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TITLE 327 WATER POLLUTION CONTROL BOARD

SECOND NOTICE OF COMMENT PERIOD
#04-106(WPCB)

DEVELOPMENT OF AMENDMENTS TO RULES CONCERNING TRANSIENT NONCOMMUNITY PUBLIC WATER SYSTEMS

PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for amendments to 327 IAC 8-1, 327 IAC 8-3, 327 IAC 8-3.1, 327 IAC 8-3.2, 327 IAC 8-3.3, 327 IAC 8-3.4, 327 IAC 8-3.5, 327 IAC 8-4, and 327 IAC 8-6 concerning simplification of the construction permitting requirements for small systems, which are designed to reduce the regulatory burden on those same small systems. The public water systems primarily affected by the proposed amendments are transient noncommunity public water systems that use wells and serve two hundred fifty (250) people or less. The amendments also update standards that are incorporated by reference in these rules. By this notice, IDEM is soliciting public comment on the draft rule language. IDEM seeks comment on the affected citations listed and any other provisions of Title 327 that may be affected by this rulemaking.

HISTORY

First Notice of Comment Period: May 1, 2004, Indiana Register (27 IR 2591).

CITATIONS AFFECTED: 327 IAC 8-1; 327 IAC 8-3; 327 IAC 8-3.1; 327 IAC 8-3.2; 327 IAC 8-3.3; 327 IAC 8-3.4; 327 IAC 8-3.5; 327 IAC 8-4; 327 IAC 8-6.

AUTHORITY: IC 13-14-8; IC 13-18-3; IC 13-18-16.

SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING

Basic Purpose and Background

The main purpose of the amendments is to simplify the construction permitting requirements for small systems, which will also reduce the regulatory burden on those same small systems. The public water systems primarily affected by the proposed amendment are transient noncommunity public water systems that use wells and serve two hundred fifty (250) people or less. Approximately two thousand five hundred (2,500) systems fall into the category. Transient noncommunity public water systems are facilities with their own water supply, usually a well, and regularly serve twenty-five (25) or more people. Examples of transient noncommunity public water systems include churches, restaurants, gas stations, campgrounds, and parks. The amendments provide regulatory relief by eliminating the requirements for a professional engineer (PE) to prepare plans and specifications and to sign and stamp permit applications for these systems as is currently required. The amendments will allow licenced professional geologists and licenced well drillers to also prepare and submit plans. The amendments will change the well siting requirements for transient noncommunity public water systems. The amendments will eliminate the need for affected systems to obtain a permit to install such items as a water softener. The amendment will also provide for the development of alternative construction permitting approaches for transient noncommunity public water systems. Standards that have been incorporated by reference into the permitting rules are also being updated.

IC 13-14-9-4 Identification of Restrictions and Requirements Not Imposed Under Federal Law

This rule is authorized under IC 13-18-16, and the amendments being made are easing the requirements on small transient public water systems using wells.

Potential Fiscal Impact

Since these amendments are designed to simplify the construction permitting process, it is believed that these amendments will result in a neutral and possibly negative fiscal impact while providing some regulatory relief and still ensuring a safe and adequate supply of drinking water.

Public Participation and Workgroup Information

An external workgroup has been established to discuss issues involved in this rulemaking. The workgroup is made up of IDEM

staff and a cross section of stakeholders. Stakeholder meetings were held on August 19, 2004, in LaGrange; August 20, 2004, in Plymouth; and August 26, 2004, in Indianapolis. The stakeholder comments from these meetings were used to create the draft amendments. Information was sent to the stakeholders in November 2004 for review and comment. If you wish to provide comments on the rulemaking, attend meetings, or have suggestions related to the workgroup process, please contact Mary Hollingsworth, Permits and Capacity Development Section, Office of Water Quality at (317) 308-3331 or (800) 451-6027 (in Indiana). Please provide your name, phone number, and e-mail address, if applicable, where you can be contacted. The public is also encouraged to submit comments and questions to members of the workgroup who represent their particular interests in the rulemaking.

SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD

IDEM requested public comment from May 1, 2004, through May 30, 2004, on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language. IDEM received no comments in response to the first notice of public comment period.

REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Mailed comments should be addressed to:

#04-106(WPCB) Amendment to Construction Rule
Lawrence Wu
Rules Section Chief
Office of Water Quality
Indiana Department of Environmental Management
P.O. Box 6015
Indianapolis, Indiana, 46206-6015.

Hand delivered comments will be accepted by the receptionist on duty at the 12th floor reception desk, Office of Water Quality, 100 North Senate Avenue, Indianapolis, Indiana.

Comments may be submitted by facsimile at the IDEM fax number: (317) 232-8406, Monday through Friday, between 8:15 and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Office of Water Quality Rules Section at (317) 233-8903.

COMMENT PERIOD DEADLINE

Comments must be postmarked, faxed, or hand delivered by January 30, 2005.

Additional information regarding this action may be obtained from Kiran Verma, Rules Section, Office of Water Quality, (317) 234-0986 or (800) 451-6027 (in Indiana).

DRAFT RULE

SECTION 1. 327 IAC 8-1-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-1-1 Community water system; fluoridation; phosphate additives

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-13-5-1; IC 13-18-2

Sec. 1. Each community water system that adds a fluoride or phosphate compound shall comply with the following:

(1) Fluoride compounds may be added to such water supplies after receiving a construction permit from the commissioner providing the total content of fluoride ion (F^-) after such addition does not exceed two (2.0) milligrams per liter (mg/l) unless the public water system is a participant in an Indiana state department of health approved school fluoride adjustment program for which the concentration of fluoride in a school water supply shall not exceed five and one-half (5.5) mg/l.

(2) Phosphate additives may be added to the water for treatment of iron, manganese, scale, and corrosion problems after receiving a construction permit from the commissioner. Such direct additives shall be in conformance with section 2 of this rule. Total phosphate concentration shall not exceed ten (10) mg/l measured as PO_4. Product may be provided in liquid or dry form. Containers in which the agents are packaged shall be labeled indicating product information and general instructions for use. At a minimum, the label must display the name and application of product, percentage phosphate concentration as PO_4, and certification of American National Standards Institute (ANSI)/National Sanitation Foundation (NSF) International Standard 60, NSF Listings, Drinking Water ~~Additives~~ **Treatment Chemicals**-Health Effects. In addition, if it is provided in liquid form, the label shall specify pH and specific gravity. The containers must also be marked identifying manufacturing batch number. All liquid products must

be treated for bacteria control at the time of manufacture with a potably approved bacteria control agent.
(Water Pollution Control Board; 327 IAC 8-1-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 705; filed Dec 28, 1990, 5:10 p.m.: 14 IR 1003; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2491; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 2. 327 IAC 8-1-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-1-2 Drinking water direct additives and indirect additives; certification requirements
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 2. (a) All public water systems shall comply with this section before the conclusion of ninety (90) days from the effective date of this rule.

(b) All direct additives in public water systems shall be certified for conformance to American National Standards Institute (ANSI)/National Sanitation Foundation (NSF) International Standard 60, NSF Listings, Drinking Water ~~Additives~~ **Treatment Chemicals**-Health Effects. All public water systems must compile and maintain on file for inspection by the commissioner a list of all direct additives used that come into contact with the drinking water. This list must contain the name, the description, the manufacturer of the product, and whether the direct additive is certified under this section. The list must be maintained as long as the direct additives are used by the public water ~~supply.~~ **system.**

(c) The following new or modified indirect additives in public water systems shall be certified for conformance to American National Standards Institute (ANSI)/National Sanitation Foundation (NSF) International Standard 61, ~~Classified or Recognized~~ Drinking Water System ~~Components, Component Materials and Treatment Additives Directory,~~ **Components-Health Effects,** except Section 9, Mechanical Plumbing Product:
(1) All indirect additives found in finished water storage facilities, including lubricants, tank coatings, paints, and epoxies.
(2) All indirect additives between all entry points ~~of~~ **to** the distribution system, and ~~all customer service connection meters.~~ **the premises of the consumer.**
(3) All filter and membrane media.
(4) All indirect additives ~~which~~ **that** are classified in a category of indirect additives for which American National Standards Institute (ANSI)/National Sanitation Foundation (NSF) International Standard 61 is available.

(d) All public water systems must demonstrate certification of direct additives and indirect additives required by subsections (b) and (c) when inspected by the commissioner.

(e) Certification that a direct additive or an indirect additive meets the standards adopted in or ~~pursuant to~~ **under** this rule shall be recognized as being listed with such certification in one (1) of the following publications:
(1) "NSF Listings, Drinking Water ~~Additives~~ **Treatment Chemicals**-Health Effects".
(2) ~~"Classified or Recognized~~ "Drinking Water System ~~Components, Component Materials, and Treatment Additives Directory".~~ **Components-Health Effects".**

(f) The commissioner may approve the use of a direct or indirect additive in a public water system only after the applicant has demonstrated that the direct or indirect additive is in compliance with **one (1) or more of** the following conditions:
(1) The direct or indirect additive has been approved and is listed by one (1) of the publications specified by subsection (e).
(2) The direct or indirect additive has been approved by an organization having a third party certification program for direct or indirect additives that has been approved by the American National Standards Institute.

(g) The commissioner shall maintain a copy of the following:
(1) "NSF Listings, Drinking Water ~~Additives~~ **Treatment Chemicals**-Health Effects".
(2) ~~"Classified or Recognized~~ "Drinking Water System ~~Components, Component Materials, and Treatment Additives Directory".~~ **Components-Health Effects".**

(h) A public water system shall not willfully introduce, permit, or suffer the introduction of a direct additive or indirect additive into the drinking water that does not meet the requirements of this rule. *(Water Pollution Control Board; 327 IAC 8-1-2; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2492; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 3. 327 IAC 8-1-3 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-1-3 Definitions
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 3. In addition to the definitions ~~contained~~ in IC 13-11-2, the following definitions apply throughout this rule:

(1) "Direct additives" means additives that are used in public water systems for the treatment of raw water. Direct additives are also used to protect drinking water during storage and distribution. Examples of direct additives include the following:
(A) Agents used for coagulation and flocculation.
(B) Corrosion and scale control.
(C) Softening.
(D) Sequestering.
(E) Precipitation.
(F) pH adjustment.
(G) Disinfection and oxidation.
(H) Miscellaneous treatment applications.
(I) Miscellaneous water supply products.

(2) "Entry point ~~of~~ **to** the distribution system" means one (1) of the following points:
(A) In public water systems ~~which~~ **that** utilize water treatment facilities, the point at which the drinking water has left the treatment facilities and has entered the **water** distribution system.
(B) In public water systems ~~which~~ **that** do not utilize water treatment facilities, the point at which the drinking water has left the supply facilities and has entered the **water** distribution system.

(3) "Indirect additives" means additives that are materials or equipment that come in contact with drinking water or come in contact with drinking water direct additives. Examples of indirect additives include the following:
(A) Pipes.
(B) Valves and related products.
(C) Barrier materials.
(D) Joining and sealing materials.
(E) Protective materials and related products.
(F) Mechanical devices used in treatment, transmission, and distribution systems.

(4) "Operator" means the person in direct or responsible charge and supervising the operation of a: ~~wastewater or~~
(A) water treatment plant;
(B) wastewater treatment plant; or ~~a~~
(C) water distribution system.

(5) "Public water system" means a ~~public water supply~~ **system** for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves at least twenty-five (25) individuals. ~~daily at least sixty (60) days out of the year.~~ The term includes any collection, treatment, storage, and distribution facilities under control of the operator of ~~such~~ **the** system and used primarily in connection with ~~such~~ **the** system, and any collection or pretreatment storage facilities not under such control that are used primarily in connection with ~~such~~ **the** system.

(Water Pollution Control Board; 327 IAC 8-1-3; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2492; filed Mar 6, 2000, 7:56 a.m.: 23 IR 1622; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 4. 327 IAC 8-1-4 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-1-4 Incorporation by reference
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-14-8

Sec. 4. The following materials, including titles and the names and addresses of where they may be located for inspection and copying, are incorporated by reference into this rule:

(1) ~~"NSF Listings,~~ "Drinking Water ~~Additives~~ **Treatment Chemicals**-Health Effects", ~~November 13, 1997,~~ **October 1, 2003,** National Sanitation Foundation (NSF) International, 3475 Plymouth Road, Ann Arbor, Michigan, 48113-0140 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North

Senate Avenue, Room 1255, Indianapolis, Indiana 46206.

