with the most recent accounting standards of the Financial Standards Board of the American Institute of Certified Public Accountants as contained in the publication entitled AICPA Professional Standards, 1211 Avenue of the Americas, New York NY 10036-8775~~American Institute of Certified Public Accountants, Harborside Financial Center, 201 Plaza 3, Jersey City, New Jersey 07311~~ (June 2011~~2001~~, no later editions are incorporated);

2) Project Budget. A project budget; and

3) Accomplishment of Project Objectives. Project information regarding the extent to which objectives have been accomplished.

c) Renewal Applications. All renewal applications shall be submitted at least 90 days prior to the start of the budget fiscal year or program year for which approval is requested.

1) Notice of Project Renewal. Within 15 days after receipt of the application, the Department shall notify the DZO in writing regarding project renewal. In the event the renewal application is determined deficient, the Department will notify the DZO of the deficiencies.

2) Notice of Deficiency. The DZO shall have 15 days from the date of the notice of deficiency to submit corrected or additional information.

3) Notice of Acceptance or Denial. Within 5 days from the start of the budget fiscal year for which the project renewal is requested, the Department shall notify the DZO that the application is accepted and that the project shall be renewed, or that the application is deficient and the renewal is denied.

d) Written Endorsement Requirement. In no case shall a project be approved by the Department that does not have the written endorsement of the designating units of government.

e) Project Proposal. A proposed project shall enhance the Enterprise Zone in accordance with Section 11(c) of the Act. In describing how the proposed project will enhance the Enterprise Zone, the DZO shall address the following:

1) Assessment of Need. The applicant shall identify the specific need, problem or objective that will be addressed by the proposed project.

2) Project Objectives. The applicant shall identify how the project will offer relief from the identified problems or meet the identified need.

3) Project Criteria. In accordance with Section 11(b) of the Act, a DZO must demonstrate that the proposed project meets all of the following criteria:

A) Self-Help. That the project will contribute to the self-help efforts of zone residents. (Self-help means the project can reasonably be expected to improve the ability of participating residents to live and/or work in the Enterprise Zone.);

B) Participation by Zone Residents. That the zone residents will actively participate in the project's planning and implementation;

C) Lack of Sufficient Resources. That the project lacks sufficient resources; and

D) DZO is Fiscally Responsible. That the DZO will be fiscally responsible for the project.

f) Project Modifications. Project modifications, either programmatic or budgetary, require the prior approval of the Department.

g) DZO Project Administrative Responsibility. The DZO shall furnish the Department an annual status report on each project. The report must be submitted no later than 30 calendar days following the anniversary, and shall consist of the following information:

1) Financial Statement. A financial statement, in accordance with the most recent generally accepted accounting principles of the American Institute of Certified Public Accountants; and

2) Achieving Objectives. A statement describing the project's success in achieving the objectives outlined in the approved application.

(Source: Amended at 36 Ill. Reg. 16067, effective October 26, 2012)

SUBPART I: UTILITY TAX EXEMPTION

Section 520.930 Application Approval Process

a) Application Approval Requirements. Applications shall be submitted to the Department, which shall approve or deny the application in writing within 90 days after receipt. The application shall be approved if it meets the requirements

of Sections 520.910 and 520.920, utilizing one of the two following options:

1) Investments Placed in Service. The applicant has substantiated, in accordance with Section 520.920(a), that the eligible investment in qualified property has been placed in service; or

2) Spending Plan and Financial Commitments. The applicant has not placed in service in qualified property the eligible investment. However, a spending plan and financial commitments for the proposed eligible investment have been submitted. The spending plan must include a detailed "project by project" description, as well as the estimated eligible investment for each specific project. The spending plan must further include the date when the eligible investment in each project will be placed in service. The applicant's financial commitments must include the sources of financing for the project. Should the applicant choose to follow this option, it must sign a written agreement with the Department obligating the business to place in service the eligible investment in qualified property within 12 months after certification pursuant to this Section. Should the business fail to place in service the eligible investment in qualified property within 12 months after certification pursuant to this Section, the business shall be decertified for the tax exemption and required to repay the exempted taxes. Should the business place in service the eligible investment subsequent to this decertification, the business may reapply to the Department for recertification. However, this reapplication must utilize the procedures set forth in subsection (a)(1) of this Section, and contain the same information as required pursuant to Section 520.920.

b) Application Denial Requirements. When the Department denies an application, it shall specify in writing the reasons for denial and allow the applicant 45 days from the date of application denial to amend and resubmit the application. Resubmitted applications shall be approved or denied in writing within 45 days after receipt.

c) Certificates for "Investment" Applicants. Applicants determined eligible by the Department, in accordance with subsection (a)(1) of this Section, will be issued a Certificate of Exemption. The exemption shall take effect six months after certification.

d) Certificates for "Spending Plan" Applicants. Applicants determined eligible by the Department, in accordance with subsection (a)(2) of this Section, will be issued a Certificate of Exemption 12 months prior to the eligible investment in qualified property being placed in service as set forth in the applicant's spending plan submitted pursuant to this Section.

e) Department's Right to Inspect and Audit. The Department shall have the right to inspect and conduct its own audit of all books and records relied upon by the business to demonstrate that the eligible investment in qualified property has been placed in service. Certified businesses shall also submit information annually to the Department documenting the maintenance of the minimum job creation or job retention criterion. Certified businesses that fail to comply with this subsection shall be decertified for the tax exemption and shall repay the exempted taxes. The jobs created or retained must be documented through personnel records.

f) Five-Year Exemption Period. All certified businesses shall receive a five-year exemption from the State utility tax.

g) Additional Exemption Period for Certified Businesses. At the expiration of this initial five-year period, certified businesses may apply to the Department for renewals of the exemption for additional five-year time periods not to exceed the termination date of the Enterprise Zone. The Department shall grant an exemption to a certified business for an additional five-year period at 100% of the State utility taxes provided that at the time of the application for each renewal:

1) Jobs Retained are in an Enterprise Zone. In the case of a business certified pursuant to the job creation criterion of Section 520.920, such business has retained a minimum of 200 full-time equivalent jobs in Illinois; or in the case of a business certified pursuant to the job retention criterion of Section 520.910, such business has retained a minimum of 1,000 full-time jobs in Illinois. A majority of the "jobs retained" must be in the Enterprise Zone in which the eligible investment is made.

2) Business is Located in an Enterprise Zone. Such business is located in an Enterprise Zone established pursuant to the Illinois Enterprise Zone Act [20 ILCS 655].

3) Business Provides an Audited Financial Statement. Such business provides a financial statement, including balance sheets and income

statements, audited according to generally accepted auditing standards by a public accountant certified in the State of Illinois as contained in the publication entitled AICPA Professional Standards, American Institute of Certified Public Accountants, 1211 Avenue of the Americas, New York NY 10036-8775~~Harborside Financial Center, 201 Plaza 3, Jersey City, New Jersey 07311~~ (June 2011~~2001~~, no later editions are incorporated). In addition, the certified business' chief financial officer shall attest in writing that the certified business is not aware of a condition or occurrence that would result in a bankruptcy or closure.

4) Maximum Period of Exemption. This exemption shall not be allowed beyond the term of the certified Enterprise Zone.

(Source: Amended at 36 Ill. Reg. 16067, effective October 26, 2012)

SUBPART J: MACHINERY AND EQUIPMENT/POLLUTION CONTROL FACILITIES SALES TAX EXEMPTION

Section 520.1030 Application Approval Process

a) Application Approval Requirements. Applications shall be submitted to the Department, which shall approve or deny the application in writing within 90 days after receipt. The application shall be approved if it meets the requirements of Sections~~Section~~ 520.1010 and 520.1020.

b) Application Denial Requirements. When the Department denies an application, it shall specify in writing the reasons for denial and allow the applicant 45 days from the date of application denial to amend and resubmit the application. Resubmitted applications shall be approved or denied in writing within 45 days after receipt.

c) Certificates of Exemption. Applicants determined eligible by the Department, in accordance with Section 520.1010, will be issued a Certificate of Exemption. A copy of the Certificate of Exemption will be filed by the Department with the Illinois Department of Revenue in accordance with Section 1f of the Retailers' Occupation Tax Act.

d) Exemption Includes. Subject to Section 520.1010, and in accordance with Section 1d of the Retailers' Occupation Tax Act, this exemption includes:

1) Tangible Personal Property. All tangible personal property used or consumed in the process of manufacturing or assembling tangible personal property for wholesale or retail sale or lease, or in the process of graphic arts production;

2) Repair and Replacement Parts. Repair and replacement parts for machinery and equipment used in the manufacturing or assembling of tangible personal property, or in the process of graphic arts production for wholesale or retail sale or lease; and

3) Equipment Manufacturing, Etc. Equipment, manufacturing or graphic arts fuels, material, and supplies for the maintenance, repair, or operation of such manufacturing or assembling or graphic arts machinery or equipment.

e) Department's Right to Inspect and Audit. The Department shall have the right to inspect and conduct its own audit of all books and records relied upon by the business to demonstrate that the eligible investment in qualified property has been placed in service. Certified businesses shall also submit information annually to the Department documenting the maintenance of the minimum job creation or job retention criterion. Certified businesses that fail to comply with this subsection shall be decertified for the tax exemption and shall repay the exempted taxes. The jobs created or retained must be documented through personnel records.

f) Five-Year Exemption Period. All certified businesses shall receive a five-year exemption from this tax.

g) Additional Exemption Period for Certified Businesses. At the expiration of this initial five-year period, certified businesses may apply to the Department for renewals of the exemption for additional five-year time periods not to exceed the termination date of the Enterprise Zone. The Department shall grant an exemption to a certified business for an additional five-year period, provided that at the time of application for renewal:

1) Job Creation/Retention Criteria. The following job creation/retention criteria are met:

A) In the case of a business certified pursuant to the job creation

criterion of Section 520.1010, the~~such~~ business has retained a minimum of 200 full-time equivalent jobs in Illinois.

B) In the case of a business certified pursuant to the job retention criterion of Section 520.1010, the~~such~~ business has:

i) Retained a minimum of 2,000 full-time jobs in Illinois; or

ii) Has made an eligible investment of $40 million resulting in the retention of 90% of the full-time jobs in place on the date on which the exemption is granted for the duration of the exemption.

C) A majority of the "jobs retained" must be in the Enterprise Zone in which the eligible investment is made.

2) Business is Located in an Enterprise Zone. The~~Such~~ business is located in an Enterprise Zone established pursuant to the Illinois Enterprise Zone Act [20 ILCS 655].

3) Business Provides an Audited Financial Statement. The~~Such~~ business provides an audited Financial Statement, including balance sheets and income statements, audited according to generally accepted auditing standards by a public accountant certified in the State of Illinois as contained in the publication entitled AICPA Professional Standards, American Institute of Certified Public Accountants, 1211 Avenue of the Americas, New York NY 10036-8775~~Harborside Financial Center, 201 Plaza 3, Jersey City, New Jersey 07311~~ (June 2011~~2001~~, no later editions are incorporated). In addition, the certified business' chief financial officer shall attest in writing that the certified business is not aware of a condition or occurrence that would result in a bankruptcy or closure.

4) Maximum Period of Exemption. This exemption shall not be allowed beyond the term of the certified Enterprise Zone.