(2) ~~"Classified or Recognized~~ "Drinking Water Systems ~~Components, Component Materials and Treatment Additives Directory", August, 1997, Underwriters Laboratory, Inc., Engineering Services, 416C, 333 Pfingsten Road, Northbrook, Illinois,~~ **Components-Health Effects", October 22, 2003, National Sanitation Foundation (NSF) International, 3475 Plymouth Road, Ann Arbor, Michigan 48113-0140** or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.

(Water Pollution Control Board; 327 IAC 8-1-4; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2493; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 5. 327 IAC 8-3-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3-1 Definitions

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-3-12; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 25-17.6; IC 25-31; IC 25-39-3

Sec. 1. In addition to the definitions ~~contained~~ in IC 13-11-2 and ~~327 IAC 1,~~ **327 IAC 8-1,** the following definitions apply throughout this rule:

(1) "Connection ban" means an order imposed by the commissioner in accordance with section 4.2 of this rule.

~~(2) "Distribution system" means the piping, storage structures, pumps, and controls used to deliver water to the public.~~

~~(3)~~ **(2)** "Early warning order" means an order imposed by the commissioner in accordance with section 4.2 of this rule.

~~(4)~~ **(3)** "Experimental permit" means a construction permit issued for an installation, treatment process, or technique for which extensive experience and records of use have not been accumulated to meet the Safe Drinking Water Act requirements.

(4) "Licensed professional geologist" means a person who is licensed as a professional geologist under IC 25-17.6.

(5) "Licensed well driller" means a person who is licensed as a well driller under IC 25-39-3.

~~(5)~~ **(6)** "Normal operating pressure" means the water main pressure maintained regardless of public service load in the absence of extenuating circumstances.

~~(6) "Operator" means the person in direct or responsible charge and supervising the operation of a wastewater or water treatment plant or a water distribution system.~~

(7) "Peak operating flow rate" means the flow rate equal to **the** maximum achievable capacity of the public water system.

(8) "Professional engineer" means a person who is registered as a professional engineer by the Indiana state board of registration for professional engineers under IC 25-31.

~~(9) "Public water system" means a public water supply for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves at least twenty-five (25) individuals daily at least sixty (60) days out of the year. The term includes any collection, treatment, storage, and distribution facilities under control of the operator of such system, t and used primarily in connection with such system and any collection or pretreatment storage facilities not under such control that are used primarily in connection with such system.~~

~~(10)~~ **(9)** "Satisfactory quality" means the physical, chemical, and bacteriological quality of drinking water meeting the requirements set forth in this article.

(10) "Small transient noncommunity public water system" means a public water system that:

(A) meets the definition of a transient noncommunity public water system under 327 IAC 8-2-1;

(B) serves two hundred fifty (250) or fewer individuals per day; and

(C) does not utilize surface water or ground water under the influence of surface water as its water source.

(11) "Two (2) year average peak" means the arithmetic mean of the highest five (5) daily pumpages as reported over the previous two (2) year period on the public water system's monthly report of operations on record with the department. If the public water system is less than two (2) years old, the term means the arithmetic mean of the highest five (5) daily pumpages as reported on the public water system's monthly report of operations on record with the department.

(12) "Water main" means any pipe located between all entry points to the **water** distribution system and ~~all customer service connection meters.~~ **the premises of the consumer.**

(Water Pollution Control Board; 327 IAC 8-3-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 709; filed Oct 22, 1991, 5:00 p.m.: 15 IR 223; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2493; filed Mar 6, 2000, 7:56 a.m.: 23 IR 1626; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 6. 327 IAC 8-3-1.1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3-1.1 Proof of capacity

Authority: IC 13-13-5; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-21-3
Affected: IC 13-18-16

Sec. 1.1. (a) A new community public water ~~supply~~ system and a new nontransient noncommunity public water ~~supply~~ system that will commence operation after October 1, 1999, must fulfill the requirements of 327 IAC 8-3.6 ~~prior to~~ **before** making a submission to the commissioner for a permit to construct as described in sections 2 and 3 of this rule.

(b) The commissioner shall deny and return to the applicant a construction permit application, plans, or specifications that are submitted for review without the proof of public water ~~supply~~ system technical, financial, and managerial capacity as required by 327 IAC 8-3.6. *(Water Pollution Control Board; 327 IAC 8-3-1.1; filed Aug 10, 1999, 8:54 a.m.: 22 IR 3678; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 7. 327 IAC 8-3-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3-2 Permits for construction of public water systems; exemptions, experimental construction permits, emergency construction permits, after-the-fact construction permits
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 2. (a) No person shall cause or allow the construction, installation, or modification of any facility, equipment, or device for any public water system without having a valid construction permit issued by the commissioner, except for replacement of equipment of similar design and capacity, none of which will change adversely the plant operation, its hydraulic design or waste products, or the **water** distribution system design, operation, or capacity **or where specifically allowed in section 2.1 of this rule.**

(b) After the commissioner has granted a construction permit, no changes in the application, plans, or specifications shall be made other than changes involving the replacement of equipment of similar design and capacity, none of which will change adversely:
(1) the plant operation;
(2) its hydraulic design or waste products; or
(3) the **water** distribution system design, operation, or capacity;
without first submitting in writing to the commissioner a detailed statement of ~~such~~ **the** proposed changes and receiving an amended construction permit from the commissioner. Construction permits shall become void if the construction is not started within one (1) year from the date of issuance of the permit unless the duration of the permit has been extended by the commissioner after receiving a written request from the permittee, ~~prior to~~ **before** the expiration of the permit, requesting ~~such~~ **the** extension with no other changes to the permit, application, plans, or specifications as approved by the commissioner.

(c) The commissioner shall have the authority to specify in the permit any limits and conditions necessary to meet the issuance requirements of section 4 of this rule.

(d) The commissioner may revoke any construction permit for noncompliance with the limits and conditions specified in the permit, or if significant and unapproved changes are made in construction that differ from the application, plans, and specifications on which the issuance of the permit was based.

(e) The commissioner may issue construction permits for public water system facilities, equipment, or devices that are to be installed or constructed in stages. These construction permits may allow site preparation or foundation construction to begin where the following conditions have been met:
(1) Plans and specifications for additional facilities, equipment, or devices that will be used in the treatment, pumping, withdrawal, or conveyance of water for public consumption must be approved by the commissioner ~~prior to~~ **before** the construction of ~~said~~ **the** facilities, equipment, or devices in accordance with this section.
(2) Public water system facilities, equipment, or devices that are not used for the treatment, pumping, withdrawal, or conveyance of water for public consumption must conform to the requirements of the "Recommended Standards for Water Works" established by the Great Lakes—Upper Mississippi River Board of State Public Health and Environmental Managers, and the American Water Works Association (AWWA) standards **or other standards set out in this rule, 327 IAC 8-3.1, 327 IAC 8-3.2, 327 IAC 8-3.3, 327 IAC 8-3.4, 327 IAC 8-3.5, 327 IAC 8-4, and 327 IAC 8-6.**

(f) In order to encourage the development of new or more efficient treatment processes, the following type of construction permits

may be issued:

(1) Experimental construction permits may be issued by the commissioner for installations, treatment processes, or techniques that have not developed extensive experience or records of use in the state of Indiana, provided that the applicant submits evidence that the installation, process, or technique will produce drinking water of satisfactory quality and normal operating pressure at the peak operating flow rate in accordance with this article.

(2) Regular construction permits may be issued for installations, treatment processes, or techniques that have been used for sufficient time to show that the installation, treatment process, or technique will produce drinking water of satisfactory quality and normal operating pressure at the peak operating flow rate in accordance with this article.

(g) For an emergency condition, as a result of a drought, storm, flood, or other natural or manmade disaster, the commissioner may issue an emergency construction permit.

(h) An after-the-fact construction permit must be obtained from the commissioner upon notification to the public water system by the commissioner of completed or progressing construction, installation, or modification of any facility, equipment, or device for any public water system lacking a valid construction permit issued from the department, except where replacement of equipment of similar design and capacity will not change adversely the plant operation, its hydraulic design or waste products, or the **water** distribution system design, operation, or capacity. The following additional conditions apply to after-the-fact construction permits:

(1) The commissioner may order that no additional construction may commence or continue progress until the after-the-fact construction permit has been obtained.

(2) As-built plans and specifications certified by a professional engineer registered in Indiana, covering all work performed without a valid construction permit issued by the commissioner must be submitted to the commissioner within one hundred twenty (120) days of notification to the public water system by the commissioner.

(3) Modifications as required by the commissioner after review of the as-built plans and specifications shall be made within the time limits specified by the commissioner.

(4) The commissioner may require interim measures taken during review of an after-the-fact construction permit, including boil orders to ensure safe drinking water of satisfactory quality and normal operating pressure at the peak operating flow rate in accordance with this article.

(5) An after-the-fact construction permit does not relieve a public water system or any other person of any liability for construction without a valid permit from the commissioner.

(Water Pollution Control Board; 327 IAC 8-3-2; filed Sep 24, 1987, 3:00 p.m.: 11 IR 709; filed Oct 22, 1991, 5:00 p.m.: 15 IR 224; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2494; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 8. 327 IAC 8-3-2.1 IS ADDED TO READ AS FOLLOWS:

327 IAC 8-3-2.1 Permits for construction of small transient noncommunity public water systems

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 25-31-14-19

Sec. 2.1. (a) Small transient noncommunity public water systems may construct facilities specified in 327 IAC 8-4-2 without obtaining a construction permit, provided that they have met all the conditions set forth in that section.

(b) For construction at small transient noncommunity public water systems that are not subject to subsection (c), the design as shown on an application, plans, and specifications may be certified by any of the following:

(1) A professional engineer.

(2) A licensed well driller.

(3) A licensed professional geologist.

(c) As required under IC 25-31-14-19(a), design on construction and maintenance projects for:

(1) a county;

(2) a city;

(3) a town;

(4) a township;

(5) a school corporation; or

(6) any other political subdivision;

must have a professional engineer certify that the design as shown on the application, plans, and specifications are in compliance with the rule.

(d) Where a permit is required, an application form shall be submitted in accordance with section 3 of this rule. If specifications for small transient noncommunity public water systems are not included in this section, the requirements of section 2 of this rule must be met. *(Water Pollution Control Board; 327 IAC 8-3-2.1)*

SECTION 9. 327 IAC 8-3-3 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3-3 Application for permits

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 4-21.5-3-5; IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 3. (a) A properly executed application form shall accompany the plans and specifications submitted to the commissioner for the purposes of obtaining a permit. Application forms may be obtained from the commissioner upon request or computer-generated if the computer-generated form is similar in appearance and identical in content to the form generated by the commissioner. A properly executed application form shall include the following:

(1) **The** name, address, identification number, and telephone number of the public water system.

(2) **The** name, address, and telephone number of the engineering firm **or other entity specified in section 2.1 of this rule** and the developing firm.

(3) **The** name, address, and title of the person who is to receive the permit (generally the person representing the funding entity of the construction project).

(4) **The** location, **a** brief description, and **the** source of funding for the construction project.

(5) A list and corresponding mailing labels of all potentially affected parties as defined by IC 4-21.5-3-5(b).

(6) A dated signature certifying that, to the best of the public water system's knowledge, all potentially affected parties, as defined by IC 4-21.5-3-5(b), have been listed.

(b) The applications, plans, and specifications along with any reports and other information shall be submitted using a format and meeting content requirements approved by the commissioner.

(c) All plans, specifications, and applications must be prepared by or under the direct supervision of a professional engineer registered in Indiana and shall bear the seal and certification of the professional engineer certifying that construction of the proposed project following the application, plans, and specifications will produce drinking water of satisfactory quality and normal operating pressure at the peak operating flow rate in accordance with this article. **Plans, specifications, and applications for small transient noncommunity public water systems must be prepared in accordance with section 2.1 of this rule.**

(d) A proposed construction project that is the subject of an application for a construction permit must be entirely independently based on existing public water system facilities or proposed construction projects with effective construction permits, issued by the commissioner, that are not the subject of the application.

(e) The commissioner may require additional information, within the context of a permit application, to determine whether the proposed facility will meet the issuance requirements of section 4 of this rule.

(f) Whenever the commissioner requires information, within the context of a permit application, regarding existing water supply facilities or water treatment works, or regarding the operation and maintenance thereof, this information shall be submitted to the commissioner within thirty (30) days of such request.

(g) A public water system proposing to install or construct facilities, equipment, or devices under a staged permitting process must submit **proposed schedules for** the following along with the initial permit application as allowed under section 2(e) of this rule:

(1) ~~A proposed schedule for~~ The construction of the entire project.

(2) ~~A proposed schedule for~~ The application or applications for the remainder of the staged parts of the total construction project.

(Water Pollution Control Board; 327 IAC 8-3-3; filed Sep 24, 1987, 3:00 p.m.: 11 IR 710; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2496; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 10. 327 IAC 8-3-8 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3-8 Incorporation by reference
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 8. Recommended Standards for Waterworks, ~~1997~~ **2003** Edition, Great Lakes—Upper Mississippi River Board of State Public Health and Environmental Managers, is incorporated by reference into this rule and may be obtained from Health Education Services, P.O. Box 7126, Albany, New York 12224 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. *(Water Pollution Control Board; 327 IAC 8-3-8; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2499; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 11. 327 IAC 8-3.1-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.1-1 Definitions
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-3-12; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 25-31; IC 36-1-2-23

Sec. 1. ~~In addition to~~ **(a)** The applicable definitions ~~contained~~ in IC 13-11-2 and 327 IAC 8-3.2-1 ~~the following definitions~~ apply throughout this rule.

~~(1) "Professional engineer" means a person registered as a professional engineer by the Indiana state board of registration for professional engineers under IC 25-31.~~

~~(2) "Water main" means any pipe located between all entry points to the distribution system and all customer service connection meters.~~

~~(3)~~ **For purposes of this rule,** "unit" means county, municipality, or township as set forth in IC 36-1-2-23. *(Water Pollution Control Board; 327 IAC 8-3.1-1; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2499; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 12. 327 IAC 8-3.1-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.1-2 Permitting authority and responsibilities
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-3-12; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 2. (a) The plans for a water main extension are not required to be submitted to any state agency for a permit, permission, or review, unless required by the federal law, if the following are met:
(1) A person submits plans to a unit concerning the design or construction of a public water main.
(2) A professional engineer prepared the plans.
(3) The unit provided a review of the plans by a qualified engineer and subsequently approved the plans.
(4) All other requirements specified in this rule and all other rules adopted by the water pollution control board are met.

(b) The proposed construction of a water main must be in accordance with the following:
(1) The Safe Drinking Water Act, 42 U.S.C. 300f-300j-26, as amended*.
(2) The Clean Water Act, 33 U.S.C. 1251-1387, as amended**.

(c) The other requirements specified in rules that have been adopted by the water pollution control board and must be adhered to in the permitting of a public water main include the following:
(1) 327 IAC 8-1: Public Water Supply Direct Additive and Indirect Additive Standards.
(2) 327 IAC 8-2: Drinking Water Standards.
(3) 327 IAC 8-3.2: Technical Standards for Water Mains.
(4) 327 IAC 8-3.3: Public Water System Quantity Requirement Standards.
(5) ~~327 IAC 8-7: Water Supply and Distribution Systems; Schools and Related~~ **327 IAC 8-3.3-4: Additional public water system quantity requirement standards for school** buildings **and related facilities.**
(6) ~~327 IAC 8-8: Water Supply and Distribution Systems;~~ **327 IAC 8-3.3-5: Additional public water system quantity requirement standards for** mobile home parks.
(7) ~~327 IAC 8-9: Water Supply and Distribution Systems;~~ **327 IAC 8-3.3-6: Additional public water system quantity**

requirement standards for agricultural **labor** camps.
(8) 327 IAC 8-10: Cross Connections; Control; Operation.

(d) Units shall notify the commissioner of all public water main construction permits that the unit has issued by submitting to the department, on the effective date of the permit, a copy of each issued permit. Each submission shall contain the following information for each issued permit:
(1) **The** identification number that has been issued by the local unit.
(2) **The** effective date of the permit.
(3) The county where the construction project is to be located.
(4) The location of the construction project in terms of the following:
(A) **The** nearest public intersection.
(B) Quarter section, section, township, and range of the approximate center of the construction project.
(C) If the information requested by clause (B) is not available, the latitude and longitude of the approximate center of the construction project to the nearest fifteen (15) seconds.
(5) The maximum number of proposed service connections to the water main.
(6) A description and numerical count of the type or types of facilities to be located at each proposed service connection whether:
(A) residential;
(B) commercial; or
(C) industrial.
(7) A project layout map on an eight and one-half (8.5) inch by eleven (11) inch sheet of paper.

(e) The commissioner may approve alternatives to the notification procedure described in subsection (d) if requested. The alternative notification procedure must provide equivalent information to that required under subsection (d) to be considered for approval.

*The Safe Drinking Water Act as amended on August 6, 1996, is incorporated by reference and may be found at 42 U.S.C. 300f to 42 U.S.C. 300j-26 and is available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46206.

The Clean Water Act in effect on January 1, 1989, and amended on December 16, 1996, is incorporated by reference and may be found at 33 U.S.C. 1251 to 33 U.S.C. 1387 and is available from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46206. *(Water Pollution Control Board; 327 IAC 8-3.1-2; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2499; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 13. 327 IAC 8-3.2-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-1 Definitions
Authority: IC 13-13-5-1; IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-2; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 25-31

Sec. 1. In addition to the definitions ~~contained~~ in IC 13-11-2 and 327 IAC 8-3-1, the following definitions apply throughout this rule:
(1) "100-year flood" means a flood with an occurrence probability of one percent (1%) each year as determined by the Indiana department of natural resources.
(2) "Accessories" means the constituent elements of a water main, such as **the following:**
(A) Pipes.
(B) Fittings.
(C) Valves.
(D) Pumps. ~~and~~
(E) Hydrants.
(3) "ASTM standards" means the recommended standards certified by the American Society for Testing and Materials.
(4) "AWWA/ANS standards" means the American National Standard approved by the American Water Works Association.
(5) "Dead-end main" means a portion of a water main that has:

(A) flow in only one (1) direction; and ~~has~~

(B) no planned future extension.

(6) "Fire flow" means the rate of water flow intended for providing fire protection.

(7) "Nonpermeable" means to be constructed of ductile iron with solvent resistant gasket materials or welded steel pipes.

~~(8) "Normal operating pressure" means the water main pressure maintained regardless of public service load in the absence of extenuating circumstances.~~

~~(9) "Professional engineer" means a person who is registered as a professional engineer by the Indiana state board of registration for professional engineers under IC 25-31.~~

~~(10)~~ **(8)** "Transmission main" means any pipe that:

(A) transports water from a:

(i) surface water intake to a surface water treatment plant; **or**

~~(B) transports water from a ground water intake~~ **(ii)** well to a water treatment plant; ~~(if present);~~

~~(C)~~ **(B)** transports:

(i) finished water from the treatment plant ~~(if present)~~ to the entry point ~~of~~ **to** the **water** distribution system; or

(ii) water from a well to the entry point to the water distribution system if there is no water treatment plant; or

~~(D)~~ **(C)** is installed for the purpose of interconnecting separate public water systems.

~~(11) "Two (2) year average peak" means the arithmetic mean of the highest five (5) daily pumpages as reported over the previous two (2) year period on the public water system's monthly report of operations on record with the department. If the public water system is less than two (2) years old, the term means the arithmetic mean of the highest five (5) daily pumpages as reported on the public water system's monthly report of operations on record with the department.~~

~~(12) "Water main" means any pipe located between all entry points to the distribution system and all customer service connection meters.~~

(Water Pollution Control Board; 327 IAC 8-3.2-1; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2500; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 14. 327 IAC 8-3.2-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-2 Incorporation by reference

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 2. ~~(a)~~ The following materials, including titles and the names and addresses of where they may be located for inspection and copying, are incorporated by reference into this rule:

(1) The American Society for Testing and Materials standards listed throughout this rule are available in the ~~1996~~ **2004** Annual Book of ASTM Standards, Part 34, Plastic Pipe and Building Products, ~~1996~~ **2004** Edition, American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.

(2) The American Water Works Association (AWWA) standards listed throughout this rule are available from the American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. Notwithstanding language to the contrary in the primarily incorporated documents, the version of all secondarily incorporated documents, which are documents referred to in the primarily incorporated documents, shall be the version in effect on the date of final adoption of this rule.

~~(b) The technical standards presented in subsection (a) are continuously revised on a twenty-four (24) month cycle. The commissioner shall commence rulemaking efforts to update the documents incorporated by reference in this section.~~ *(Water Pollution Control Board; 327 IAC 8-3.2-2; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2500; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 15. 327 IAC 8-3.2-4 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-4 Certification

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 4. A professional engineer must certify that the water main designs as shown on the application, plans, and specifications are in compliance with this rule **except as allowed by 327 IAC 8-3-2.1.** *(Water Pollution Control Board; 327 IAC 8-3.2-4; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2501; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 16. 327 IAC 8-3.2-8 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-8 Water main materials
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 8. (a) All piping, accessories, and other materials in a water main shall conform to 327 IAC 8-1, contain less than eight percent (8%) by mass lead, and conform to the following applicable standards:

(1) For ductile-iron and fittings, the following standards apply:

(A) ~~C104/A21.4-95~~ **C104/A21.4-2003** American National Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.

(B) ~~C105/A21.5-93~~ **C105/A21.5-1999** American National Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems.

(C) ~~C110/A21.10-93~~ **C110/A21.10-2003** American National Standard for Ductile-Iron and Gray-Iron Fittings, 3 In. through 48 In. (75 mm through 1,200 mm), for Water and Other Liquids.

(D) ~~C111/A21.50-90~~ **C111/A21.11-2000** American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.

(E) ~~C115/A21.15-94~~ **C115/A21.15-1999** American National Standard for Flanged Ductile-Iron Pipe or Gray-Iron Threaded Flanges.

(F) ~~C150/A21.50-91~~ **C150/A21.50-2002** American National Standard for the Thickness Design of Ductile-Iron Pipe.

(G) ~~C151/A21.51-91~~ **C151/A21.51-2002** American National Standard for Ductile-Iron Pipe, Centrifugally Cast, for Water. ~~or Other Liquids.~~

(H) ~~C153/A-21.53-94~~ **C153/A21.53-2000** American National Standard for Ductile-Iron Compact Fittings ~~3 In. through 24 In. (76 mm through 610 mm) and 54 In. through 64 In. (1,400 mm through 1,600 mm),~~ for Water Service.

(2) For steel pipe, the following standards apply:

(A) ~~C200-91~~ **C200-97** AWWA Standard for Steel Water Pipe, 6 In. (150 mm) and Larger.

(B) ~~C203-91~~ **C203-02** AWWA Standard for Coal-Tar Protective Coatings and Linings for Steel Water Pipelines-Enamel and Tape-Hot-Applied **(includes revisions C203a-99).**

(C) ~~C205-89~~ **C205-00** AWWA Standard for Cement-Mortar Protective Lining and Coating for Steel Water Pipe-4 In. and Larger-Shop Applied.

(D) ~~C206-91~~ **C206-97** AWWA Standard for Field Welding of Steel Water Pipe.

(E) ~~C207-94~~ **C207-01** AWWA Standard for Steel Pipe Flanges for Waterworks Service-Sizes 4 In. through 144 In. (100 mm through 3,600 mm).

(F) ~~C208-83(R89)~~ **C208-01** AWWA Standard for Dimensions for Fabricated Steel Water Pipe Fittings.

(G) ~~C209-90~~ **C209-00** AWWA Standard for Cold-Applied Tape Coatings for the Exterior of Special Sections, Connections, and Fittings for Steel Water Pipelines.

(H) ~~C210-92~~ **C210-03** AWWA Standard for Liquid-Epoxy Coating Systems for the Interior and Exterior of Steel Water Pipelines.

(I) ~~C213-91~~ **C213-01** AWWA Standard for Fusion-Bonded Epoxy Coating for the Interior and Exterior of Steel Water Pipelines.

(J) ~~C214-89~~ **C214-00** AWWA Standard for Tape Coating Systems for the Exterior of Steel Water Pipelines. ~~(includes addendum C214a-91).~~

(K) ~~C215-94~~ **C215-04** AWWA Standard for Extruded Polyolefin Coatings for the Exterior of Steel Water Pipelines.

(L) ~~C216-94~~ **C216-00** AWWA Standard for Heat-Shrinkable Cross-Linked Polyolefin Coatings for the Exterior of Special Sections, Connections, and Fittings. ~~for Steel Water Pipelines.~~

(M) ~~C217-90~~ **C217-04** AWWA Standard for Cold-Applied Petrolatum Tape and Petroleum Wax Tape Coatings for the Exterior of Special Sections, Connections, and Fittings for Buried Steel Water Pipelines.