(Source: Amended at 36 Ill. Reg. 16067, effective October 26, 2012)

SUBPART P: HIGH IMPACT SERVICE FACILITY MACHINERY AND EQUIPMENT SALES TAX EXEMPTION

Section 520.1630 Application Approval Process

a) Application Approval Requirements. Applications shall be submitted to the Department, which shall approve or deny the application in writing within 60 days after receipt. The application shall be approved if it meets the requirements of Sections 520.1610 and 520.1620 and the applicant has submitted a spending plan and financial commitments for the proposed eligible investment. The applicant must sign a written agreement with the Department obligating the business to place in service the eligible investment in qualified property within five years after the date of certification. Should the business fail to place in service the eligible investment in qualified property within five years following certification, the business shall be decertified for the tax exemption and required to repay the exempted taxes. Should the business place in service eligible investment subsequent to decertification, the business may reapply to the Department for recertification. However, this reapplication must utilize the procedures set forth in Section 520.1620, and contain the same information as required pursuant to Section 520.1610.

b) Application Denial Requirements. When the Department denies an application, it shall specify in writing the reasons for denial and allow the applicant 15 days from the date of application denial to amend and resubmit the application. Resubmitted applications shall be approved or denied within 30 days after receipt.

c) Certificate of Eligibility for Exemption. Applicants determined eligible by the Department in accordance with Sections 520.1610 and 520.1620 will be issued a Certificate of Eligibility for Exemption.

d) 10-Year Exemption Period. All certified businesses shall receive a 10-year exemption from the tax imposed by Section 2 of the Retailers' Occupation Tax Act on purchases of machinery and equipment used in the operation of a high impact service facility, as provided in Section 1j of the Retailers' Occupation Tax Act, and on purchases of jet fuel and petroleum products sold to and used in the conduct of its business of sorting, handling and redistribution of mail, freight, cargo or other parcels in the operation of a high impact service facility, defined in Section 1j of the Retailers' Occupation Tax Act.

e) Quarterly Reports Required. All certified businesses shall submit quarterly reports describing the progress made toward the creation of 750 or more full-time

or full-time equivalent jobs, and the investment of $100 million in qualified property at the High Impact Service Facility.

f) Additional Exemption Periods~~Period~~. At the expiration of this initial 10-year period, certified businesses may apply to the Department for renewals~~a renewal~~ of the exemption for ~~an~~ additional 5~~10~~-year time periods. Any previously certified business that had its exemption expire for the sole reason that it could not seek an additional renewal under the previous version of this Section may apply to the Department for a renewal, and the Department may grant an exemption to the business and make that exemption retroactively effective as of the date of its previous expiration.~~period.~~ The Department shall grant an exemption to a certified business for an additional 5~~10~~-year period provided that, at the time of application for renewal:

1) Minimum Jobs Created. The business has created a minimum of 750 or more full-time or full-time equivalent jobs at a High Impact Service Facility in Illinois.

2) Business is Located in an Enterprise Zone. The business is located in an Enterprise Zone established pursuant to the Illinois Enterprise Zone Act [20 ILCS 655].

3) Business Provides an Audited Financial Statement. The business provides a financial statement, including balance sheets and income statements, audited according to generally accepted auditing standards by a public accountant certified in the State of Illinois as contained in the publication entitled AICPA Professional Standards, American Institute of Certified Public Accountants, 1211 Avenue of the Americas, New York NY 10036-8775~~Harborside Financial Center, 201 Plaza 3, Jersey City, New Jersey 07311~~ (June 2011~~2001~~, no later editions are incorporated). In addition, the certified business chief financial officer shall attest in writing that the certified business is not aware of a condition or occurrence that would result in a bankruptcy or closure.

4) Maximum Period of Exemption. This exemption shall not be allowed beyond the term of the certified Enterprise Zone.

(Source: Amended at 36 Ill. Reg. 16067, effective October 26, 2012)

DEPARTMENT OF COMMERCE AND ECONOMIC OPPORTUNITY

NOTICE OF ADOPTED AMENDMENTS

SUBPART Q: AIRCRAFT SUPPORT CENTER SALES TAX EXEMPTION

Section 520.1730 Application and Approval Process

a) Upon receipt of a complete application, the Department shall approve or deny the application in writing within 60 days after receipt. The application shall be approved if it meets the requirements of Sections 520.1710 and 520.1720 and the applicant has submitted a spending plan and financial commitments for the proposed eligible investment. The applicant must have a Legally Binding Agreement as contained in Section 520.1720(d) that obligates the business to place in service the eligible investments within three years after the date of certification. If the business fails to meet any of the conditions of the agreement, including, but not limited to, failure to place in service the eligible investments in qualified property within three years after the date of certification, the business may be decertified for the tax exemption and required to repay the exempted taxes. Should the business place in service eligible investments subsequent to decertification, the business may reapply to the Department for recertification. However, this reapplication must utilize the procedures set forth in Section 520.1720~~,~~ and contain the same information as required pursuant to Section 520.1710.

b) When the Department denies an application, it shall specify in writing the reasons for denial and allow the applicant 15 days from the date of application denial to amend and resubmit the application. Resubmitted applications shall be approved or denied within 30 days after receipt.

c) Applicants determined eligible by the Department in accordance with Sections 520.1710 and 520.1720 shall be issued a Certificate of Eligibility for Exemption.

d) All certified businesses shall receive a 10-year exemption from the tax imposed by Section 1o of the Retailers' Occupation Tax Act [35 ILCS 120/1o] on purchases of jet fuel and petroleum products used or consumed by any aircraft support center directly in the process of maintaining, rebuilding, or repairing aircraft, as provided in Section 1o of the Retailers' Occupation Tax Act.

e) All certified businesses shall submit quarterly reports describing the progress made toward the creation of 750 or more full-time equivalent jobs and the investment of $30,000,000 in qualified property at the aircraft support center.

f) At the expiration of this initial 10-year period, certified businesses may apply to the Department for a renewal of the exemption for an additional 10-year time period. The Department shall grant an exemption to a certified business for an additional 10-year period, provided that, at the time of application for renewal:

1) The~~Such~~ business has created a minimum of 750 or more full-time equivalent jobs and the investment of $30,000,000 in qualified property for an aircraft support center in Illinois.

2) The~~Such~~ business is located at a joint use military and civilian airport at a federal Air Force Base.

3) The~~Such~~ business provides an audited financial statement, including balance sheets and income statements, audited according to generally accepted auditing standards by a public accountant certified in the State of Illinois as contained in the publication entitled AICPA Professional Standards, American Institute of Certified Public Accountants, 1211 Avenue of the Americas, New York NY 10036-8775 ~~Harborside Financial Center, 201 Plaza 3, Jersey City, New Jersey 07311~~ (June 2011~~2001~~, no later editions are incorporated). In addition, the firm's chief financial officer shall attest in writing that the firm is not aware of a condition or occurrence that would result in bankruptcy or closure.

4) The total period of the exemption from the taxes imposed under the Act shall not exceed 20 years.

(Source: Amended at 36 Ill. Reg. 16067, effective October 26, 2012)

DEPARTMENT OF HUMAN SERVICES

NOTICE OF ADOPTED AMENDMENTS

1) Heading of the Part: Child Care

2) Code Citation: 89 Ill. Adm. Code 50

3)

Section Numbers:	Adopted Action:
50.710	New Section
50.720	New Section
50.730	New Section
50.740	New Section
50.750	New Section
50.760	New Section

4) Statutory Authority: Implementing Articles I through IXA and authorized by Section 12-13 of the Illinois Public Aid Code [305 ILCS 5/Arts. I through IXA and 12-13] and P A 96-864

5) Effective Date of Amendments: October 29, 2012

6) Does this rulemaking contain an automatic repeal date? No

7) Does this rulemaing contain incorporations by reference? No

8) A copy of the adopted amendments, including any material incorporated, is on file in the agency' principal office and is available for public inspection.

9) Notice of Proposal Published in the Illinois Register: November 4, 2011; 35 Ill. Reg. 17560

10) Has JCAR issued a Statement of Objection to this rulemaking? No

11) Differences between Proposal and Final Version: Various non-substantive grammatical changes were made since First Notice to Sections 50.720, 50.730, 50.740 and 50.750. In addition, a new Section 70.760 was added that includes information on the Gateways to Opportunity Registry.

a)

12) Have all changes agreed upon by the agency and JCAR been made as indicated in the agreements issued by JCAR? Yes

13) Will this rulemaking replace any emergency rulemaking currently in effect? No

DEPARTMENT OF HUMAN SERVICES

NOTICE OF ADOPTED AMENDMENTS

14) Are there any proposed rulemakings pending on this Part? No

15) Summary and Purpose of Rulemaking: Pursuant to provisions of PA 96-864, this rulemaking implements the Gateways to Opportunity Program, the Illinois Professional Development System. This rulemaking outlines the framework for awarding the Gateways to Opportunity Credentials. DHS will award Gateways to Opportunity credentials to early care and education, school-age, youth development, and family support practitioners. The Gateways to Opportunity program will also identify professional knowledge guidelines to indicate what all adults who work with children, youth and families need to know, understand and be able to demonstrate to support children's and youth's development, school readiness, school success, families' development, self-sufficiency and well-being. The Gateways to Opportunity Credentials will be available through the Direct Route Application Process or the Entitled Route Program.

16) Information and questions regarding these adopted amendments shall be directed to:

Tracie Drew, Chief
Bureau of Administrative Rules and Procedures
Department of Human Services
100 South Grand Avenue East
Harris Building, 3rd Floor
Springfield, Illinois 62762

217/785-9772

17) Do these amendments require the preview of the Procurement Policy Board as specified in Section 5-25 of the Illinois Procurement Code? No

The full text of the Adopted Amendments begins on the next page:

DEPARTMENT OF HUMAN SERVICES

NOTICE OF ADOPTED AMENDMENTS

TITLE 89: SOCIAL SERVICES
CHAPTER IV: DEPARTMENT OF HUMAN SERVICES
SUBCHAPTER a: GENERAL PROGRAM PROVISIONS

PART 50
CHILD CARE

SUBPART A: GENERAL PROVISIONS

Section
50.101 Incorporation by Reference
50.105 Definitions
50.110 Participant Rights and Responsibilities
50.120 Notification of Available Services
50.130 Child Care Overpayments and Recoveries

SUBPART B: APPLICABILITY

Section
50.210 Child Care
50.220 Method of Providing Child Care
50.230 Child Care Eligibility
50.235 Income Eligibility Criteria
50.240 Qualified Provider (Repealed)
50.250 Additional Service to Secure or Maintain Child Care
50.260 Job Search (Repealed)

SUBPART C: PAYMENT FEES

Section
50.310 Fees for Child Care Services
50.320 Maximum Monthly Income and Parent Fee by Family Size, Income Level and Number of Children Receiving Full-time Care

SUBPART D: PROVIDER REQUIREMENTS

Section
50.400 Purpose
50.410 Qualified Provider

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50.420 Provider Registration and Certification Requirements
50.430 Provider Background Checks
50.440 Payment for Child Care Services

SUBPART E: GREAT START PROGRAM

Section
50.510 Great START Program
50.520 Method of Providing the Wage Supplement
50.530 Eligibility
50.540 Employer Responsibility
50.550 Notification of Eligibility
50.560 Phase-in of Wage Supplement Scale
50.570 Wage Supplement Scale
50.580 Evaluation

SUBPART F: CHILD CARE COLLABORATION PROGRAM

Section
50.610 Child Care Collaboration Program
50.620 Approvable Models of Collaboration
50.630 Requirements for Approval in the Child Care Collaboration Program
50.640 Notification of Eligibility
50.650 Rules and Reporting for the Child Care Collaboration Program

SUBPART G: GATEWAYS TO OPPORTUNITY CREDENTIALS

Section
50.710 Gateways to Opportunity, the Illinois Professional Development System
50.720 Gateways to Opportunity Credentials
50.730 Application for Credentials
50.740 Framework for Gateways to Opportunity Credentials
50.750 Professional Knowledge
50.760 Gateways to Opportunity Registry

AUTHORITY: Implementing Articles I through IXA and authorized by Section 12-13 of the Illinois Public Aid Code [305 ILCS 5/Arts. I through IXA and 12-13].