(N) ~~C218-91~~ **C218-02** AWWA Standard for Coating the Exterior of Aboveground Steel Water Pipelines and Fittings.

(O) ~~C219-91~~ **C219-01** AWWA Standard for Bolted, Sleeve-Type Couplings for Plain-End Pipe.

(P) ~~C220-92~~ **C220-98** AWWA Standard for Stainless-Steel Pipe, 4 In. (100 mm) and Larger.

(3) For concrete pipe, the following standards apply:

(A) ~~C300-89~~ **C300-04** AWWA Standard for Reinforced Concrete Pressure Pipe, Steel-Cylinder Type. ~~for Water and Other~~

~~Liquids (includes addendum C300a-93).~~

(B) ~~C301-92~~ **C301-99** AWWA Standard for Prestressed Concrete Pressure Pipe, Steel-Cylinder Type. ~~for Water and Other Liquids.~~

(C) ~~C302-95~~ **C302-04** AWWA Standard for Reinforced Concrete Pressure Pipe, Noncylinder Type.

(D) ~~C303-95~~ **C303-02** AWWA Standard for Concrete Pressure Pipe, Bar-Wrapped, Steel-Cylinder Type.

(E) ~~C304-92~~ **C304-99** AWWA Standard for Design of Prestressed Concrete Cylinder Pipe.

(4) For asbestos-cement pipe, the following standards apply:

(A) ~~C400-93~~ **C400-03** AWWA Standard for Asbestos-Cement Pressure Pipe, 4 In. through 16 In. (100 mm through 400 mm), for Water Distribution ~~Systems.~~ **and Transmission.**

(B) ~~C401-93~~ **C401-03** AWWA Standard for the Selection of Asbestos-Cement Pressure Pipe, 4 In. through 16 In. (100 mm through 400 mm), for Water Distribution Systems.

(C) ~~C402-89~~ **C402-00** AWWA Standard for Asbestos-Cement Transmission Pipe, 18 In. through 42 In. (450 mm through 1,050 mm), for ~~Potable~~ Water ~~and Other Liquids.~~ **Supply Services.**

(D) ~~C403-89~~ **C403-00** AWWA Standard for the Selection of Asbestos-Cement Transmission and Feeder Main Pipe, Sizes 18 In. through 42 In. (450 mm through 1,050 mm).

(5) For valves and hydrants, the following standards apply:

(A) ~~C500-93~~ **C500-02** AWWA Standard for Metal-Seated Gate Valves for Water Supply Service (includes addendum C500a-95).

~~(B) C501-92 AWWA Standard for Cast-Iron Sluice Gates.~~

~~(C)~~ **(B)** C502-94 AWWA Standard for Dry-Barrel Fire Hydrants (includes addendum C502a-95).

~~(D) C503-88~~ **(C) C503-07** AWWA Standard for Wet-Barrel Fire Hydrants.

~~(E) C504-94~~ **(D) C504-00** AWWA Standard for Rubber-Seated Butterfly Valves.

~~(F) C507-91~~ **(E) C507-99** AWWA Standard for Ball Valves 6 In. through 48 In. (150 mm through 1,200 mm).

~~(G) C508-93~~ **(F) C508-01** AWWA Standard for Swing-Check Valves for Waterworks Service, 2 In. (50 mm) through 24 In. (600 mm) NPS. ~~(includes addendum C508a-93).~~

~~(H) C509-94~~ **(G) C509-01** AWWA Standard for Resilient-Seated Gate Valves for Water Supply Service. ~~(includes addendum C509a-95).~~

~~(I) C510-92~~ **(H) C510-97** AWWA Standard for Double Check Valve Backflow-Prevention Assembly.

~~(J) C511-92~~ **(I) C511-97** AWWA Standard for Reduced-Pressure Principle Backflow-Prevention Assembly.

~~(K) C512-92~~ **(J) C512-04** AWWA Standard for Air-Release, Air/Vacuum, and Combination Air Valves for Waterworks Service.

~~(L) C540-93~~ **(K) C540-02** AWWA Standard for Power-Actuating Devices for Valves and Sluice Gates.

~~(M) C550-90~~ **(L) C550-01** AWWA Standard for Protective Epoxy Interior Coatings for Valves and Hydrants.

(M) C560-00 AWWA Standard for Cast-Iron Slide Gate.

(6) For plastic pipe, the following standards apply:

(A) ~~C900-89~~ **C900-97** AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe, 4 In. through 12 In., for Water Distribution. ~~(includes addendum C900a-92).~~

(B) ~~C901-88~~ **C901-02** AWWA Standard for Polyethylene (PE) Pressure Pipe and Tubing, ½ In. through 3 In., for Water Service.

(C) ~~C905-88~~ **C905-97** AWWA Standard for Polyvinyl Chloride (PVC) Water Transmission Pipe, Nominal Diameters 14 In. through 36 In.

(D) ~~C906-90~~ **C906-99** AWWA Standard for Polyethylene (PE) Pressure Pipe and Fittings, 4 In. through 63 In., for Water Distribution **and Transmission.**

(E) C907-91 AWWA Standard for Polyvinyl Chloride (PVC) Pressure Fittings for Water, 4 In. through 8 In. (100 mm through 200 mm).

(F) American Society for Testing and Materials (ASTM) ~~D2239-96A~~ **D2239-03 Standard** Specifications for PE Plastic Pipe (SDR-PR) **Based on Controlled Inside Diameter.**

(G) ASTM ~~D2241-96A~~ **D2241-04A Standard** Specifications for **Polyvinyl Chloride (**PVC**)** ~~Plastic~~ **Pressure-Rated** Pipe ~~(SDR-PR).~~ **(SDR Series).**

(H) ASTM ~~D3350-96~~ **D3350-02A Standard** Specifications for ~~PE~~ **Polyethylene** Plastic Pipe and ~~Fitting~~ **Fittings** Materials.

(b) All water mains installed in areas of ground water contamination, consisting of solvent, petroleum, or other volatile or semivolatile organic compounds, shall be constructed with nonpermeable piping and accessories.

(c) Piping and accessories previously used exclusively for water mains may be reused if **the piping or accessories:**

(1) ~~the piping or accessories~~ comply with the requirements of subsection (a); and

(2) ~~the piping or accessories~~ have been restored to their original condition.

(d) All connections between pipes shall have mechanical joints or slip-on joints with rubber gaskets with the exception of:
(1) steel pipe that may be welded;
(2) polyethylene (PE) pipes that may be thermojointed by a person who is a manufacturer's certified thermojointer; or
(3) piping described in section 10(d) of this rule.

(e) Water mains constructed with PVC and installed under existing or proposed roadways and railroads shall be cased in conformance with AWWA Standard ~~C900-89, Appendix A~~ **C900-97** or AWWA Standard ~~C905-88, Appendix A.~~ **C905-97.**

(f) Water mains that are cased shall conform to AWWA Standard ~~C600-93, Section 6.~~ **C600-99.**

(g) Water mains constructed with nonmetallic materials must be equipped with tracing wire or other metallic identification equipment. *(Water Pollution Control Board; 327 IAC 8-3.2-8; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2502; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 17. 327 IAC 8-3.2-11 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-11 Flow rate and pressure in the water main
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 11. (a) The flow rate and the pressure requirements of subsection (b) shall be provided at all service connections in a water main extension applicable to this rule.

(b) At a flow rate equal to the peak daily customer demand as determined in 327 IAC 8-3.3-2, the normal operating pressure in the water main shall not be less than twenty (20) psi under all conditions of flow at the ground level at all points in the water main when demonstrated in conformance with subsection (c).

(c) The flow rate and the pressure requirements of subsection (b) shall be demonstrated to the commissioner with either:
(1) a computer-based model; or
(2) other hydraulic calculations.

(d) In addition to the requirements in subsections (a) through (c), the water supply and water distribution system at noncommunity public water systems shall be sized and constructed to deliver water at twenty (20) pounds per square inch minimum pressure to all fixtures and appurtenances during periods of peak water demand. *(Water Pollution Control Board; 327 IAC 8-3.2-11; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2505; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 18. 327 IAC 8-3.2-17 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-17 Installation
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 17. (a) All water mains and their accessories shall be installed and pressure and leak tested in accordance with the applicable provisions of **one (1) of the following:**
(1) C600-99 AWWA Standard ~~C600-93, C602-89, C603-90,~~ **for Installation of Ductile-Iron Water Mains and Their Appurtenances.**
(2) C602-00 AWWA Standard for Cement-Mortar Lining of Water Pipelines in Place, 4 in (100 mm) and Larger.
(3) C603-96(R00) AWWA Standard for Installation of Asbestos Cement Pressure Pipe.
(4) C605-94 ~~or C606-87.~~ **AWWA Standard for Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.**
(5) C606-04 AWWA Standard for Grooved and Shouldered Joints.
If an AWWA Standard is not available for the particular installation, the manufacturer's recommended installation procedure shall be followed.

(b) Continuous and uniform bedding shall be provided in the trench for all buried pipe. Backfill material shall be tamped in layers around the pipe and to a sufficient height above the pipe to adequately support and protect the pipe. All stones unable to pass through a U.S. Standard Sieve opening of two (2) inches that are found in the trench within six (6) inches of the outside edge of the pipe shall be removed.

(c) All necessary reaction blocking, tie rods, or joints designed to prevent movement for pipes and fittings (regardless of material type) at tees, bends, plugs, and hydrants shall be installed to prevent movement in conformance with AWWA Standard ~~C600-93, Section 3.8.~~ **C600-99.**

(d) Water mains shall be covered with earthen cover in accordance with the following:

Depth of Cover Requirements for Water Mains

County	Cover[1] (in)
Adams	60
Allen	60
Bartholomew	48
Benton	60
Blackford	60
Boone	54
Brown	48
Carroll	60
Cass	60
Clark	36
Clay	54
Clinton	54
Crawford	36
Daviess	48
Dearborn	48
Decatur	48
Dekalb	60
Delaware	60
Dubois	42
Elkhart	60
Fayette	54
Floyd	36
Fountain	60
Franklin	48
Fulton	60
Gibson	42
Grant	60
Greene	54
Hamilton	54
Hancock	54
Harrison	36
Hendricks	54
Henry	54
Howard	60
Huntington	60
Jackson	48
Jasper	60
Jay	60

Jefferson	42
Jennings	48
Johnson	54
Knox	48
Kosciusko	60
LaGrange	60
Lake	60
LaPorte	60
Lawrence	48
Madison	60
Marion	54
Marshall	60
Martin	48
Miami	60
Monroe	48
Montgomery	60
Morgan	48
Newton	60
Noble	60
Ohio	42
Orange	42
Owen	54
Parke	60
Perry	36
Pike	42
Porter	60
Posey	42
Pulaski	60
Putnam	54
Randolph	54
Ripley	48
Rush	54
St. Joseph	60
Scott	36
Shelby	54
Spencer	36
Starke	60
Steuben	60
Sullivan	54
Switzerland	42
Tippecanoe	60
Tipton	60
Union	48
Vanderburgh	36
Vermillion	60
Vigo	60
Wabash	60
Warren	60
Warrick	36

Washington	36
Wayne	54
Wells	60
White	60
Whitley	60

[1] The cover dimension is measured from the top of pipe to the proposed finish grade.

(Water Pollution Control Board; 327 IAC 8-3.2-17; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2506; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 19. 327 IAC 8-3.2-18 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-18 Disinfection

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 18. (a) All new, cleaned, or repaired water mains shall be disinfected in accordance with **C651-99** AWWA Standard ~~C651-92.~~ **for Disinfecting Water Mains.**

(b) All chlorinated water shall be disposed of by either **disposal to a:**
(1) ~~disposal to a~~ sanitary sewer with the approval of the local sewer authority; or
(2) ~~disposal to a~~ location other than a sanitary sewer after obtaining a discharge permit from the commissioner.

(c) All laboratory reports documenting the conformance with AWWA Standard ~~C651-92~~ **C651-99,** Section 7, shall be submitted to the commissioner before the water main is brought into service. The laboratory used shall be approved by the commissioner. The laboratory report presenting the sample results shall be sent to the commissioner within ten (10) working days of receipt from the laboratory. The laboratory results shall have the commissioner's assigned permit number marked on the upper right hand corner of the top page. *(Water Pollution Control Board; 327 IAC 8-3.2-18; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2508; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 20. 327 IAC 8-3.2-20 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.2-20 Technical standard alternative demonstration

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 20. (a) An alternative to technical standards required by this rule may be approved by the commissioner for either a single application or for public water system-wide applications of the technical standard if the applicant demonstrates in a written submission that the alternative will achieve the following:
(1) Meet the issuance requirements of 327 IAC 8-3-4.
(2) Provide drinking water of at least the same satisfactory quality and normal operating pressure at the peak operating flow rate as the technical standards of this rule would provide.

(b) An alternative to technical standards required by this rule may be approved by the commissioner for all systems or a specific subset of systems if the alternative will achieve the following:
(1) Meet the issuance requirements of 327 IAC 8-3-4.
(2) Provide drinking water of at least the same satisfactory quality and normal operating pressure at the peak operating flow rate as the technical standards of this rule would provide.

~~(b)~~ **(c)** An approved alternative to a technical standard shall be in effect for one (1) year from the commissioner's approval of that alternative standard.

~~(c)~~ **(d)** An alternative to a technical standard **approved under subsection (a)** shall only apply to the application or the public water system for which the alternative is requested. *(Water Pollution Control Board; 327 IAC 8-3.2-20; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2508; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 21. 327 IAC 8-3.3-4 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.3-4 Additional public water system quantity requirement standards for school buildings and related facilities
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 4. (a) All school buildings and related facilities shall be supplied with safe, potable water from an approved source and an approved **water** distribution system.

(b) The drinking water for school buildings and related facilities shall be supplied at the flow rate and pressure required by 327 IAC 8-3.2-11 and at the quality required by 327 IAC 8-2 and in accordance with the following:
(1) The water supply and **water** distribution system shall be sized and constructed to deliver water at twenty (20) pounds per square inch minimum pressure to all fixtures and appurtenances during periods of peak water demand.
(2) Notwithstanding subdivision (1), school buildings may be served by hand-operated well pumps where religious custom precludes using electrically or gasoline driven well pumps providing the well and well pump are located and constructed in compliance with this rule and applicable sections of 410 IAC 6-5.1.

(c) A connection to a public water ~~supply~~ **system** shall be made with its potable water used exclusively wherever ~~such supply~~ **the system** is available or becomes available within a reasonable distance from the school facility, with the exception that nonpotable sources of water are available and may be utilized for the following nonpotable activities:
(1) Lawn sprinkling.
(2) Bus washing.
(3) Firefighting.
(4) Other nonpotable uses provided by a nonpotable distribution system having no connection to the potable system.

(d) Where a community public water ~~supply~~ **system** is not available, a properly located and constructed private water supply shall be provided. Beginning on the effective date of this rule, all new and modified public water systems exclusively serving schools and related facilities shall be equipped with a backup system capable of providing drinking water in accordance with subsection (b).

(e) Well pumps, pressure tanks, storage tanks, treatment facilities, and piping shall be sized to meet peak daily consumer demands. The minimum usable capacity of the pressure tank, in gallons, shall be three (3) times the installed well pump capacity in gallons per minute. For example, a pump of thirty (30) gallons per minute capacity would require a pressure tank of ninety (90) gallons usable capacity. If the well or pump cannot meet peak demands, sufficient additional usable storage capacity shall be provided to meet peak demands.

(f) Each school building or addition to a school building may have a potable water supply where necessary to provide adequate service. However, where two (2) or more school potable water supply systems are located on the same site, the water supply systems shall be sufficiently interconnected to allow for the maximum possible utilization of each should a system fail.

(g) Unless lower water system demands can be documented to the satisfaction of the commissioner, all school buildings and additions to school buildings constructed after February 17, 1985, shall have a water supply system capable of furnishing a minimum of:
(1) fifteen (15) gallons per day per student up through the elementary grades;
(2) twenty-five (25) gallons per day per student in grades greater than elementary; and
(3) one hundred (100) gallons per day per dormitory bed based on maximum building occupancy.
(Water Pollution Control Board; 327 IAC 8-3.3-4; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2511; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 22. 327 IAC 8-3.3-5 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.3-5 Additional public water system quantity requirement standards for mobile home parks
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 5. (a) An accessible, adequate, safe, and potable supply of water shall be provided in all mobile home parks and additions.

(b) Where a public water ~~supply~~ **system** is available, a connection shall be made thereto and its water used exclusively.

(c) A watertight casing pipe extending at least twelve (12) inches above the ground shall surround any part of a suction pipe, drop pipe, or delivery pipe not normally under constant pressure and located within twenty-five (25) feet of the ground surface.

(d) Each mobile home lot shall be provided with a cold water tap extending at least four (4) inches above the ground surface. The outlet shall be protected from freezing by the use of a heater tape, insulation, or draining when not in use. In no case shall a stop-and-waste valve or other device that would allow aspiration, ~~or~~ backflow, or contaminated water into the potable water system be used.

(e) The individual water and sewer connections on each mobile home lot shall be separated not less than five (5) feet horizontally.

(f) The water supply system shall be capable of furnishing a minimum of two hundred (200) gallons per day per mobile home lot in all mobile home parks constructed after June 14, 1974, as well as in all additions to mobile home parks constructed after the date. *(Water Pollution Control Board; 327 IAC 8-3.3-5; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2511; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 23. 327 IAC 8-3.3-6 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.3-6 Additional public water system quantity requirement standards for agricultural labor camps
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1; IC 16-41-26-8
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 6. (a) An adequate and convenient supply of water that meets the water quality standards of the department ~~pursuant to~~ **under** 327 IAC 2 shall be available at all times in each agricultural labor camp for culinary, drinking, bathing, and laundry purposes. Where a public water ~~supply~~ **system** is available, it shall be used to provide water for the agricultural labor camp.

(b) A cold water tap shall be available within one hundred (100) feet of each individual living unit when water is not provided in the unit. Adequate drainage facilities shall be provided for overflow and spillage. *(Water Pollution Control Board; 327 IAC 8-3.3-6; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2512; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 24. 327 IAC 8-3.4-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-1 Definitions
Authority: IC 13-13-5-1; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-2; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 16-41-26-1; IC 25-17.6; IC 25-31; IC 25-39-3

Sec. 1. In addition to the definitions ~~contained~~ in IC 13-11-2, the following definitions apply throughout this rule:
(1) "Agricultural labor camp" means an area as described in IC 16-41-26-1.
(2) "Annulus" means the space between the exterior of a well casing and the inside diameter of the borehole.
(3) "Bentonite" ~~means clay material composed predominantly of sodium montmorillonite which meets American Petroleum Institute specifications standard 13-A, Drilling Fluid Materials (1985)*.~~ **has the meaning set forth in 312 IAC 13-1-4.**
(4) "Bentonite slurry" means a mixture, made according to manufacturer specifications, of water and commercial grouting or plugging bentonite ~~which~~ **that** contains high concentrations of solids. The term does not include sodium bentonite products ~~which~~ **that** contain low solid concentration or ~~which~~ **that** are designed for drilling fluid purposes.
~~(5) "Certified professional geologist" means a person who is certified as a professional geologist by the board of certification for professional geologists under IC 25-17.6.~~
~~(6)~~ **(5)** "Community public water supply system", ~~or~~ "CPWSS", ~~or~~ "community", **or "community public water system"** means a public water system that serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents.
~~(7)~~ **(6)** "Course grade crushed bentonite" means natural bentonite crushed to an average size range of three-eighths (⅜) to three-fourths (¾) inches.
~~(8)~~ **(7)** "Direct additives" means chemical additives that are used in public water systems for the treatment of raw water. Direct additives are also used to protect drinking water during storage and distribution. Examples of direct additives include agents used for the following:
(A) Coagulation and flocculation.

(B) Corrosion and scale control.
(C) Softening.
(D) Sequestering.
(E) Precipitation.
(F) pH adjustment.
(G) Disinfection.
(H) Oxidation.

~~(9) "Distribution system" means one (1) of the following:~~

~~(A) In a community public water supply system, the term means the network of water piping, pumping stations, storage equipment, valves, fire hydrants, pressure regulators, and equipment required to transport water to the customer's service connection from one (1) of the following points:~~

~~(i) A treatment plant.~~

~~(ii) A source of raw water supply if no treatment is provided.~~

~~(B) In a noncommunity public water supply system, the term means the network of water piping, pumping stations, valves, fire hydrants, pressure regulators, and equipment required to transport water to the point of use from one (1) of the following:~~

~~(i) A point that is one (1) foot beyond the water storage tank~~

~~(ii) The well, if no water storage tank is utilized.~~

~~(10)~~ **(8)** "Drawdown" means the vertical difference measured between the static and the pumping water levels. ~~This~~ **The** term is commonly expressed in units of length.

(9) "Entry point to the water distribution system" means one (1) of the following points:

(A) For public water systems that utilize water treatment facilities, the point at which the drinking water has left the treatment facilities and has entered the water distribution system.

(B) For public water systems that do not utilize water treatment facilities, the point at which the water has left the supply facilities and has entered the water distribution system.

~~(11)~~ **(10)** "Flowing well" means a well completed in a confined aquifer where the water rises naturally to an elevation above land surface.

~~(12)~~ **(11)** "Indirect additives" means additives that are materials or equipment that come in contact with drinking water or come in contact with direct additives. Examples of indirect additives include the following:

(A) Pipes, valves, and related products.
(B) Barrier or baffle materials.
(C) Joining and sealing materials.
(D) Protective materials and related products.
(E) Mechanical devices or structures used in treatment, storage, transmission, and distribution systems.

~~(13)~~ **(12)** "Isolation area" means the separation distance of a public water ~~supply~~ system production well from a potential or existing source of contamination or damage as described in section 9 of this rule.

(13) "Licensed professional geologist" means a person who is licensed as a professional geologist by the Indiana board of licensure for professional geologists under IC 25-17.6.

(14) "Licensed well driller" means a person who is licensed as a well driller under IC 25-39-3.

~~(14)~~ **(15)** "Medium grade crushed bentonite" means natural bentonite crushed to an average size range of one-fourth (¼) to three-eighths (⅜) inch.

~~(15)~~ **(16)** "Noncommunity public water supply system" or "NCPWSS" means a public water system that serves at least fifteen (15) service connections used by nonresidents or regularly serves twenty-five (25) or more nonresident individuals daily for at least sixty (60) days per year.

~~(16)~~ **(17)** "Nontransient noncommunity public water supply system" means a ~~noncommunity~~ public water ~~supply~~ system that

~~(A) serves at least fifteen (15) service connections used by nonresidents; or~~

~~(B)~~ **is not a community water system that** regularly serves the same twenty-five (25) or more ~~nonresident individuals daily for~~ **persons** at least six (6) months per year.

~~(17)~~ **(18)** "Normal operating pressure" means the water pressure maintained in a system regardless of public service load in the absence of extenuating circumstances.

~~(18)~~ **(19)** "Peak daily consumer demand" means the flow rate as determined in 327 IAC 8-3.3.

(20) "Pitless adapter"means a device or assembly of parts that will permit water to pass through the wall of the well casing or extension thereof and that provides access to the well and parts of the water system within the well in a manner to prevent the entrance of contaminants into the well and the water produced.

~~(19)~~ **(21)** "Primary pump" means a pump used to deliver drinking water to a **water** distribution system.