DEPARTMENT OF HUMAN SERVICES

NOTICE OF ADOPTED AMENDMENTS

SOURCE: Emergency rules adopted at 21 Ill. Reg. 9502, effective July 1, 1997, for a maximum of 150 days; adopted at 21 Ill. Reg. 14961, effective November 10, 1997; emergency amendment at 22 Ill. Reg. 12816, effective July 1, 1998, for a maximum of 150 days; amended at 22 Ill. Reg. 21037, effective November 27, 1998; emergency amendment at 23 Ill. Reg. 10875, effective August 20, 1999, for maximum of 150 days; amended at 24 Ill. Reg. 1058, effective January 10, 2000; emergency amendment at 24 Ill. Reg. 6604, effective April 5, 2000, for a maximum of 150 days; amended at 24 Ill. Reg. 13987, effective September 1, 2000; amended at 24 Ill. Reg. 15423, effective October 10, 2000; emergency amendment at 25 Ill. Reg. 2735, effective February 5, 2001, for a maximum of 150 days; amended at 25 Ill. Reg. 8176, effective June 23, 2001; emergency amendment at 25 Ill. Reg. 8443, effective July 1, 2001, for a maximum of 150 days; amended at 25 Ill. Reg. 14854, effective October 31, 2001; emergency amendment at 25 Ill. Reg. 16116, effective December 1, 2001, for a maximum of 150 days; amended at 26 Ill. Reg. 7113, effective April 25, 2002; amended at 27 Ill. Reg. 12090, effective July 14, 2003; amended at 27 Ill. Reg. 18411, effective November 24, 2003; amended at 28 Ill. Reg. 6895, effective April 23, 2004; emergency amendment at 28 Ill. Reg. 10121, effective July 1, 2004, for a maximum of 150 days; emergency expired November 27, 2004; amended at 29 Ill. Reg. 2687, effective February 4, 2005; emergency amendment at 29 Ill. Reg. 13253, effective August 11, 2005, for a maximum of 150 days; emergency expired January 7, 2006; amended at 30 Ill. Reg. 11190, effective June 6, 2006; amended at 31 Ill. Reg. 12584, effective August 20, 2007; emergency amendment at 31 Ill. Reg. 13350, effective September 10, 2007, for a maximum of 150 days; emergency expired February 6, 2008; amended at 32 Ill. Reg. 6048, effective March 31, 2008; emergency amendment at 32 Ill. Reg. 6652, effective April 1, 2008, for a maximum of 150 days; amended at 32 Ill. Reg. 9604, effective June 20, 2008; amended at 32 Ill. Reg. 14742, effective August 28, 2008; amended at 33 Ill. Reg. 8195, effective June 8, 2009; emergency amendment at 33 Ill. Reg. 15889, effective November 1, 2009, for a maximum of 150 days; emergency amendment at 33 Ill. Reg. 16517, effective November 1, 2009, for a maximum of 150 days; emergency expired March 30, 2010; amended at 34 Ill. Reg. 5275, effective March 29, 2010; emergency amendment at 34 Ill. Reg. 8619, effective June 16, 2010, for a maximum of 150 days; emergency expired on November 12, 2010; amended at 34 Ill. Reg. 10512, effective July 8, 2010; amended at 34 Ill. Reg. 19539, effective December 6, 2010; amendment at 35 Ill. Reg. 1397, effective January 6, 2011; amended at 35 Ill. Reg. 3993, effective February 25, 2011; emergency amendment at 35 Ill. Reg. 6583, effective April 1, 2011, for a maximum of 150 days; emergency expired August 28, 2011; amended at 35 Ill. Reg. 8878, effective May 25, 2011; amended at 36 Ill. Reg. 1564, effective January 17, 2012; amended at 36 Ill. Reg. 12104, effective July 10, 2012; amended at 36 Ill. Reg. 14513, effective September 12, 2012; amended at 36 Ill. Reg. 16067, effective October 29, 2012.

SUBPART G: GATEWAYS TO OPPORTUNITY CREDENTIALS

Section 50.710 Gateways to Opportunity, the Illinois Professional Development System

a) Subject to the availability of funds, the Department, through its agents, shall administer Gateways to Opportunity.

b) Gateways to Opportunity is a professional development system designed to support a diverse, stable and quality workforce for settings serving children, youth and families specifically to:

1) Enhance the quality of services for children, youth and families;

2) Increase positive outcomes for children, youth and families;

3) Advance the availability of coursework and training related to quality services for children, youth and families; and

4) Identify Core Professional Knowledge for practitioners in settings serving children, youth and families.

c) The Department shall award Gateways to Opportunity Credentials to early care and education, school-age, youth development, and family support practitioners through two application routes, as outlined in Section 50.730.

(Source: Added at 36 Ill. Reg. 16067, effective October 29, 2012)

Section 50.720 Gateways to Opportunity Credentials

Credentialing, as set forth by this Part, is only for the purpose of validating an individual's qualifications. Credentials are awarded based on a variety of professional achievements in field experience, knowledge and skills, educational attainment and/or training accomplishments.

a) Gateways to Opportunity Early Care and Education (ECE) Credential
The ECE Credential is designed to identify and validate skills necessary to work in high quality early care and education programs. It is awarded based on educational and professional achievement in services for young children ages birth to eight years. The ECE Credential shall have six levels and each will be awarded for increasing acquisition of education and skills, including college coursework specifically related to the early development and learning of children ages birth to eight years.

b) Gateways to Opportunity Illinois Director Credential
The Illinois Director Credential is designed to identify and validate the skills necessary to administer high quality early childhood and/or school age care programs. It is awarded based on educational and professional achievement in the administration of early childhood and school age programs. The Illinois Director Credential shall have three levels and each will be awarded for increasing complexity of education and skills, including college coursework specifically related to the development of children ages birth to 12 years and program management.

c) Gateways to Opportunity Infant/Toddler Credential
The Infant/Toddler Credential is designed to identify and validate the skills necessary to work in high quality programs serving infants and toddlers ages birth to three years. It is awarded based on educational and professional achievement in infant/toddler services. The Infant/Toddler Credential shall have five levels and each will be awarded for increasing acquisition of education and skills, including college coursework specifically related to the care and development of children ages birth to three years.

d) Gateways to Opportunity School-Age/Youth Development Credentials
The School-Age/Youth Development Credentials are designed to identify and validate the skills necessary to work in high quality programs serving school-age children and youth ages five to 20 years. It is awarded based on educational and professional achievement in services for school-age children and youth. The School-Age/Youth Development Credentials shall have at least three levels, each being awarded for increasing acquisition of education and skill, including college coursework specifically related to the development of children and youth ages five to 20 years.

e) Gateways to Opportunity Family Specialist Credential
The Family Specialist Credential is designed to identify and validate the skills necessary to work in high quality family support service programs. It is awarded based on educational and professional achievement in services for families. The Family Specialist Credential shall have at least three levels, each being awarded for increasing acquisition of education and skill, including college coursework specifically related to services for families.

f) Gateways to Opportunity Family Child Care Credential

The Family Child Care Credential is designed to identify and validate the skills necessary to work in high quality family child care homes. The credential is awarded based on educational and professional achievement in family child care. The Family Child Care Credential shall have at least three levels, each being awarded for increasing acquisition of education and skill, including college coursework specifically related to family child care.

(Source: Added at 36 Ill. Reg. 16067, effective October 29, 2012)

Section 50.730 Application for Credentials

a) The Gateways to Opportunity Credentials shall be available through two application routes:

1) The Direct Route Application Process
The applicant submits an application, college transcripts, and a portfolio verifying experience and professional contributions to the Gateways to Opportunity Credential Office.

2) The Entitled Route Program
The applicant successfully completes approved college coursework that covers the Core Professional Knowledge for each specific credential at the entitled education institution. An entitled education institution is a college or university that has aligned its coursework with specific credential benchmarks based on State and national standards identified in Section 50.750(c) and meets additional credential requirements through coursework. Applicants can find additional information about entitled education institutions at: http://www.ilgateways.com/en/gateways-credential-entitlement-information.

b) The applicant shall be responsible for providing all information and documentation required to demonstrate his or her qualifications for a particular credential to the Gateways to Opportunity Credential Office, specifically:

1) a Credential Application, available from the Gateways to Opportunity Credential Office, 1226 Towanda Plaza, Bloomington, Illinois 61701;

2) official college transcripts from the higher education institutions; and

3) a portfolio verifying experience and professional contributions.

c) The Gateways to Opportunity Credential Application can be accessed at: www.ilgateways.com/en/participant-application.

d) The information and documentation identified in Section 50.730(b) is reviewed according to the appropriate Credential Framework (see Section 50.740) that can be found at http://www.ilgateways.com/en/gateways-to-opportunity-credentials.

e) The Department or its agents will notify applicants, in writing, of eligibility for a credential within 60 days after receipt of all required documentation. Applicants that disagree with the credential determination may request reconsideration by writing to the IDHS Bureau of Child Care and Development (BCCD), 400 W. Lawrence, Springfield, Illinois 62762, within 60 days after notification of the original determination. The final decision on eligibility for credentials will be made by the Child Care Professional Development Manager in consultation with the BCCD Bureau Chief. The criteria used during reconsideration by DHS' Bureau of Child Care and Development will be the same Credential Framework used to determine eligibility. The Credential Framework is located in Section 50.740 and on the GTO website at http://www.ilgateways.com/en/gateways-to-opportunity-credentials.

(Source: Added at 36 Ill. Reg. 16067, effective October 29, 2012)

Section 50.740 Framework for Gateways to Opportunity Credentials

a) The framework for each Gateways to Opportunity Credential outlines what an applicant (direct route and entitled route) needs to have in order to obtain a credential. Each Credential Framework has four components:

1) General education. An individual's general level of education has been shown to be a strong predictor for high-quality educational practices and services to children, youth and families.

2) Education and training specific to each credential. In order to be strong practitioners, a strong foundation in the fundamentals of coursework specific to each credential is needed.

3) Work and practical experience specific to each credential. On-the-job experience provides a basis for evaluating effective practices.

4) Professional contributions specific to that credential. Effective practitioners demonstrate leadership through active engagement in professional endeavors beyond the scope of their job descriptions.

b) Specific information about the framework components for each credential can be found at: http://www.ilgateways.com/en/gateways-to-opportunity-credentials, or by contacting: Gateways to Opportunity, 1226 Towanda Plaza, Bloomington, Illinois 61701.

c) Review of the Credential Framework

1) The framework for each credential will be reviewed every five years.

2) The review shall include, but not be limited to, the following areas:

A) Alignment with related professional standards;

B) Availability of related coursework statewide; and

C) Relevance of the professional contributions.

(Source: Added at 36 Ill. Reg. 16067, effective October 29, 2012)

Section 50.750 Professional Knowledge

Professional knowledge identifies what all adults who work with children, youth and families need to know, understand and be able to demonstrate to support children's and youth's development, school readiness, school success, families' development, self-sufficiency and well-being. This knowledge is divided into content areas.

a) Content Areas

1) The content areas represent traditional subject areas and identify the range of observable skills that adults need to facilitate learning and development. The content areas for each credential remain the same for all levels of

training, education and role responsibilities. The content areas for Gateways to Opportunity Credentials include, but are not limited to:

A) Human growth and development;

B) Health, safety and nutrition;

C) Observation and assessment;

D) Curriculum or program development;

E) Interactions and environments;

F) Family and community relationships; and

G) Personal and professional development.

2) Additional information about the Gateways to Opportunity Credential Content Areas can be found at: http://www.ilgateways.com/en/higher-education-institution-faculty-and-programs, or by contacting: Gateways to Opportunity, 1226 Towanda Plaza, Bloomington, Illinois 61701.

b) Competency Levels
The benchmarks for each content area in all Gateways to Opportunity Credentials are set at levels that increase in complexity according to the specific educational and professional achievement. Professionals are awarded credentials at the level that matches their educational and professional attainment.

c) Alignment with other Professional Standards

1) The knowledge, skills and disposition indicators for adults working with children and youth align with other sets of recognized professional standards for early childhood and school-age care programs, such as, but not limited to:

A) The Illinois Professional Teaching Standards (IPTS) (see 105 ILCS 5/21-0.01) and 23 Ill. Adm. Code 24 (http://www.isbe.net/profprep.PDFs/ipts.pdf);

B) The Illinois Early Childhood Education Content-Area Standards (http://www.isbe.net/earlychi/pdf/early_learning_standards.pdf);

C) The Professional Standards for Teacher Preparation by the National Association for the Education of Young Children (http://www.naeyc.org/faculty/pdf/2002.pdf and http://www.naeyc.org/faculty/pdf/2003.pdf); and

D) The Council on Accreditation's Afterschool Standards (http://www.coaafterschool.org/standards.php).