~~(20)~~ **(22)** "Production well" or "well" means a well that provides water for human consumption within the applicability of section

2 of this rule.
~~(21)~~ **(23)** "Professional engineer" means a person who is registered as a professional engineer by the state board of registration for professional engineers under IC 25-31.
~~(22)~~ **(24)** "Pumping test" means a test that is conducted to determine well performance or aquifer characteristics.
~~(23)~~ **(25)** "Rated capacity" means the flow rate that a pump is capable of producing at a total dynamic head as determined by the manufacturer of that pump. ~~This~~ **The** term is usually expressed as a unit of volume produced from a well within a unit of time.
~~(24)~~ **(26)** "Regulatory flood" has the meaning ~~as~~ set forth in 310 IAC 6-1-3.
(27) "Sanitary setback" means an isolation area.
~~(25)~~ **(28)** "Schedule 40" refers to the unit of size of standard steel pipe. Standard pipe sizes are designated by the nominal size and schedule number. The schedule numbers are related to the permissible operating pressure of the pipe and to the allowable stress of the steel of the pipe. The range of schedule numbers is from ten (10) to one hundred sixty (160) with the higher numbers indicating a heavier wall thickness. Since all schedules of pipe of a given nominal size have the same outside diameter, the higher schedules have a smaller inside diameter.
(29) "Small transient noncommunity public water system" means a public water system that meets the definition of a transient noncommunity public water system under 327 IAC 8-2-1 and serves two hundred fifty (250) or fewer individuals per day.
~~(26)~~ **(30)** "Specific capacity" means the rate of discharge of a production well per unit of drawdown. ~~This~~ **The** term is commonly expressed as a unit of volume produced from a well within a unit of time per length or depth of drawdown.
~~(27)~~ **(31)** "Static water level" means the level of water (including seasonal fluctuations) in the production well that is not influenced by pumping.
~~(28)~~ **(32)** "Test well" means a well that is installed to:
(A) obtain hydrogeological information; or ~~to~~
(B) monitor the quality or quantity of ground water.
~~(29)~~ **(33)** "Unconsolidated formations" means geologic materials overlying bedrock, such as sand, gravel, and clay.
~~(30)~~ **(34)** "Usable capacity" means the volume of water available in a hydropneumatic **or other** tank as measured from the pump shut-off pressure to the pump starting pressure.
(35) "Water distribution system" means that part of the public water system in which water is conveyed from the water treatment plant to the premises of the consumer.

~~*This document is incorporated by reference. Notwithstanding language to the contrary in the primarily incorporated documents, the versions of all secondarily incorporated documents, which are those documents referred to in the primarily incorporated documents, shall be the versions in effect on the date of final adoption of this rule. Copies of this publication may be obtained from American Petroleum Institute, 1220 L Street NW, Washington, D.C. 20005 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.~~ *(Water Pollution Control Board; 327 IAC 8-3.4-1; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3366; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 25. 327 IAC 8-3.4-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-2 Applicability
Authority: IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 2. The technical standards established in this rule are applicable to the design and construction of new or modified public water ~~supply~~ system production wells constructed in Indiana as specified in 327 IAC 8-3 and to the applications, plans, and specifications of those water wells that are reviewed by the commissioner. *(Water Pollution Control Board; 327 IAC 8-3.4-2; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3368; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 26. 327 IAC 8-3.4-3 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-3 Certification
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 25-31-14-19

Sec. 3. **(a)** A professional engineer must certify that the well design as shown on an application, plans, and specifications for a

public water ~~supply~~ system well is in compliance with this rule **except as provided in subsection (b).**

(b) For a well design at small transient noncommunity water systems that are not subject to subsection (c), the well design as shown on an application, plans, and specifications for a public water system well may be certified by any of the following:
(1) A professional engineer.
(2) A licensed well driller.
(3) A licensed professional geologist.

(c) As required under IC 25-31-14-19(a), a well design on projects for a county, city, town, township, school corporation, or other political subdivision must have a professional engineer certify that the well design as shown on an application, plans, and specifications for a public water system well is in compliance with the rule. *(Water Pollution Control Board; 327 IAC 8-3.4-3; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3368; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 27. 327 IAC 8-3.4-4 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-4 Required information regarding the location of a proposed production well
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 25-31-14-19

Sec. 4. (a) Two (2) copies of the following information shall be provided with each application for a proposed production well or for the conversion of an existing well to a production well:
(1) A description of the purpose of the proposed well, including the following:
(A) The anticipated well yield.
(B) The anticipated system demand.
(2) The following, as applicable, to demonstrate ownership or control of the ~~isolation area~~ **sanitary setback** of the proposed well:
(A) A copy of a recorded deed or easement.
(B) A certified statement attesting to the ownership or control of the ~~isolation area~~ **sanitary setback** of the proposed well.
(3) The rated capacity of the existing well or wells if the proposed well is in an existing well field.
(4) The number of wells proposed for construction in the application.
(5) The highest flood elevation on record with the Indiana department of natural resources in the proposed ~~isolation area,~~ **sanitary setback,** as determined in section 9 of this rule, if any part of the ~~isolation area~~ **sanitary setback** is in an area identified by the Federal Emergency Management Agency (FEMA) as a flood hazard.

(b) The following two (2) types of public water ~~supply~~ systems shall submit an application, for a new production well, that provides the information as specified:
(1) A CPWSS subject to this rule shall submit two (2) copies of the following:
(A) The information required by 327 IAC 8-4.1-13.
(B) Driving directions to the well site.
(2) A NCPWSS subject to this rule shall submit two (2) copies of the following:
(A) A detailed map, drawn to a scale, showing the following:
(i) The proposed well site with ownership or easement boundaries.
(ii) The location of the proposed well.
(iii) The standard ~~isolation area~~ **sanitary setback** in accordance with section 9 of this rule.
(iv) The results of a visual survey showing all sources of contamination within a radius of one thousand (1,000) feet.
(B) The United States Geological Survey (USGS) quadrangle name for the proposed production well site.
(C) A summary of geologic and ground water quality information, where available, for the aquifer system utilized by a proposed well.
(D) Driving directions to the production well site.

(c) The plans required to be submitted with an application for a construction permit specified in 327 IAC 8-3-3 shall be submitted in duplicate and include plans of the proposed well site in accordance with the following:
(1) Each sheet of the plans must bear a dated signature and seal of a professional engineer **or, in the case of a small transient noncommunity public water system:**
(A) a dated signature and seal of a professional engineer;
(B) a dated signature and license number of a licensed well driller; or

(C) a dated signature and license number of a licensed professional geologist.

Where a professional engineer is required under IC 25-31-14-19(a), each sheet of the plans at a small transient noncommunity public water system must bear a dated signature and seal of a professional engineer.

(2) Include the entire ~~isolation area,~~ **sanitary setback,** as described in section 9 of this rule, or the area within a one hundred (100) foot radius from the proposed well casing, whichever is greater, along with a description specifying the following:

(A) The finished grade that will prevent surface water ponding near the well location.

(B) The highest flood elevation on record with the Indiana department of natural resources in the proposed ~~isolation area~~ **sanitary setback** if any part of the ~~isolation area~~ **sanitary setback** is in an area identified by the FEMA as a flood hazard.

(C) The location of the following existing or proposed facilities:

(i) Wells.

(ii) Roads and buildings.

(iii) Discharge piping.

(iv) Raw water transmission main.

(v) Sanitary sewers, storm sewers, manholes, and culverts.

(vi) Septic or sewage treatment equipment, including absorption field trenches.

(vii) Aboveground storage tanks, underground storage tanks, and the distribution device serving a tank of either type.

(viii) Surface waterbodies.

(ix) A potential source of contamination not described in this clause.

(3) If an existing or proposed facility listed in subdivision (2)(C) is not present in the ~~isolation area,~~ **sanitary setback,** the application for a construction permit shall specify that fact.

(Water Pollution Control Board; 327 IAC 8-3.4-4; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3368; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 28. 327 IAC 8-3.4-8 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-8 Production well materials

Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 8. (a) A direct **or indirect** additive used with **or in** a production well must be in accordance with 327 IAC 8-1.

~~(b) An indirect additive in a production well shall be certified for conformance to American National Standards Institute (ANSI)/National Sanitation Foundation (NSF) International Standard 61, Drinking Water System Components-Health Effects, with the exception of Section 9, Mechanical Plumbing Product (November 13, 1997)*.~~

~~(c) The certification requirement of subsection (b), that an indirect additive is in accordance with this rule, shall be satisfied if the indirect additive is listed with certification in one (1) of the following publications:~~

~~(1) "NSF Listings, Drinking Water Additives-Health Effects" (November 13, 1997)*.~~

~~(2) "Classified or Recognized Drinking Water System Components, Component Materials and Treatment Additives Directory" (December 1997)**.~~

~~(d) The commissioner may approve the use of an indirect additive in a production well only after the applicant has demonstrated that the indirect additive is in compliance with the following:~~

~~(1) The indirect additive has been approved and is listed by one (1) of the publications specified by subsection (c).~~

~~(2) The indirect additive has been approved by an organization having a third party certification program for indirect additives that has been approved by the American National Standards Institute.~~

~~(c)~~ **(b)** A lead packer shall not be used in a production well.

~~(f)~~ **(c)** A public water ~~supply~~ system shall not introduce, permit, or allow the introduction of a material into the drinking water that does not meet the requirements of this rule or 327 IAC 8-1.

~~*These documents are incorporated by reference. Notwithstanding language to the contrary in the primarily incorporated documents, the versions of all secondarily incorporated documents, which are those documents referred to in the primarily incorporated documents, shall be the versions in effect on the date of final adoption of this rule. Copies of this publication may be obtained from NSF International, 3475 Plymouth Road, Ann Arbor, Michigan 48113-0140 or from the Indiana Department of~~

~~Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.~~

~~**This document is incorporated by reference. Notwithstanding language to the contrary in the primarily incorporated documents, the versions of all secondarily incorporated documents, which are those documents referred to in the primarily incorporated documents, shall be the versions in effect on the date of final adoption of this rule. Copies of this publication may be obtained from Underwriters Laboratory, Inc., Engineering Services, 416C, 333 Pfingsten Road, Northbrook, Illinois 60062-2096 or from the Indiana Department of Environmental Management, Office of Water Management, Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.~~ *(Water Pollution Control Board; 327 IAC 8-3.4-8; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3370; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 29. 327 IAC 8-3.4-9 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-9 Separation of a production well from a potential or existing source of microbiological or chemical contamination or damage

Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 15-3-3.5; IC 15-3-3.6

Sec. 9. A public water ~~supply~~ system shall comply with the following provisions for the separation of a production well from a potential or existing source of contamination or damage, **except replacement wells as allowed under section 9.1 of this rule:**

(1) The ~~isolation area~~ **sanitary setback** from a potential or existing source of contamination for the construction of a public water system production well is the circular area within a radius as stated in the following table:

Table 9-1

~~Isolation~~ **Sanitary Setback** Radius Provisions (Linear Feet Measured from the Outside Edge of the Well Casing)

Public Water System Type	~~Standard Isolation~~ **Sanitary Setback** Radius	Well Subjected to Automatic Disinfection*	Favorable Hydrogeologic Conditions are Present**
Community	200	100	100
Noncommunity greater than or equal to 70 gpm***	200	100	100
Noncommunity, Susceptible Populations****	200	100	100
Noncommunity, Nonsusceptible, less than 70 gpm***	100	100	100

*Automatic disinfection as described in subdivision (2).

**Favorable hydrogeologic conditions as described in subdivision (3).

***70 gallons per minute (gpm) as measured per pump (rated capacity).

****Schools, correctional facilities, health care facilities, and agricultural labor camps.

(2) The radius creating the ~~isolation area~~ **sanitary setback** shall be one hundred (100) feet for a well that will be subject to automatic disinfection treatment ~~meeting the provisions of 327 IAC 8-2-8.6 prior to~~ **before** entering the **water** distribution system. **To meet this provision at systems using chlorine or chlorine dioxide, the free chlorine residual disinfectant concentration in the water entering the water distribution system cannot be less than two-tenths (0.2) milligrams per liter (mg/l) for more than four (4) hours, and the residual disinfectant level in the water distribution system cannot be undetectable in more than five percent (5%) of the samples collected each month in accordance with 327 IAC 8-2.5-6(c). Systems using disinfectants other than chlorine or chlorine dioxide must maintain an equivalent level of disinfection as determined by the commissioner.**

(3) A determination of favorable hydrogeological conditions may be approved by the commissioner after the submission of a report that is signed, dated, and sealed by a ~~certified~~ **licensed** professional geologist or other person legally authorized to perform geological services or a professional engineer who applies geology to the practice of engineering. The report must include the following information:

(A) The thickness, vertical permeability, and spatial continuity of a protective layer or layers overlying the production aquifer.

(B) The local and regional geologic conditions of the well site area.

(C) The relative susceptibility to contamination of the proposed production aquifer.

(4) A well discharging into the inlet side of a surface water treatment process plant that meets the requirements of 327 IAC 8-2-8.5,

~~and~~ 327 IAC 8-2-8.6, **and 327 IAC 8-2.6** shall not be held to ~~an isolation area~~ **a sanitary setback** requirement.

(5) The ~~isolation area~~ **sanitary setback** shall be subject to the following additional requirements:

(A) The separation distance between two (2) or more wells of a public water ~~supply~~ system shall be maintained in accordance with the following:

(i) A production well with a pumping capacity of less than seventy (70) gallons per minute (GPM) shall not be located closer than fifty (50) feet from another production well.