2) The knowledge, skills and dispositions for adults working with families align with other sets of recognized professional family support services standards, such as, but not limited to:

A) ACF Office of Head Start Competency Goals and Indicators (http://eclkc.ohs.acf.hhs.gov/hslc/Family_and_Community_Partnerships);

B) Family and Community Development Credential (http://www.iacaanet.org/pdi.php); and

C) Cornell University Family Development Credential (http://www.human.cornell.edu/HD/FDC).

(Source: Added at 36 Ill. Reg. 16067, effective October 29, 2012)

Section 50.760 Gateways to Opportunity Registry

a) The Gateways to Opportunity Registry is a tool that tracks the characteristics and ongoing professional development of the workforces identified in this subsection (a), recognizes those attainments and identifies approved courses/training and trainers.

1) Early Childhood Care and Education

2) School Age

3) Youth Development

b) Gateways to Opportunity Registry Membership

1) Anyone working with or on behalf of children, youth and families can become a member of the Gateways to Opportunity Registry by completing the online application at http://www.ilgateways.com/registry-membership.

2) Membership is renewed annually in order to keep workforce data current.

c) Professional Development Record

1) The Professional Development Record (PDR) reports an individual Registry member's education, credentials/certificates, and trainings attended in the reporting period.

2) The PDR can be printed at any time from a secure website by the Registry member only.

d) Statewide Online Training Calendar

1) The Statewide Online Training Calendar lists professional development events (e.g., workshops, conferences and training series) that practitioners may attend in order to meet licensing requirements, obtain credentials, etc.

2) The Statewide Online Training Calendar can be found at http://www.ilgateways.com/en/statewide-online-training-calendar.

(Source: Added at 36 Ill. Reg. 16067, effective October 29, 2012)

STATE BOARD OF EDUCATION

NOTICE OF ADOPTED AMENDMENTS

1) Heading of the Part: New Teacher Induction and Mentoring

2) Code Citation: 23 Ill. Adm. Code 65

3)

Section Number:	Adopted Action:
65.10	Amendment
65.20	Amendment
65.110	Amendment
65.120	Amendment
65.130	Amendment
65.140	Amendment
65.150	Amendment
65.155	New Section
65.160	Amendment
65.170	New Section
65.APPENDIX A	New Section
65.APPENDIX B	New Section

4) Statutory Authority: 105 ILCS 5/Art. 21A-35

5) Effective Date of Amendments: October 25, 2012

6) Does this rulemaking contain an automatic repeal date? No

7) Does this rulemaking contain incorporations by reference? Yes; see 65.160(d)(3).

8) A copy of the adopted amendments, including any material incorporated by reference, is on file in the agency's principal office and is available for public inspection.

9) Notice of Proposal Published in Illinois Register: July 6, 2012; 36 Ill. Reg. 9607

10) Has JCAR issued a Statement of Objection to this rulemaking? No

11) Differences between Proposal and Final Version: In the body of the rules, "PILOT" was removed from the title of Subpart B.

In Section 65.120(c) and 65.130(b), the minimum number of beginning teachers that a program must serve was reduced from 20 to 10.

In Section 65.130(d), the rule was modified to allow for interactions between the beginning teacher and mentor to include electronic media, and the face-to-face contact was reduced from 40 to 30 hours for a teacher in his or her second year of the program.

Several other minor technical changes were made to provide consistent use of terminology throughout the Part.

12) Have all the changes agreed upon by the agency and JCAR been made as indicated in the agreements issued by JCAR? Yes

13) Will this rulemaking replace any emergency rulemaking currently in effect? No

14) Are there any other proposed rulemakings pending on this Part? No

15) Summary and Purpose of Amendment: The New Teacher Induction and Mentoring program has been updated to better reflect the best practices of induction and mentoring programs and incorporate important current research and advances in the field, namely the development of program standards and a program continuum to be used for ongoing improvement, support and evaluation (see Appendices A and B of the proposed amendments). The standards were adopted by the then-State Teacher Certification Board in December 2008 and a year later, a task force completed its work on the induction continuum. The standards have served as guidance for induction and mentoring programs but program alignment to the standards has not been a requirement of funding. The standards now will become an integral part of each grantee's implementation of an induction and mentoring program, providing consistency among programs across the State.

Briefly, the other modifications accomplished the following.

- Clarified that the requirements contained in Part 65 are applicable to induction and mentoring programs funded both on a competitive basis (i.e., when funding is insufficient to provide grants to all eligible entities), as well as to programs established in a statewide implementation should sufficient funds become available. (See Section 65.20.)
- Required that each funded program serve a minimum number of beginning teachers. Applicants with fewer than the minimum required under the rules could partner with other eligible entities to offer a joint program. The amendments also allow for consideration of a program serving fewer than the minimum number of new teachers when an applicant can provide evidence that it has the resources (both financial and

human) to locally implement and sustain the program. (See Sections 65.120 and 65.130.)

- Provided for local flexibility in determining the amount of time that the beginning teacher and mentor would spend in face-to-face contact by reducing the current requirement of 60 hours – which became a ceiling that programs would not go beyond – to 40 hours for first-year teachers and at least 30 hours for those in their second year. (See Section 65.130.)
- Fleshed out the requirements for the receipt of funding in years two and beyond and tying receipt of continuation funding to the program's continuous improvement based on the Illinois Induction Program Continuum. (New Section 65.155 and Appendix B.)
- Removed a funding priority for "hard to staff" schools, since the focus of a high-quality proposal should be on its alignment with the Illinois Standards of Quality and Effectiveness for Beginning Teacher Induction Programs (see Appendix A).
- Strengthened the criteria used to evaluate proposals to align to the Illinois Standards of Quality and Effectiveness for Beginning Teacher Induction Programs (see Appendix A) and reflect the best practices of high-quality induction and mentoring programs.

16) Information and questions regarding these adopted amendments shall be directed to:

Vicki Phillips
Division Administrator
Division of Preparation and Evaluation
Illinois State Board of Education
100 North First Street, E-310
Springfield, Illinois 62777

(217) 782-2948

The full text of the Adopted Amendments begins on the next page:

STATE BOARD OF EDUCATION

NOTICE OF ADOPTED AMENDMENTS

TITLE 23: EDUCATION AND CULTURAL RESOURCES
SUBTITLE A: EDUCATION
CHAPTER I: STATE BOARD OF EDUCATION
SUBCHAPTER b: PERSONNEL

PART 65
NEW TEACHER INDUCTION AND MENTORING

SUBPART A: GENERAL PROVISIONS

Section
65.10 Purpose and Scope
65.20 Requirements of the Plan; Program Specifications

SUBPART B: BEGINNING TEACHER INDUCTION GRANT PROGRAM

Section
65.110 Purpose and Applicability
65.120 Eligible Applicants
65.130 Program Specifications
65.140 Initial Application Procedure
65.150 Criteria for the Review of Initial Applications
65.155 Application Content and Approval for Continuation Programs
65.160 Allocation of Funds
65.170 Terms of the Grant

65.APPENDIX A Illinois Standards of Quality and Effectiveness for Beginning Teacher Induction Programs
65.APPENDIX B Illinois Induction Program Continuum

AUTHORITY: Implementing Article 21A of the School Code [105 ILCS 5/Art. 21A] and authorized by Section 21A-35 of the School Code [105 ILCS 5/21A-35].

SOURCE: Emergency rules adopted at 30 Ill. Reg. 11783, effective June 26, 2006, for a maximum of 150 days; adopted at 30 Ill. Reg. 17425, effective October 23, 2006; amended at 33 Ill. Reg. 15258, effective October 20, 2009; amended at 36 Ill. Reg. 16098, effective October 25, 2012.

SUBPART A: GENERAL PROVISIONS

Section 65.10 Purpose and Scope

This Subpart A establishes the fundamental requirements that shall apply to each program of induction for new teachers for which approval or grant funds pursuant to Article 21A of the School Code [105 ILCS 5/Art. 21A] are sought. For the purposes of this Part, "beginning teacher" shall have the same meaning as that set forth for "new teacher" in Section 21A-5 of the School Code [105 ILCS 5/21A-5].

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.20 Requirements of the Plan; Program Specifications

a) When State funding is available to support new proposals for any initiative under Article 21A of the School Code, the State Superintendent of Education shall issue ~~a Request for Proposals (RFP) (or, in the case of noncompetitive funding, other~~ application materials~~)~~ in order to solicit applications from eligible entities. As used in this Part, a "proposal" or "application" means relevant portions of a plan for an induction and mentoring program that meets the requirements of Section 21A-20 of the School Code [105 ILCS 5/21A-20], accompanied by the additional materials applicants will be required to submit, as described in ~~the relevant~~ Subpart B of this Part.

1) When the level of funding is insufficient to provide grants to each eligible entity in the State, a Request for Proposals (RFP) will be issued to solicit applications from eligible entities, and applications will be considered for funding based on the extent to which they meet the criteria set forth in Section 65.150 of this Part.

2) When the level of funding is sufficient to fund all eligible entities in the State, a request for applications will be issued and each school district whose plan meets the requirements of Article 21A of the School Code and this Part will receive a grant in an amount equal to at least the amount specified in Section 21A-25 of the School Code.

b) In accordance with Section 21A-20 of the School Code, each~~Each~~ plan approved for a beginning teacher induction grant shall:~~conform to the requirements of Section 21A-20 of the School Code.~~

1) *assign a mentor teacher to each* beginning *teacher for a period of at least 2 school years*, providing sufficient time for the beginning teacher and mentor to engage in mentoring activities;

2) *align with the Illinois Professional Teaching Standards, content area standards and the* employing entity's existing *local school improvement and professional development plans, if any.* In order to demonstrate the alignment required by this subsection (b)(2)~~Section 21A-20(2) of the School Code~~, each plan shall discuss the relationship among the services and experiences that will be available to beginning~~new~~ teachers, the content-area standards applicable to their respective fields of certification or licensure endorsement, as applicable, or assignment (see 23 Ill. Adm. Code 26 and 27), and the Illinois Professional Teaching Standards (see 23 Ill. Adm. Code 24);~~, and the employing entity's existing plans for school improvement and professional development.~~

3) *address all of the following elements and how they will be provided:*

A) *mentoring and support of the* beginning *teacher;*

B) *professional development specifically designed to ensure the growth of the* beginning *teacher's knowledge and skills* and accelerate the beginning teacher's practice; and

C) *formative assessment designed to ensure feedback and reflection, which must not be used in any evaluation of the* beginning *teacher; and*

4) *describe the role of mentor teachers, the criteria and process for their selection, and how they will be trained, provided that each mentor teacher shall demonstrate the best practices in teaching his or her respective field of practice. A mentor teacher may not directly or indirectly participate in the evaluation of a new teacher pursuant to Article 24A of* the School *Code or the evaluation procedure of the public school.*

c) Each plan shall meet the Illinois Standards of Quality and Effectiveness for Beginning Teacher Induction Programs set forth in Appendix A of this Part and further amplified in Section 65.150 of this Part.