(ii) A production well with a pumping capacity of greater than or equal to seventy (70) GPM shall not be located closer than one hundred (100) feet from another production well.

(iii) A public water ~~supply~~ system drinking water well that is a part of a transient noncommunity public water ~~supply~~ system ~~that is not a nontransient noncommunity public water supply system~~ shall not be closer than fifty (50) feet, regardless of the capacity of pumping equipment, from another well in the system.

(B) A storm or sanitary sewer shall not be located within the ~~isolation area~~ **sanitary setback** of a production well unless the storm or sanitary sewer is:

(i) more than fifty (50) feet, as measured from all directions, from a public water ~~supply~~ system production well; and

(ii) constructed in accordance with 327 IAC 8-3.2-8, 327 IAC 8-3.2-17(a), and 327 IAC 8-3.2-17(b).

(C) The ~~standard isolation area~~ **sanitary setback** for a public water ~~supply~~ system production well shall conform to the following requirements concerning transportation routes:

(i) Roadways, paved surfaces, and parking areas for service vehicles that:

(AA) service the proposed well, pump, and appurtenances;

(BB) are owned or controlled by the public water ~~supply~~ system; and

(CC) are restricted from access by the public;

shall not be held to ~~an isolation area~~ **a sanitary setback** requirement.

(ii) Roadways, paved surfaces, and parking areas that are part of the following shall not be located within fifty (50) feet of a well:

(AA) Residential subdivisions.

(BB) Apartment communities.

(CC) Mobile home parks.

(DD) Recreational parks.

(iii) A transportation route, such as a railway, roadway, paved area, or parking area, including paved or unpaved roadway or surface areas, that is:

(AA) accessible in full or in part for commercial or industrial transportation activities; or

(BB) listed as a hazardous material route;

shall not be located within the ~~standard isolation area~~ **sanitary setback** as measured from the outside edge of the well casing to the traveled portion of the transportation route.

(D) The distance between the location of a public water ~~supply~~ system production well casing and a surface water body, such as:

(i) a stream;

(ii) a pond;

(iii) a lake;

(iv) a river;

(v) an impoundment; or

(vi) a drainage ditch;

shall be a minimum of twenty-five (25) feet.

(6) The commissioner may modify the requirements of ~~an isolation area~~ **a sanitary setback, control area,** or a separation distance to an alternative area or distance so long as the alternative area or distance shall be able to provide the same factor of safety for filtering pathogenic contaminants as the ~~standard isolation area~~ **sanitary setback** or separation distance. The commissioner's decision to allow an alternative ~~isolation area~~ **sanitary setback** or separation distance shall be based on the following conditions:

(A) The applicant's submission of a report describing **the following:**

(i) Treatment processes.

(ii) Geologic features.

(iii) Additional ~~raw~~ water monitoring provisions. ~~or~~

(iv) Other means of providing pathogenic contaminant filtration.

(v) Other means of mitigating contaminant sources relative to the location of the well.

(B) The report required by clause (A) must:

(i) be signed and sealed by a professional engineer, **licensed well driller,** or ~~certified~~ **licensed** professional geologist; or
(ii) cite the applicable provisions of 327 IAC 8-4.1.

(7) A supplier of water to a public water system shall own or control the ~~isolation area~~ **sanitary setback** by recorded deed, easement, or long term lease. **A small transient noncommunity public water system shall own or control a fifty (50) foot sanitary setback by recorded deed, easement, or long term lease.**

(8) The use, application, storage, mixing, loading, and transportation of pesticides in accordance with IC 15-3-3.5, IC 15-3-3.6, and the rules and guidance thereunder, developed by the **Indiana** pesticide review board and the office of the Indiana state chemist, may occur within the ~~standard isolation area~~ **sanitary setback** if the following requirements are met by the public water system:

(A) The production well casing is constructed of steel in accordance with section 16 of this rule.

(B) The product is stored within a containment system:

(i) designed;

(ii) constructed;

(iii) operated; and

(iv) maintained;

to contain spills or leaks.

(9) Water treatment chemicals and fuels for water production equipment containing contaminants that are not registered pesticides regulated under the federal Safe Drinking Water Act, 42 U.S.C. 300f et seq., as amended August 6, 1996* may be used, stored, mixed, loaded, and transported within the standard ~~isolation area~~ **sanitary setback** if the following conditions are met:

(A) The production well casing is constructed of steel in accordance with section 16 of this rule.

(B) The product is stored:

(i) within a containment system designed, constructed, operated, and maintained to contain spills or leaks; **and**

~~(C) The product is stored~~ **(ii)** in an underground or aboveground storage tank that is in conformance with applicable federal, state, and local laws and regulations.

*The federal Safe Drinking Water Act is incorporated by reference. Copies of this law may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room N1255, Indianapolis, Indiana 46206. *(Water Pollution Control Board; 327 IAC 8-3.4-9; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3371; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 30. 327 IAC 8-3.4-9.1 IS ADDED TO READ AS FOLLOWS:

327 IAC 8-3.4-9.1 Sanitary setback requirements for replacement wells at noncommunity public water systems
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 9.1. All replacement wells at noncommunity public water systems shall be located as far as practicable from all potential contaminant sources on property that the public water system already owns or controls if the provisions of section 9(1) through 9(5) of this rule cannot be met. *(Water Pollution Control Board; 327 IAC 8-3.4-9.1)*

SECTION 31. 327 IAC 8-3.4-12 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-12 Flow rate and pressure requirements
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 12. (a) The normal operating pressure in the **water** distribution system of a noncommunity public water ~~supply~~ system shall meet the following conditions:

(1) Be a minimum of thirty-five (35) pounds per square inch (psi) at ground level for a flow rate equal to the average daily consumer demand as determined in 327 IAC 8-3.3-2.

(2) Be at least twenty (20) psi under all conditions of flow in the **water** distribution system and at ground level for a flow rate equal to the peak daily consumer demand as determined in 327 IAC 8-3.3-2.

(b) Flow rate and pressure requirements for a community public water ~~supply~~ system shall be in accordance with the requirements of 327 IAC 8-3.2-11. *(Water Pollution Control Board; 327 IAC 8-3.4-12; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3373; readopted filed*

Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 32. 327 IAC 8-3.4-13 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-13 Backup provisions for production wells
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 13. (a) The following backup provisions shall apply to both a community public water ~~supply~~ system and a noncommunity public water ~~supply~~ system having a pumping capacity greater than or equal to seventy (70) gallons per minute:

(1) The backup provisions shall be designed to provide system conformance with section 12 of this rule when the largest pump is out of service.

(2) A system shall have one (1) or more backup wells designed to provide system conformance with section 12 of this rule.

(b) Schools, correctional facilities, health care facilities, and agricultural labor camps, regardless of pumping capacity, must comply with the requirements of subsection (a). *(Water Pollution Control Board; 327 IAC 8-3.4-13; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3373; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 33. 327 IAC 8-3.4-14 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-14 Hydropneumatic storage tanks
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 22-12

Sec. 14. (a) A hydropneumatic storage tank shall abide by the following:

(1) The requirements of IC 22-12 and 680 IAC.

(2) Shall not be buried except when in accordance with subdivisions (3) and (4).

(3) A tank shall be protected from freezing and flooding.

(4) Provide housing as follows:

(A) A hydropneumatic storage tank with an air-water diaphragm separator shall be within **the** housing.

(B) Hydropneumatic storage tanks without an air-water separator shall have all nontank mechanical parts, including valves, piping, and components, within **the** housing.

(5) Be equipped to provide the following:

(A) The ability to isolate the tank from the rest of the public water system.

(B) A drain.

(C) Control equipment consisting of the following:

(i) A pressure gauge.

(ii) Pressure relief valve.

(iii) Air addition as follows:

(AA) Manual air addition may suffice for a hydropneumatic storage tank with an air-water diaphragm separator.

(BB) Equipment for automatic air addition shall be required for all other hydropneumatic storage tanks.

(iv) Start and stop controls for the pumps.

(b) The usable capacity of a hydropneumatic storage tank must **meet one (1) of the following:**

(1) Be a minimum of three (3) times the installed rated capacity, in gallons per minute, of the primary pump, or pumps if more than one (1) pump is used to meet peak system demand, at an operating pressure of at least thirty-five (35) pounds per square inch.

(2) Be based on the manufacturer's pump specifications.

(3) Meet an alternative criteria approved by the commissioner.

(c) Unless required by IC 22-12 or 680 IAC to be certified by ASME, a hydropneumatic storage tank shall be certified by ANSI, ASME, NSF, or UL. The applicant must submit information showing that the tank used is properly certified.

~~(c)~~ **(d)** Hydropneumatic tank storage of water shall not be designated for fire protection purposes.

~~(d)~~ **(e)** A hydropneumatic tank shall not be used in a community public water ~~supply~~ system when more than four hundred (400)

persons are served.

(f) If more than one (1) hydropneumatic tank is used in series, each tank must:
(1) be able to be hydraulically isolated from the others using valves or similar devices;
(2) have sampling taps for performing water quality sampling; and
(3) be operated and maintained to ensure adequate water turnover.

(Water Pollution Control Board; 327 IAC 8-3.4-14; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3373; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 34. 327 IAC 8-3.4-16 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-16 Casing and screen requirements
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 16. (a) A drinking water production well casing shall meet the following requirements:
(1) A steel or stainless steel casing is required for the following:
(A) A community public water ~~supply~~ system.
(B) A public water ~~supply~~ system production well casing with an inside diameter greater than six (6) inches.
(2) Steel or stainless steel shall meet the following:
(A) Schedule 40 if the casing is less than or equal to ten (10) inches in diameter.
(B) Be at least three hundred seventy-five thousandths (0.375) of an inch in thickness if the casing is greater than ten (10) inches in diameter.
(3) Steel or stainless steel pipe used in a well casing shall be joined by:
(A) threading and the use of screwed couplings; or
(B) welding with full circumference welds.
(4) A production well not regulated under subdivision (1) may be equipped with a polyvinyl chloride (PVC) well casing when all of the following are met:
(A) The production well is not located within two hundred (200) feet of stored or staged petroleum products or any known sources of volatile or semivolatile organic contaminants.
(B) The PVC casing is joined by solvent welding or mechanical joints that use PVC locking strips and synthetic watertight sealing gaskets.
(C) The PVC well casing and joints meet the requirements of ANSI/ASTM ~~F480-94~~ **F480-02 "Standard Specifications** for Thermoplastic ~~Water~~ Well Casing Pipe and Couplings made in Standard Dimension Ratios (SDR) ~~(Annual Book of ASTM Standards, March 1994)*.~~ **SCH 40 and SCH 80"*.**
(D) The minimum wall thickness of PVC casing is at least the equivalent of SDR 21 according to ANSI/ASTM ~~F480-94~~ **F480-02 for "Standard Specifications** for Thermoplastic ~~Water~~ Well Casing Pipe and Couplings made in Standard Dimension Ratios (SDR) ~~(Annual Book of ASTM Standards, March 1994)*.~~ **SCH 40 and SCH 80"*.**
(E) PVC casing shall be protected from damage from collision in accordance with the following:
(i) Three (3) posts shall be placed in an equilateral formation no more than twenty-four (24) inches in radius from the outside edge of the casing.
(ii) The posts specified in item (i) shall:
(AA) be concrete-filled steel posts at least four (4) inches in diameter or hollow steel at least twenty-five hundredths (0.25) of an inch in thickness; **and**
~~(iii) The posts specified in item (i) shall~~ **(BB)** extend at least three (3) feet above grade and four (4) feet below grade.
(5) A permanent well casing shall terminate as follows:
(A) At the higher level of one (1) of the following:
(i) At least eighteen (18) inches above finished grade.
(ii) At least thirty-six (36) inches above the regulatory flood elevation if located in a designated flood hazard area identified by the Federal Emergency Management Agency (FEMA).
(B) At least twelve (12) inches above the pump house floor or concrete apron.

(b) The casing shall be vented to the atmosphere with a vent that terminates in a downturned position at or above the top of the casing or the pitless adapter unit. The vent shall have a minimum one and one-half (1½) inch diameter opening covered with a twenty-four (24) mesh, noncorrodible screen.