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

SUBPART B: BEGINNING TEACHER INDUCTION GRANT~~PILOT~~ PROGRAM

Section 65.110 Purpose and Applicability

This Subpart B establishes the application procedure and criteria for selection by the State Board of Education of the applicants that will receive grant funds under the Beginning Teacher Induction Grant~~Pilot~~ Program as authorized by Section 21A-25 of the School Code [105 ILCS 5/21A-25]. The purposes of the grant program~~Pilot Program~~ shall be to provide support for programs of intensive support and mentoring for beginning~~new~~ teachers as specified in Section 65.130 of this Part and to gather information that will permit evaluation of the effects of these programs and provide for ongoing improvement and support of each program funded.

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.120 Eligible Applicants

Eligible applicants for grant funding under this Subpart B shall be the entities identified in Section 21A-5 of the School Code~~ [105 ILCS 5/21A-5]~~, as well as public university laboratory schools approved by the State Board of Education pursuant to Section 18-8.05(K) of the School Code [105 ILCS 5/18-8.05(K)] (see Section 2-3.109a of the School Code [105 ILCS 5/2-3.109a]). ~~An eligible applicant may also be a partnership of eligible entities or a partnership of one or more eligible entities and one or more institutions of higher education, professional associations, regional offices of education, or not-for-profit providers of educational services No application shall be considered unless it includes a written statement by the authorized representative of the collective bargaining unit, if any, concurring with its submisstion.~~

a) An eligible applicant may also be a partnership of eligible entities~~ or a partnership of one or more eligible entities and one or more institutions of higher education, professional associations, regional offices of education, or not for profit providers of educational services~~.

1) If a joint application is submitted, then an administrative agent shall be designated and the application shall be signed by the authorized official of each entity that is a participant.

2) A school district or other eligible entity shall only participate in one proposal for a specific program.

b) No application shall be considered unless it includes a written statement by the authorized representative of the collective bargaining unit, if any, of each participating entity concurring with its submission.

c) Each eligible applicant shall propose to serve at least 10 beginning teachers. Eligible applicants with fewer than 10 beginning teachers may participate as part of a joint application. (See Section 65.130(b) of this Part.)

d) An eligible applicant may contract with one or more institutions of higher education, professional associations, regional offices of education, or not-for-profit providers of educational services *to assist in implementing the program*. (See Section 21A-15 of the School Code.)

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.130 Program Specifications

a) Each program supported with grant funds under this Subpart B shall incorporate:

1) mentoring for beginning~~new~~ teachers that is provided by experienced teachers who have received training to equip them for this role;

2) professional development for recipient teachers, mentors, and administrators who have roles in the program; ~~and~~

3) formative assessment of beginning~~new~~ teachers' practice with respect to the Illinois Professional Teaching Standards and the content-area standards relevant to their respective fields of assignment; and~~.~~

4) the Illinois Standards of Quality and Effectiveness for Beginning Teacher Induction Programs. (See Appendix A of this Part.)

b) Each program shall serve no fewer~~more~~ than 10~~75~~ beginning~~new~~ teachers.~~,~~ If fewer than 10 teachers are proposed to be served, the applicant may either:

1) participate in a beginning teacher induction program as part of a joint application; or

2) provide in its application~~unless~~ a specific rationale for the reduction~~is provided~~ that demonstrates that the applicant has sufficient resources, in

addition to funding received under this Subpart B, and adequate personnel to continue the program and provide~~how~~ each beginning~~new~~ teacher with~~will receive comparable and~~ adequate attention and support comparable to what would be provided in a larger program.

c) Each beginning~~new~~ teacher shall~~, at the time he or she begins the program,~~ have, at the time he or she begins the program, less than two years' teaching experience and hold an initial or a provisional early childhood, elementary, secondary, special K-12, or special preschool-age 21 certificate issued pursuant to Article 21 of the School Code [105 ILCS 5/Art. 21] or a professional educator license issued pursuant to Article 21B of the School Code [105 ILCS 5/Art. 21B], as applicable. An individual seeking a professional educator license under the provisions of Section 21B-35 of the School Code [105 ILCS 5/21B-35] and holding an educator license with stipulations endorsed for provisional educator also may participate if he or she has less than two years' teaching experience.

d) Subject to the exceptions of this subsection (d), each~~Each~~ program shall be designed to ensure that each beginning~~new~~ teacher spends no less than 40~~60~~ hours ~~in face-to-face contact~~ with the mentor assigned~~, either one on one or in another configuration~~, including both classroom observation of the beginning~~new~~ teacher by the mentor and other interactions between these individuals. ~~Each mentor who provides at least 60 hours of mentoring service in a grant year shall be paid $1,200 from grant funds awarded pursuant to this Part.~~

1) During a teacher's first year of the program, at least 30 hours of contact between the teacher and mentor shall be face to face, either one on one or in another configuration, and the remaining interactions may be through electronic means, such as web-based applications, telephone or video.

2) During a teacher's second year of the program, a minimum of 30 hours of contact is required, of which at least 20 hours shall be face to face.

e) Each program shall provide for the development of an individual learning~~induction~~ plan for each beginning~~new~~ teacher served and for the provision of professional development that is directly related to the needs identified in the individual learning plan.

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.140 Initial Application Procedure

Each applicant that is proposing a program that has not received funding in the year previous to the current application, to include all applications from eligible entities that received funding under this Part previous to FY 2012, shall submit to the State Board of Education an application that includes the components specified in this Section.~~For purposes of this Subpart, the terms "proposal" shall have the same meaning.~~

a) Grants for initial programs shall be offered in years in which the level of available funding is such that one or more new programs can be supported, along with those currently funded programs that seek continuation funding in accordance with Section 65.155 of this Part.

b)~~a)~~ When State funding is available for new grants under this Subpart, the State Superintendent of Education shall issue the applicable application materials (see Section 65.20(a) of this Part~~a Request for Proposals (RFP~~) in order to solicit applications from eligible entities.

c)~~b)~~ The application materials~~RFP~~ shall describe the format that applicants will be required to follow and the information they will be required to submit, including a description of the proposed program, identification of the specific schools in which the induction program will be conducted, and the number of beginning~~new~~ teachers and mentors involved. (Also see Section 65.150 of this Part for information relative to the contents of the proposal.)

d)~~c)~~ The application materials~~RFP~~ shall indicate the amount or expected amount of the appropriation for the program and shall describe the allowable expenditures and the basis for awarding grants. If matching funds or resources will be required of applicants, the application materials~~RFP~~ shall describe these requirements.

e)~~d)~~ The application materials~~RFP~~ shall include a budget summary and payment schedule, as well as a narrative budget breakdown, i.e., a detailed explanation of each line item of expenditure.

f)~~e)~~ The application materials~~RFP~~ shall identify the data recipients will be required to collect and report regarding the activities conducted with grant funds and the results of those activities, as well as the timelines for reporting.

1) The applicant shall propose a specific method for collecting and maintaining data specific to program implementation and the induction program's impact on beginning teachers' performance, based on the

induction program standards and continuum (see Appendices A and B of this Part), for the purpose of program improvement and evaluation.

A) Program records shall at least include a roster of mentors and beginning teachers that includes the frequency (number of interactions) and duration (number of hours) of contact between each mentor and beginning teacher.

B) Program records shall at least include information about each beginning teacher's performance evaluation rating awarded pursuant to Section 24A-5 of the School Code [105 ILCS 5/24A-5] and 23 Ill. Adm. Code 50 (Evaluation of Certified Employees under Articles 24A and 34 of the School Code) and retention status of each beginning teacher during his or her participation and after completion of the program.

2) The applicant shall describe a process that is consistent with continuous program improvement for using any data collected under subsection (f)(1) of this Section.

g)~~f)~~ The application materials~~RFP~~ shall include ~~such~~ certifications and assurances and program-specific terms of the grant as the State Superintendent may require, to be signed by each applicant that is a party to the application and submitted with the proposal. (Also see Section 65.170 of this Part.)

h)~~g)~~ The application materials~~RFP~~ shall specify the deadline for submission of proposals, which shall provide potential applicants with at least 30 days to respond.

~~h)~~ ~~Separate applications shall be required for renewal of grant funding. Each application for renewal shall include at least:~~

~~1)~~ ~~a description of expenditures and activities during the year just concluded, demonstrating that the project has been implemented in conformance with the approved grant agreement and that the recipient continues to exhibit need for grant funds for this purpose; and~~

~~2)~~ ~~an updated budget summary and payment schedule for the renewal year, including a narrative budget breakdown.~~

i) Incomplete proposals shall not be considered.

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.150 Criteria for the Review of Initial Applications

Applications for initial funding shall be evaluated to determine the extent to which each meets~~in accordance with~~ the criteria set forth in this Section. ~~When considering substantially equal proposals, the State Superintendent of Education shall give preference to programs that will take place in hard-to-staff schools, i.e., Illinois public schools that rank in the upper third among public schools of their type (e.g., elementary, middle, secondary) in terms of the rate of attrition among teachers.~~

a) Program Goals and Design and Resources (20 points)

1) The proposal articulates goals for the program that focus on the improvement of beginning teacher practice, retention, and student achievement, as well as the continuous improvement of the program.

2) The proposal articulates the requirements for beginning teachers to successfully complete the program.

3) The proposal contains a plan for effective communication among all stakeholders.

4) The proposal articulates how the program is aligned with school and district improvement plans, other teaching effectiveness initiatives, and other professional learning opportunities.

5) The proposal identifies and allocates adequate resources to ensure the successful implementation of the program design.

6) The proposal provides for specific practices and policies, such as reduced course load for mentors, reduced course load for beginning teachers, release time, substitute pay, mentor stipends and access to resources, that will permit the participants in the program to devote the time necessary to reach the goals of the program.

b) Induction Program Leadership, Administration and Support (15 points)

1) The proposal identifies the individuals who will lead the program and clearly delineates their roles in planning, implementing, evaluating and refining the program. The roles and responsibilities of the program leaders are appropriate for the scope and complexity of the proposed program.

2) The proposal includes strategies that will be used in providing oversight for the program to permit ongoing analysis of its effectiveness, allow for necessary programmatic modifications and provide communication with all stakeholders.

3) The proposal identifies how the induction program leadership will encourage and facilitate communication and collaboration among all stakeholders to ensure support of the program.

c) Site Administrator's Roles and Responsibilities (15 points)

1) The detailed description of the role and responsibilities of the program's site administrator (e.g., principal) suggests that each administrator will have ongoing participation in and provide leadership for the program so as to engender positive teaching and learning conditions for beginning teachers.

2) The proposal presents a plan for professional development for site administrators that provides a minimum of at least four hours of training specific to the site administrator's role in understanding, designing and implementing high-quality beginning teacher induction programs.

d) Mentor Selection, Assignment, Training and Ongoing Development (20 points)

1) The proposal describes a comprehensive strategy for recruiting teachers who are suited to the role of mentor.

2) The proposal describes the criteria for mentor selection, which shall include at least the following:

A) a record of the mentor's effective teaching practice and professional conduct, including at least three years of teaching experience and a performance evaluation rating of "proficient" or "excellent" from each of the mentor's last two performance

evaluations conducted pursuant to Section 24A-5 of the School Code and 23 Ill. Adm. Code 50 (Evaluation of Certified Employees under Articles 24A and 34 of the School Code);

B) demonstrated commitment of the mentor to his or her own professional growth and learning, including the ability to be reflective and articulate about his or her teaching practice;

C) ability of the mentor to relate and communicate effectively with colleagues;

D) the mentor's professional commitment to improving the induction of beginning teachers; and

E) knowledge of effective professional development for beginning teachers and effective adult learning strategies.

3) The proposal describes the foundational training for mentors, which shall include or incorporate at least the following topics:

A) adult learning theory and/or instruction relative to the implementation of the Standards for Professional Learning (2011) published by Learning Forward, 504 South Locust Street, Oxford, Ohio 45056 and posted at http://www.learningforward.org/standards/index.cfm; no later amendments to or editions of these standards are incorporated by this Section;

B) foundations of mentoring;

C) formative assessment;

D) coaching and observation strategies; and

E) analysis of student work and data.

4) The proposal provides a plan for mentor training that is ongoing, with at least monthly opportunities for mentors to interact with other mentors via a mentor learning community to build mentors' skills through problem-solving and reflection so that they can better assist beginning teachers in the development of their teaching skills and professional practices. The

sessions will enable participating mentors to share experiences and strengthen their ability to employ mentoring tools, protocols and formative assessment to support mentoring effectiveness.

5) The proposal provides a detailed description of the process to be used for assessment of mentor practice and mentor accountability.

e) Beginning Teacher Development and Formative Assessment (15 points)

1) The proposal describes plans for the timely orientation of the beginning teachers to the induction program before the start of their teaching assignments and for a formal network to provide novice colleagues with at least quarterly learning opportunities and ongoing support.

2) The proposal provides for the professional development of beginning teachers, which includes at least the development of an individual learning plan for each beginning teacher served and for the provision of professional development that is directly related to the needs identified in the individual learning plan.

3) The proposal clearly articulates a method for the formative assessment of beginning teachers' practice and describes how that information will be used in the individual learning plan.

4) The proposal includes quarterly plans for incorporating issues of pedagogy, classroom management and content knowledge into professional development for beginning teachers and for ensuring alignment of this material with the Illinois Professional Teaching Standards, the participants' specific identified needs and local instructional priorities.

5) The program is designed to afford at least one opportunity during each semester to observe teaching practices modeled by experienced teachers and discuss selected aspects of teaching practice with these teachers.

f) Program Impact and Implementation (Evaluation) (15 points)

1) The proposal identifies information to be collected and reported on the performance and retention of beginning teachers that will add to an

understanding of the effects of more intensive induction programs as compared to the results of more typical models.

2) The evaluation is designed to assess the effectiveness of particular initiatives or components of the program and will likely produce data that can be used to improve the program.

3) The applicant identifies a method for tracking the continued service of the teachers served after the project ends so that longitudinal data can be compiled.

~~a) Program Design (45 points)~~

~~1) The proposal identifies specific practices and policies such as reduced course load for mentors, release time, and access to resources that will permit the participants in the program to devote the necessary time to induction and mentoring.~~

~~2) The proposal describes plans for timely orientation of the new teachers to the induction program and for a formal network of the novice colleagues that will provide them with ongoing learning opportunities and support.~~

~~3) The proposal clearly articulates methods for collecting evidence related to the new teachers' practice and describes how that information will be used in planning for professional development and other support for the new teachers.~~

~~4) The proposal includes specific plans for incorporating issues of pedagogy, classroom management, and content knowledge into professional development for the new teachers and for ensuring alignment of this material with the Illinois Professional Teaching Standards, the participants' specific identified needs, and local instructional priorities.~~

~~5) The proposal presents coherent allocation and scheduling of the participants' time and is cost-effective in light of the level of resources requested and the number of new teachers to be served.~~

~~b) Mentor Recruitment and Support (25 points)~~

~~1) The proposal describes a comprehensive strategy for recruiting experienced teachers who are suited to the role of mentors, including:~~

~~A) the involvement of parties with an interest in teacher quality and retention;~~

~~B) thorough outreach and communication regarding the availability of positions for mentors;~~

~~C) clear criteria for the skills and experience sought; and~~

~~D) consideration of multiple sources of information in identifying the candidates to be selected.~~

~~2) The proposal provides for formal orientation of the mentors selected, for fundamental training of these individuals at the beginning of the program, and for professional development during the course of the program that is designed to strengthen their ability to employ mentoring tools, protocols, and formative assessment in response to the needs of beginning teachers.~~

~~3) The proposal describes a systematic approach to establishing a "community of mentoring practice" that will enable the participating mentors to share experiences and strategies and support each other's work within the induction program.~~

~~c) Evaluation Design (20 points)~~

~~1) The proposal identifies information to be collected and reported on the performance and retention of new teachers that will add to an understanding of the effects of more intensive induction programs as compared to the results of more typical models.~~

~~2) The proposal suggests how the effects of particular initiatives or components of the program will be measured.~~

~~3) The applicant proposes a method for tracking the continued service of the teachers served after the project ends so that longitudinal data can be compiled.~~

~~d) Leadership and Direction (10 points)~~

~~1) The proposal demonstrates that the individuals who will direct or coordinate the induction program have experience in this endeavor or a commitment to it, as evidenced by their history of involvement or professional development.~~

~~2) The management structure described is appropriate to the scope and complexity of the program, the specific responsibilities of the on-site administrator are evident, and the roles and contributions of collaborating entities, if any, are clearly delineated.~~

~~3) The proposal includes strategies that will be used in providing oversight for the program to permit ongoing analysis of its effectiveness, necessary programmatic modifications, integration of various relevant professional development plans, and communication structures that respect the need for confidentiality when applicable.~~

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.155 Application Content and Approval for Continuation Programs

The requirements of this Section shall apply to those applicants seeking funding to continue beginning teacher induction programs beyond the initial grant period.

a) In order to continue to operate a Beginning Teacher Induction Grant Program, a grantee each year shall submit an application for continuation. The application shall include at least the following:

1) a description of expenditures and activities conducted during the year just concluded, demonstrating that the project has been implemented in conformance with the approved grant agreement and that the recipient continues to exhibit a need for grant funds for this purpose (i.e., the expected number of beginning teachers to be served);

2) an overview of the program to be conducted in the continuation period, addressing the program components outlined in Section 65.130 of this Part;

3) a summary of progress the applicant has made in implementing the standards and criteria listed in Appendix A of this Part during the previously funded grant period. The summary shall:

A) be based on the induction program continuum contained in Appendix B of this Part; and

B) list any strategies to be employed during the continuation period to improve the induction program and advance the applicant along the induction program continuum for one or more standards or criteria;

4) budget summary and payment schedule as well as a budget breakdown, i.e., a detailed explanation of each line item of expenditure; and

5) the certifications and assurances and program-specific terms of the grant referred to in Section 65.140(f) of this Part applicable to the continuation period.

b) A Beginning Teacher Induction Grant Program shall be approved for continuation provided that:

1) a need continues to exist for the program, as evidenced by the number of beginning teachers to be served;

2) the program components proposed will be effective in assisting and improving the practice of beginning teachers and are based on the areas identified for program improvement pursuant to subsection (a)(3) of this Section;

3) the proposed budget is cost-effective, as evidenced by the cost of proposed services in relation to the numbers to be served and the services to be provided; and

4) in the year previous to the continuation application, the applicant complied with the terms and conditions of any grant it received pursuant to this Subpart B.

(Source: Added at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.160 Allocation of Funds

a) The State Superintendent of Education shall approve initial applications for competitive funding and make final determinations regarding the amounts to be provided based upon the total funds appropriated for this initiative, the amounts necessary to fund the top-ranked proposals, and the need to distribute the benefits of innovative induction models on a statewide basis. The minimum grant to be awarded will range from $1,200 to $1,500 for each teacher served in a program that has been approved for funding under this Part.

b) It is the intention of the State Board of Education to approve continuation funding for projects under this Part prior to providing funding for new applicants. Funding for existing grantees for each year shall be contingent upon the availability of funds for the program and evidence presented in renewal proposals that the projects have been implemented in accordance with the approved grant agreements and that the recipients continue to need additional State resources in order to implement their programs. If funds remain available for new programs, an RFP shall be issued as provided in Section 65.140 of this Part.

c) In accordance with Section 21A-25 of the School Code, in years when sufficient funding is available for a statewide implementation of the beginning teacher induction grant program, the minimum grant to be awarded will be $1,200 for each teacher served in a program approved for funding under this Part.

(Source: Amended at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.170 Terms of the Grant

a) The grantee shall participate in external reviews and statewide data collection, as determined by the State Superintendent of Education, to be used to assess the overall effectiveness of induction and mentoring in the State and to understand the effects of intensive induction programs on beginning teacher practice and effectiveness.

b) The grantee shall participate in State-provided technical assistance activities and State-developed trainings related to the use of the Illinois Standards of Quality and Effectiveness for Beginning Teacher Programs and the Illinois Induction Program Continuum. (See Appendix A and Appendix B of this Part.)

c) Reporting. The grantee shall submit data and information about the beginning teacher induction program each year to the State Superintendent of Education in a format specified by and according to the timeline set forth by the State Superintendent. The report shall include, at a minimum, an assessment of the

grantee's progress towards meeting any locally established goals for the program, as set forth in the approved application, and the number of beginning teachers and mentors served during the grant period.

d) Each grantee shall submit to the State Board of Education by December 31 of each grant year a final count of the teachers to be served in the beginning teacher induction program for the respective grant period. In instances in which the final count is less than the number of teachers proposed to be served in the approved application, the State Board of Education shall reduce grant proceeds not yet received by an amount equal to the difference between the proposed and actual number of teachers served multiplied by the per teacher amount awarded pursuant to either Section 65.160(a) or (c) of this Part, as applicable.

(Source: Added at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.APPENDIX A Illinois Standards of Quality and Effectiveness for Beginning Teacher Induction Programs

This Appendix A sets forth a clear framework to assist in the development of research-based programs that meet local needs and are responsive to local contexts. The standards are broad and interdependent, describing a vision of a comprehensive and dynamic program for beginning teachers and those who support them. The intent of these standards is to foster thoughtful, high-quality growth and development. Each program funded under this Part shall meet the standards set forth in this Section.

Standard 1: Induction Program Leadership

The induction program has an administrative structure with specified leaders who plan, implement, evaluate and refine the program through data analysis, program evaluation and stakeholder communication linked to relevant standards.

Criterion 1.1: Program leadership is selected and the leaders' role is clearly defined to include being responsible for program planning, operation, oversight and use of data.

Criterion 1.2: Program leadership, program partners and all stakeholders have the time, fiscal resources and authority to implement and support the program.

Criterion 1.3: Program leadership, program partners and all stakeholders create a culture of commitment to beginning teacher induction and improving student achievement.

Criterion 1.4: Program leadership engages in initial and ongoing professional development to understand, design and implement high-quality induction and mentoring.

Standard 2: Program Goals and Design

Local program design is focused on beginning teacher development, support and retention and improved student learning. The goals are guided by current induction research, effective practices, standards contained in this Section, the district and school improvement plans and local concerns and context.

Criterion 2.1: Program design includes learning outcomes for beginning teacher participants that recognize a continuum of teacher development and a focus on

student learning with clearly defined participant expectations for program completion.

Criterion 2.2: Program design provides for effective communication among program leadership, mentors, beginning teachers and site administrators and is consistently integrated into district and school improvement goals and ongoing professional development initiatives.

Criterion 2.3: Program design includes high-quality mentor selection, training, assessment and evaluation, and ongoing support in a mentor learning community.

Criterion 2.4: Program design defines essential activities, including beginning teacher formative assessment, written documentation of beginning teacher and mentor work, analysis of beginning teacher instruction and student learning, and professional development for all stakeholders.

Criterion 2.5: Program goals and outcomes for teacher development, retention and support and student learning are reviewed and revised as necessary by designated program leaders and stakeholders based on the analysis of multiple sources of program evaluation data.

Standard 3: Resources

Program leadership allocates and monitors sufficient resources to meet all goals and deliver program components to all participants.

Criterion 3.1: Program leadership, program partners and all stakeholders allocate adequate resources to ensure an appropriate distribution of funds to support components defined in the program design and in alignment with the district's improvement plan.

Criterion 3.2: Program leadership, program partners and all stakeholders access and coordinate existing professional development resources to effectively align and coordinate those resources with the induction program.

Criterion 3.3: Program leadership, program partners and all stakeholders allocate sufficient, sanctioned, protected time for mentoring to foster high-quality mentoring for beginning teachers.

Criterion 3.4: Formative program leadership, program partners and all stakeholders monitor resource allocations on a regular basis in order to make necessary adjustments as needed during the year.

Criterion 3.5: Summative program leadership, program partners and all stakeholders support the development of fiscal reports to document allocations of resources as necessary for accountability and to promote ongoing program improvement.

Standard 4: Site Administrators Roles and Responsibilities

Site administrators lead efforts to create a positive climate for the delivery of all essential program components. Site administrators and program leadership collaborate to ensure that they are well-prepared to assume their responsibilities for supporting beginning teachers in the induction program.

Criterion 4.1: Program leadership, program partners and all stakeholders collaborate to design effective professional development for site administrators and promote their full involvement in program operations to maximize ongoing program improvement.

Criterion 4.2: Program leadership, program partners and all stakeholders collaborate with site administrators to ensure positive working environments for beginning teachers.

Criterion 4.3: Program leadership, program partners and all stakeholders collaborate with site administrators to foster the development of collaborative learning communities to promote a program of support for all staff.

Criterion 4.4: Program leadership, program partners and all stakeholders support site administrators to provide ongoing high-quality communications regarding induction program design and implementation.

Criterion 4.5: Program leadership, program partners and all stakeholders engage with site administrators to ensure positive mentoring experiences and to uphold the relationship between mentor and beginning teacher as confidential.

Criterion 4.6: Program leadership, program partners and all stakeholders collaborate with the site administrator to align their work in support of beginning teachers with the standards for administrators.

Standard 5: Mentor Selection and Assignment

Mentors are recruited, selected and assigned using a comprehensive strategy that includes a clearly articulated, open process and specific criteria that are developed by and communicated to all stakeholder groups.

Criterion 5.1: Program leadership, program partners and all stakeholders are guided by clear rigorous selection criteria and processes to ensure that beginning teachers will receive high-quality mentoring throughout their participation in the induction program.

Criterion 5.2: Program leadership, program partners and all stakeholders ensure that the matching of beginning teachers and mentors is based on multiple relevant factors to establish effective pairing of mentors with beginning teachers.

Criterion 5.3: Program leadership, program partners and all stakeholders define and implement a process to address changes or make necessary adjustments in mentor and beginning teacher matches.

Standard 6: Mentor Professional Development

Mentor professional development provides a formal orientation and foundational mentor training before they begin their work with beginning teachers and should continue over the course of the mentor's work with beginning teachers. Mentors have time, supported by the program, to engage in this mentor learning community and are consistently supported in their efforts to assist beginning teachers in their development, with a focus on student learning.

Criterion 6.1: Program leadership, program partners and all stakeholders collaborate to provide foundational training for mentors to develop basic knowledge, skills and attitudes for high-quality mentoring.

Criterion 6.2: Program leadership, program partners and all stakeholders facilitate the development of a professional learning community for mentors to regularly reflect on, improve and refine their practice.

Criterion 6.3: Program leadership, program partners and all stakeholders collaborate to provide ongoing professional development for mentors to advance induction practice and promote beginning teacher development.

Standard 7: Development of Beginning Teacher Practice

Beginning teachers have regularly scheduled time, provided during the two-year program, to participate in ongoing professional development that is focused on their professional growth to support student learning.

Criterion 7.1: Program leadership, program partners and all stakeholders collaborate to provide beginning teacher orientation to clarify district school and induction programs and ensure high levels of beginning teacher participation.

Criterion 7.2: Program leadership, program partners and all stakeholders collaborate to design and implement formal support of networking opportunities for beginning teachers to ensure their participation in collaborative cultures focused on professional learning and ongoing support.

Criterion 7.3: Program leadership, program partners and all stakeholders implement ongoing professional development to ensure high-quality beginning teacher development.

Criterion 7.4: Program leadership, program partners and all stakeholders provide and support sanctioned time for induction and mentoring processes to ensure sufficient support for high-quality professional development experiences for beginning teachers.

Standard 8: Formative Assessment

Beginning teachers and mentors participate in formative assessment experiences, collaboratively collecting and analyzing measures of teaching progress, including appropriate documentation, mentor observations and student work, to improve classroom practices and increase student achievement. The formative assessment is an ongoing, non-evaluative, evidence-based measurement of growth over time, involving a variety of sources of data, that is used to inform ongoing professional development.

Criterion 8.1: Program leadership, program partners and all stakeholders ensure that mentors use formative assessment tools collaboratively with beginning teachers for initial self-assessments and development of individual learning plans to guide weekly visits and determine the scope, focus and content of professional development activities.

Criterion 8.2: Program leadership, program partners and all stakeholders ensure that mentors utilize a wide range of formative assessment tools in order to establish multiple measures of teaching from which to promote further professional development.

Criterion 8.3: Program leadership, program partners and all stakeholders establish and maintain procedures for documenting confidential use of formative assessment to gather evidence of reflective processes that impact student learning and practice.

Criterion 8.4: Program leadership, program partners and all stakeholders develop and follow policy regarding use of formative assessment and documentation to protect their use for program purposes only and not for evaluation of beginning teachers or for employment decisions.

Standard 9: Program Evaluation

Programs operate a comprehensive, ongoing system of program development and evaluation that involves all program participants and other stakeholders.

Criterion 9.1: Program leadership, program partners and all stakeholders develop and implement an ongoing process for program evaluation based on multiple internal and external sources with formal and informal measures to ensure ongoing program improvement.

Criterion 9.2: Program leadership, program partners and all stakeholders analyze multiple sources of data and share results with stakeholders in a systematic way.

Criterion 9.3: Program leadership, program partners and all stakeholders implement a process for mentor accountability in a supportive environment through a defined process of communication and documentation.

Criterion 9.4: Program leadership, program partners and all stakeholders participate in external reviews and statewide data collection designed to examine and improve program quality and effectiveness and to inform policymakers and stakeholders.

(Source: Added at 36 Ill. Reg. 16098, effective October 25, 2012)

Section 65.APPENDIX B Illinois Induction Program Continuum

a) The Illinois Induction Program Continuum describes four levels of program implementation for each criterion of the standards set forth in Appendix A of this Part. The levels outline the progress of improvement new induction programs are expected to make and provide the basis for the development, support and evaluation of induction programs. The levels of program implementation are as follows.

1) Establishing Programs are learning about the induction program standards and establishing program components. Limited involvement of all stakeholders occurs at this level.

2) Applying Programs have some experience and are applying knowledge of induction program standards and moving toward full implementation of program components. The program is shared with additional stakeholders.

3) Integrating Programs are more experienced with induction program standards and accomplished in implementation of program components. They are working collaboratively with an expanded group of stakeholders on a regular basis.

4) Systematizing Programs collaborate regularly with all stakeholders to integrate induction program standards and program components throughout the district or consortia. The program is beyond compliance and embodies innovative practices by contributing to the broader educational community.

b) The Illinois Induction Program Continuum assists with continuous program improvement through:

1) the provision of a common language to describe and discuss program development and ongoing improvement;

2) assistance to program leadership and partners to collaboratively design, implement and assess the quality and effectiveness of their programs;

3) assistance to program leadership in setting clear, evidence-based goals and planning for program development and improvement; and

4) identification of program needs for resources and supports.

(Source: Added at 36 Ill. Reg. 16098, effective October 25, 2012)

POLLUTION CONTROL BOARD

NOTICE OF PUBLIC INFORMATION ON PROPOSED AMENDMENT

NOTICE OF PUBLIC HEARING AND COMMENT PERIOD
PURSUANT TO 415 ILCS 5/9.1(e) and 1 ILCS 100/5-70(b)

Notice of Public Comment Period and Public Hearing for
State Implementation Plan (SIP) Submittals for Ozone

The Pollution Control Board (Board) is accepting public comments and will conduct a public hearing on a prospective ozone SIP submittal to the U.S. Environmental Protection Agency (USEPA). The Board will accept written comments on the proposed rule that will form the basis for the SIP proposal until 45 days after the date of this issue of the *Illinois Register*, and a public hearing will occur in Springfield and Chicago on December 20, 2012. The Board presently anticipates adoption of an new exemption from the definition of volatile organic material (VOM) on January 3, 2013, or within a short time after that date.

Section 9.1(e) of the Environmental Protection Act (Act) [415 ILCS 5/9.1(e)] requires the Board to "exempt from regulation under the SIP for ozone the [VOMs] which have been determined by [USEPA] to be exempt from regulation under [SIPs] for ozone due to negligible photochemical reactivity." The USEPA listing of these compounds is codified at 40 CFR 51.100(s). The Board is required to adopt those exemptions using the "identical in substance" rulemaking procedure of Section 7.2 of the Act [415 ILCS 5/7.2]. The Illinois listing of these compounds is codified at 35 Ill. Adm. Code 211.7150.

On October 18, 2012, the Board adopted a proposal for public comment in docket R13-1 to initiate adoption of the latest USEPA exemption of a compound from the definition of VOM. The USEPA action was the June 22, 2012 (77 Fed. Reg. 37610) exemption of *trans*-1,3,3,3-tetra-fluoropropene (HFO-1234ze) (CAS no. 29118-24-9) from regulation under state ozone SIPs. A Notice of Proposed Amendment appears in today's issue of the *Illinois Register* relative to the docket R13-1 proposal.

The Board expects that the Illinois Environmental Protection Agency (Agency) will submit the present amendments as a revision to the Illinois SIP for ozone pursuant to section 110 of the federal Clean Air Act (42 USC 7410(a) (2010) and the implementing USEPA regulations. *See* 40 CFR 51.102 and appendix V (2010).

Section 9.1(a) of the Act [415 ILCS 5/9.1(a)] requires the Board to "provide for notice, a hearing if required by [USEPA], and public comment before adopted rules are filed with the Secretary of State." As USEPA will require the State to have conducted a hearing on the exemption from the definition of VOM involved in this proceeding pursuant to 42 USC 4210(a) and 40 CFR 51.102,

POLLUTION CONTROL BOARD

NOTICE OF PUBLIC INFORMATION ON PROPOSED AMENDMENT

the Board has scheduled a public hearing in this matter to occur by teleconference at two locations, as follows:

10:00 a.m., December 20, 2012

James R. Thompson Center
Illinois Pollution Control Board Hearing Room
100 West Randolph Street, Room 11-512
Chicago
and

Sangamo Building
Illinois Pollution Control Board Hearing Room
1021 North Grand Avenue
Springfield

The Board invites public comment on the proposed amendments. The Board will receive public comments until at least 45 days after a notice of these proposed amendments appears in the *Illinois Register*. Anyone may file a public comment with the Board at:

John T. Therriault, Assistant Clerk of the Board
Office of the Clerk
Pollution Control Board
James R. Thompson Center
100 W. Randolph Street, Suite 11-500
Chicago, Illinois 60601

All comments relating to this rulemaking should clearly refer to docket number R13-1.

The record in this docket will include all documents pertaining to this proceeding. All documents in the record are publicly available for inspection and copying as provided in 2 Ill. Adm. Code 2175 (2010) by contacting the Office of the Clerk. The documents are also freely available online at the Board's webpage: www.ipcb.state.il.us.

The record will not include a copy of the following documents, which are all otherwise publicly available:

- The June 22, 2012 *Federal Register* notice that prompted this action (referenced in the Board's October 18, 2012 opinion and order proposing amendments);

POLLUTION CONTROL BOARD

NOTICE OF PUBLIC INFORMATION ON PROPOSED AMENDMENT

- Federal statutes and regulations referenced in the Board's October 18, 2012 opinion and order; and
- Illinois statutes and regulations referenced in the Board's October 18, 2012 opinion and order.

The Board requests that interested persons direct questions to the following person:

Michael J. McCambridge, Staff Attorney
Pollution Control Board
100 West Randolph Street, Room 11-500
Chicago, Illinois 60601
312-814-6924
mccambm@ipcb.state.il.us

The Board requests that interested persons request documents from or submit documents to the following person:

John T. Therriault, Assistant Clerk of the Board
Pollution Control Board
100 West Randolph Street, Room 11-500
Chicago, Illinois 60601
312-814-3629
therriaj@ipcb.state.il.us

After the hearing and conclusion of the public comment period, the Board will promptly issue an opinion and order adopting final rule amendments. The Board presently anticipates adoption of the amendments on January 3, 2013. The Board will then file the amendments with the Office of the Secretary of State, and a Notice of Adopted Amendments will appear in the *Illinois Register*. Any Agency submission of the associated SIP revision to USEPA will follow that Notice.

JOINT COMMITTEE ON ADMINISTRATIVE RULES
NOVEMBER AGENDA

SCHEDULED MEETING:

MICHAEL A. BILANDIC BUILDING
ROOM 600C
CHICAGO, ILLINOIS
NOVEMBER 13, 2012
11:00 A.M.

NOTICES: The scheduled date and time for the JCAR meeting are subject to change. Due to *Illinois Register* submittal deadlines, the agenda below may be incomplete. Other items not contained in this published agenda may be considered by the Committee at the meeting, and items from the list may be postponed to future meetings.

RULEMAKINGS CURRENTLY BEFORE JCAR

NOTICE: It is the policy of the Committee to allow only representatives of State agencies to testify orally on any rule under consideration at Committee hearings. If members of the public wish to express their views with respect to a proposed rule, they should submit written comments to the Office of the Joint Committee on Administrative Rules at the following address:

Joint Committee on Administrative Rules
700 Stratton Office Building
Springfield, Illinois 62706
Email: jcar@ilga.gov
Phone: 217/785-2254

PROPOSED RULEMAKINGS

Capitol Development Board

1. Illinois Energy Conservation Code (71 Ill. Adm. Code 600)
   -First Notice Published: 36 Ill. Reg. 6874 – 5/4/12
   -Expiration of Second Notice: 12/16/12

Drycleaner Environmental Response Trust Fund Council

2. General Program (35 Ill. Adm. Code 1500)
   -First Notice Published: 36 Ill. Reg. 6875 – 5/11/12

JOINT COMMITTEE ON ADMINISTRATIVE RULES
NOVEMBER AGENDA

-Expiration of Second Notice: 11/29/12

Elections

3. Personnel (26 Ill. Adm. Code 212)
-First Notice Published: 36 Ill. Reg. 12999 – 8/17/12
-Expiration of Second Notice: 12/6/12

Gaming Board

4. Video Gaming (General) (11 Ill. Adm. Code 1800)
-First Notice Published: 36 Ill. Reg. 12699 – 8/10/12
-Expiration of Second Notice: 11/16/12

5. Video Gaming (General) (11 Ill. Adm. Code 1800)
-First Notice Published: 36 Ill. Reg. 12949 – 8/17/12
-Expiration of Second Notice: 11/16/12

Healthcare and Family Services

6. Medical Assistance Programs (89 Ill. Adm. Code 120)
-First Notice Published: 35 Ill. Reg. 19337 – 12/2/11
-Expiration of Second Notice: 12/1/12

7. Veterans' Health Insurance Program (89 Ill. Adm. Code 128)
-First Notice Published: 35 Ill. Reg. 19352 – 12/2/11
-Expiration of Second Notice: 12/1/12

8. Long Term Care Reimbursement Changes (89 Ill. Adm. Code 153)
-First Notice Published: 36 Ill. Reg. 8128 – 6/1/12
-Expiration of Second Notice: 12/5/12

Higher Education

9. Grow Your Own Teacher Grants (23 Ill. Adm. Code 1085)
-First Notice Published: 36 Ill. Reg. 12666 – 8/10/12
-Expiration of Second Notice: 11/23/12

Human Services

JOINT COMMITTEE ON ADMINISTRATIVE RULES
NOVEMBER AGENDA

10. General Administrative Provisions (89 Ill. Adm. Code 10)
-First Notice Published: 36 Ill. Reg. 10582 – 7/20/12
-Expiration of Second Notice: 12/1/12

11. General Administrative Provisions (89 Ill. Adm. Code 10)
-First Notice Published: 36 Ill. Reg. 9892 – 7/13/12
-Expiration of Second Notice: 12/1/12

12. General Assistance (Repealer) (89 Ill. Adm. Code 114)
-First Notice Published: 36 Ill. Reg. 9894 – 7/13/12
-Expiration of Second Notice: 12/1/12

13. Related Program Provisions (89 Ill. Adm. Code 117)
-First Notice Published: 36 Ill. Reg. 9898 – 7/13/12
-Expiration of Second Notice: 12/1/12

14. Collections and Recoveries (89 Ill. Adm. Code 165)
-First Notice Published: 36 Ill. Reg. 9900 – 7/13/12
-Expiration of Second Notice: 12/1/12

Illinois Emergency Management Agency

15. Registration and Operator Requirements for Radiation Installations (32 Ill. Adm. Code 320)
-First Notice Published: 36 Ill. Reg. 13354 – 8/24/12
-Expiration of Second Notice: 11/24/12

16. Fees for Radioactive Material Licensees (32 Ill. Adm. Code 331)
-First Notice Published: 36 Ill. Reg. 13364 – 8/24/12
-Expiration of Second Notice: 11/24/12

17. Quality Standards and Certification Requirements for Facilities Performing Mammography (32 Ill. Adm. Code 370)
-First Notice Published: 36 Ill. Reg. 13369 – 8/24/12
-Expiration of Second Notice: 11/24/12

Insurance

18. Insurance Data Reporting Requirements (50 Ill. Adm. Code 4203)
-First Notice Published: 36 Ill. Reg. 1100 – 2/3/12

JOINT COMMITTEE ON ADMINISTRATIVE RULES
NOVEMBER AGENDA

-Expiration of Second Notice: 11/22/12

19. Internal Security Standard and Fidelity Bonds (50 Ill. Adm. Code 904)
-First Notice Published: 36 Ill. Reg. 9055 – 6/22/12
-Expiration of Second Notice: 12/5/12

20. Accident and Health Expense Reporting (50 Ill. Adm. Code 2043)
-First Notice Published: 36 Ill. Reg. 12199 – 8/3/12
-Expiration of Second Notice: 12/5/12

Investment

21. State (of Illinois) Employees' Deferred Compensation Plan (80 Ill. Adm. Code 2700)
-First Notice Published: 36 Ill. Reg. 13539 – 8/31/12
-Expiration of Second Notice: 12/8/12

Pollution Control Board

22. Introduction (35 Ill. Adm. Code 301)
-First Notice Published: 36 Ill. Reg. 5713 – 4/13/12
-Expiration of Second Notice: 12/7/12

23. Water Quality Standards (35 Ill. Adm. Code 302)
-First Notice Published: 36 Ill. Reg. 5721 – 4/13/12
-Expiration of Second Notice: 12/7/12

24. Water Use Designations and Site-Specific Water Quality Standards (35 Ill. Adm. Code 303)
-First Notice Published: 36 Ill. Reg. 5756 – 4/13/12
-Expiration of Second Notice: 12/7/12

Public Health

25. Hospital Licensing Requirements (77 Ill. Adm. Code 250)
-First Notice Published: 36 Ill. Reg. 9 – 1/6/12
-Expiration of Second Notice: 11/29/12

26. Emergency Medical Services and Trauma Center Code (77 Ill. Adm. Code 515)
-First Notice Published: 36 Ill. Reg. 11937 – 7/27/12
-Expiration of Second Notice: 11/17/12

JOINT COMMITTEE ON ADMINISTRATIVE RULES
NOVEMBER AGENDA

27. Perinatal HIV Prevention Code (77 Ill. Adm. Code 699)
-First Notice Published: 36 Ill. Reg. 2060– 2/10/12
-Expiration of Second Notice: 12/9/12

Racing Board

28. Medication (11 Ill. Adm. Code 603)
-First Notice Published: 36 Ill. Reg. 12988 – 8/17/12
-Expiration of Second Notice: 11/24/12

Secretary of State

29. Collection of Fees (92 Ill. Adm. Code 1003)
-First Notice Published: 36 Ill. Reg. 13519 – 8/31/12
-Expiration of Second Notice: 12/5/12

30. Certificates of Title, Registration of Vehicles (92 Ill. Adm. Code 1010)
-First Notice Published: 36 Ill. Reg. 13525 – 8/31/12
-Expiration of Second Notice: 12/5/12

Teachers' Retirement System

31. The Administration and Operation of the Teachers' Retirement System (80 Ill. Adm. Code 1650)
-First Notice Published: 36 Ill. Reg. 12248 – 8/3/12
-Expiration of Second Notice: 11/25/12

Workers' Compensation Commission

32. Arbitration (50 Ill. Adm. Code 7030)
-First Notice Published: 36 Ill. Reg. 13005 – 8/17/12
-Expiration of Second Notice: 11/17/12

33. Miscellaneous (50 Ill. Adm. Code 7110)
-First Notice Published: 36 Ill. Reg. 13012 – 8/17/12
-Expiration of Second Notice: 11/17/12

34. Commission Review Board Procedures (50 Ill. Adm. Code 7500)
-First Notice Published: 36 Ill. Reg. 13029 – 8/17/12

JOINT COMMITTEE ON ADMINISTRATIVE RULES
NOVEMBER AGENDA

-Expiration of Second Notice: 11/17/12

PEREMPTORY RULEMAKING

Human Services

35. Supplemental Nutrition Assistance Program (SNAP) (89 Ill. Adm. Code 121)
-Notice Published: 36 Ill. Reg. 15148 – 10/12/12

AGENCY RESPONSES

Commerce Commission

36. Obligations of Retail Electric Suppliers (83 Ill. Adm. Code 412; 35 Ill. Reg. 12996)

Veterans' Affairs

37. Payment of Maintenance Charges and Income Management at the Illinois Veterans Homes (95 Ill. Adm. Code 108; 36 Ill. Reg. 5450)

JOINT COMMITTEE ON ADMINISTRATIVE RULES
ILLINOIS GENERAL ASSEMBLY

SECOND NOTICES RECEIVED

The following second notices were received by the Joint Committee on Administrative Rules during the period of October 23, 2012 through October 29, 2012 and have been scheduled for review by the Committee at its November 13, 2012 or December 11, 2012 meetings. Other items not contained in this published list may also be considered. Members of the public wishing to express their views with respect to a rulemaking should submit written comments to the Committee at the following address: Joint Committee on Administrative Rules, 700 Stratton Bldg., Springfield IL 62706.

Second Notice Expires	Agency and Rule	Start Of First Notice	JCAR Meeting
12/6/12	State Board of Elections, Personnel (26 Ill. Adm. Code 212)	8/17/12 36 Ill. Reg. 12999	11/13/12
12/7/12	Pollution Control Board, Introduction (35 Ill. Adm. Code 301)	4/13/12 36 Ill. Reg. 5713	11/13/12
12/7/12	Pollution Control Board, Water Quality Standards (35 Ill. Adm. Code 302)	4/13/12 36 Ill. Reg. 5721	11/13/12
12/712	Pollution Control Board, Water Use Designations and Site-Specific Water Quality Standards (35 Ill. Adm. Code 303)	4/13/12 36 Ill. Reg. 5756	11/13/12
12/8/12	Illinois State Board of Investment, State (of Illinois) Employees' Deferred Compensation Plan (80 Ill. Adm. Code 2700)	8/31/12 36 Ill. Reg. 13539	11/13/12
12/12/12	Illinois Racing Board, Concessionaire Rules (11 Ill. Adm. Code 402)	9/7/12 36 Ill. Reg. 13812	12/11/12

ILLINOIS ADMINISTRATIVE CODE
Issue Index - With Effective Dates

Rules acted upon in Volume 36, Issue 45 are listed in the Issues Index by Title number, Part number, Volume and Issue. Inquiries about the Issue Index may be directed to the Administrative Code Division at (217) 782-7017/18.

PROPOSED RULES

68 - 1455 15525
35 - 211 15575
35 - 611 15599
77 - 690 15918
77 - 905 15940

ADOPTED RULES

14 - 520 10/26/2012 16067
89 - 50 10/29/2012 16085
23 - 65 10/25/2012 16098

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