(c) A production well shall meet the following construction requirements:
(1) Have a maximum deviation from plumb not in excess of two-thirds (⅔) of the inside diameter of the well casing per one hundred (100) feet of well depth.
(2) Be aligned to permit proper operation of the type of permanent pump intended for the well. Alignment shall be tested as follows:
(A) By lowering into the well, through its entire depth, a section of pipe forty (40) feet long or a dummy of the same length.
(B) The pipe or dummy used as specified by clause (A) shall be in accordance with the following:
(i) One-half (½) inch less in diameter than the inside diameter of the part of the casing or hole being tested when the casing or hole diameter is ten (10) inches or less.
(ii) One (1) inch smaller than the inside diameter when that part of the casing or hole being tested is greater than ten (10) inches.
(C) An alignment test shall not be required inside well screens.

(d) A production well completed in an unconsolidated formation shall have screens installed and constructed of one (1) of the following materials:
(1) Stainless steel.
(2) PVC only if the casing material is also PVC.

(e) A production well casing shall be fitted to permit measurements of static and pumping water levels.

(f) A production well in an unconsolidated formation shall be packed with silica gravel if it has artificial gravel wall filters.

(g) The well house floor shall be at least six (6) inches above grade.

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SECTION 35. 327 IAC 8-3.4-17 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-17 Pitless adapter unit requirements
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 17. A production water well equipped with a pitless unit shall meet the following requirements:
(1) A pitless unit shall be constructed of steel, ~~or~~ stainless steel, **or other material compatible with the casing as approved by the commissioner,** unless the well casing is constructed of PVC in accordance with section 16 of this rule.
(2) A pitless unit shall be installed on the well casing using one (1) of the following types of joints:
(A) Welded, **with either mechanical or chemical weld.**
(B) Flanged.
(C) Threaded.
(3) The discharge connection of a pitless unit shall be pressurized at all times.
(4) A pitless unit shall be designed so that the pump can be removed for servicing and maintenance without disturbing the underground discharge piping.
(5) A pitless unit shall have an inside diameter greater than or equal to the casing diameter if the casing diameter is less than twelve (12) inches.
(6) At least one (1) check valve shall be installed inside the well casing if a submersible pump is used.
(7) A compression joint shall not be used for the installation of a pitless unit.
(8) A buried suction line is not permitted.
(9) A saddle-type pitless adapter is not permitted **except at systems with a well casing and a diameter of six (6) inches or less. At these systems, a saddle-type pitless adapter may be used if:**

(A) it maintains positive pressure;
(B) the pitless adapter is designed to support the weight of the column and pump; and
(C) the pump is accessible.

(Water Pollution Control Board; 327 IAC 8-3.4-17; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3375; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 36. 327 IAC 8-3.4-23 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-23 Grouting requirements
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 23. This section governs grouting materials and the installation of grouting materials **as follows:**
(1) Grouting materials shall consist of the following:
(A) Neat cement grout shall consist of cement conforming to ASTM ~~C150 (1996 Annual Book of ASTM Standards)~~ **C150-04 Standard Specification for Portland Cement*** and contain at least two percent (2%) but ~~no~~ **not** more than five percent (5%) by weight of bentonite additive.
(B) Bentonite slurry that can include polymers designed to retard swelling.
(C) Pelletized, granular, medium-grade, or coarse-grade crushed bentonite.
(D) Concrete grout shall consist of equal amounts of:
(i) cement, conforming to AWWA ~~A100-90, Section 7 (effective February 1, 1991)**;~~ **A100-97 AWWA Standard for Water Wells**;** and
(ii) sand mixed with the addition of water to make a mixture not exceeding six (6) gallons of water per one (1) cubic foot of cement;
and contain at least two percent (2%) but ~~no~~ **not** more than five percent (5%) by weight of bentonite additive.
(2) The installation of grouting materials shall be in accordance with the following:
(A) Except as provided in section 21(2) of this rule, neat cement and bentonite slurry shall be pressure pumped into place with a grout pipe from the bottom of the annular space upward in a continuous operation.
(B) Pelletized, granular, medium-grade, or coarse-grade crushed bentonite shall be introduced in a manner to prevent bridging of the borehole annulus.
(C) Concrete grout shall be installed according to one (1) of the following:
(i) Pressure pumped.
(ii) Placed by gravity through a grout pipe from the bottom of the annular space upward in a continuous operation.
(iii) Introduced in a manner to prevent bridging of the borehole annulus.
(3) The annulus of a well shall be grouted with one (1) of the types of grout as specified in subdivision (1) and in accordance with the applicable grout installation methods specified in subdivision (2), with the exception of a prohibition against using the method named in subdivision (2)(C)(iii) if:
(A) the diameter of the borehole is eight (8) inches or larger than the outside diameter of the well casing; and
(B) the well is equal to or less than one hundred (100) feet in depth.
(4) The annulus of a well shall be pressure grouted with neat cement, concrete grout, or a bentonite slurry if:
(A) the diameter of the borehole is less than eight (8) inches larger than the outside diameter of the well casing; or
(B) the well is greater than one hundred (100) feet in depth.
(5) The annulus of a well may be grouted, with concrete grout containing gravel not larger than one-half (½) inch in size, by using gravity without the use of a grout pipe if:
(A) the diameter of the borehole is greater than twelve (12) inches larger than the outside diameter of the well casing; and
(B) the depth to be grouted is equal to or less than ten (10) feet.
(6) Grouting of the borehole annulus shall be accomplished upon the earlier of the following events:
(A) Within twenty-four (24) hours following the installation of the well casing.
(B) The removal of drilling equipment from the proposed well location.
(7) All work on the well shall cease during the grout setup time as specified by the grout material supplier.

*This document is incorporated by reference. Notwithstanding language to the contrary in the primarily incorporated documents, the versions of all secondarily incorporated documents, which are those documents referred to in the primarily incorporated documents, shall be the versions in effect on the date of final adoption of this rule. Copies of this ~~publication~~ **standard** may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103 or from the

Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.

This document is incorporated by reference. Notwithstanding language to the contrary in the primarily incorporated documents, the versions of all secondarily incorporated documents, which are those documents referred to in the primarily incorporated documents, shall be the versions in effect on the date of final adoption of the primarily incorporated document. Copies of this ~~publication~~ **standard may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235 or from the Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206. *(Water Pollution Control Board; 327 IAC 8-3.4-23; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3376; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 37. 327 IAC 8-3.4-24 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-24 Disinfection procedure requirements
Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 24. (a) The disinfection procedures described in this section shall be performed with one (1) of the following approved forms of chlorine:
(1) Calcium hypochlorite.
(2) Sodium hypochlorite.

(b) Gravel installed in a new production well must be chlorinated by use of the following method:
(1) Silica gravel for gravel pack shall be disinfected with calcium hypochlorite or sodium hypochlorite ~~prior to~~ **before** installation in a well at a rate that will produce a liquid concentration of at least fifty (50) milligrams per liter (mg/l) as the gravel is installed.
(2) The gravel, disinfected according to subdivision (1), shall be fed into a gravel chute or tremie to completely fill the annular void outside the well casing to the top gravel pack level.
(3) Chlorine shall be added to the well, following the activity described in subdivision (2), and circulated until a chlorine concentration of not less than fifty (50) mg/l in the entire volume of fluid is achieved.

(c) Immediately before placement in the void caused by settled gravel in a well, replacement gravel shall be soaked in a chlorine solution of at least fifty (50) mg/l for a duration not less than thirty (30) minutes during initial construction or subsequent repairs.

(d) Permanent equipment and material used in a production well shall be chlorinated ~~prior to~~ **before** installation by spraying exposed areas with a solution containing a chlorine residual of ~~no~~ **not** less than two hundred (200) ~~milligrams per liter~~ mg/l.

(e) A new or modified well proposed to be a production well shall be chlorinated in accordance with one (1) of the following:
(1) The water in the well casing shall be treated for disinfection as follows:
(A) To create a chlorine residual of one hundred (100) ~~milligrams per liter~~ **mg/l** to the entire volume of water in the casing, well screen, and rock hole, if present.
(B) The well must be:
(i) chlorinated using the compound requirements in Table 24-1; **and**
~~(C) The well must be~~ **(ii)** surged at least three (3) times following chlorination.
~~(D)~~ **(C)** The chlorinated water must remain in the well casing at least twelve (12) hours following the surging activity of clause ~~(C).~~ **(B)(ii).**
(2) The water in the well casing shall be treated for disinfection as follows:
(A) To create a chlorine residual of fifty (50) mg/l to the entire volume of water in the casing, well screen, and rock hole, if present.
(B) The well must be:
(i) chlorinated using the compound requirements in Table 24-1; **and**
~~(C) The well must be~~ **(ii)** surged at least three (3) times following chlorination.
~~(D)~~ **(C)** The chlorinated water must then remain in the well casing at least twenty-four (24) hours following the surging activity of clause ~~(C).~~ **(B)(ii).**

Table 24-1

Amount of Chemical Compound

Well-Hole or Well-Casing Diameter (in.)	Volume per 100 Feet of Water Depth (gal)	Calcium Hypochlorite* (65 percent available Cl_2)	Sodium Hypochlorite† (12 trade percent‡)
5	106.09	1.1 oz	5.65 fl oz
6	146.9	1.5 oz	7.8 fl oz
8	261.1	2.7 oz	13.9 fl oz
10	408.0	4.2 oz	1.4 pt
12	587.5	6.0 oz	2.0 pt
16	1,044.0	10.7 oz	3.5 pt
20	1,632.0	1 lb 1 oz	0.7 gal
24	2,350.0	1 lb 8 oz	1.0 gal
30	3,672.0	2 lb 6 oz	1.5 gal
36	5,287.0	3 lb 6 oz	2.2 gal
48	9,400.0	6 lb 1 oz	3.9 gal
60	11,690.0	9 lb 7 oz	6.1 gal

Notes:

*Quantities of Ca $(OCl)_2$ based on 65 percent available chlorine by dry weight (16 oz = 1 lb).

†Quantities of NaOCl based on 12 trade percent available chlorine by US liquid measure (1 gal = 4 qt = 8 pt = 128 fl oz).

‡Trade percent is a term used by chlorine manufacturers; trade percent × 10 = grams of available chlorine in 1 liter of solution.

(f) After disinfection accomplished in accordance with subsection (e), a new or modified public water ~~supply~~ system production well and a flowing well shall be sampled for the presence of coliform at least twice, with sampling done ~~no~~ **not** less than twenty-four (24) hours apart, by a laboratory certified by the Indiana state department of health **or the United States Environmental Protection Agency using methods specified in 327 IAC 8-2-8.7.** If the presence of coliform is indicated by the sample results, the disinfection of the well shall be repeated.

(g) Disposal of chlorinated water from well disinfection shall be to one (1) of the following sources:

(1) A sanitary sewer with the approval of the local sewer authority.

(2) A location other than a sanitary sewer in accordance with local, state, and federal regulations.

(Water Pollution Control Board; 327 IAC 8-3.4-24; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3377; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 38. 327 IAC 8-3.4-25 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-25 Postconstruction testing and reporting requirements

Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 13-18-16-2

Sec. 25. (a) The following information must be submitted to the commissioner before a new or modified production well is placed into production:

(1) Results of a production well performance test (PWPT) that was performed for a period of at least twenty-four (24) hours for a community public water ~~supply~~ system and ~~at least eight (8) hours for~~ a **nontransient** noncommunity public water ~~supply~~ system **serving more than two hundred fifty (250) individuals.** The PWPT information submitted to the commissioner shall include the following:

(A) Pumping rate of test (at least one (1) times the maximum daily pumping rate).

(B) Static water level (stable before pumping).

(C) Water level at:

(i) start up and at interim readings; **and**

~~(D) Water level at~~ **(ii)** the end of the PWPT.

~~(E)~~ **(D)** Specific capacity at the end of the PWPT.

(2) Every well shall be tested for specific capacity of the well. The well shall be test pumped at a capacity at least equal to the pumping rate desired from the well during normal usage.

~~(2)~~ **(3)** A copy of the Indiana department of natural resources' record of water well completed in accordance with the requirements of ~~310 IAC 16-2-6.~~ **312 IAC 13-2-6.**

~~(3)~~ **(4)** The results of:

(A) water quality samples obtained during test pumping; **and**

~~(4) The results of~~ **(B)** disinfection confirmation samples obtained during disinfection.

(5) Completed copies of the chemical analytical reports of sampling done and analyzed by a laboratory certified by the Indiana department of health **or the United States Environmental Protection Agency using methods set forth in 327 IAC 8-2-4.2** for the following constituents:

(A) Nitrate (NO_3).

(B) Fluoride.

(b) The commissioner may modify or revoke a construction permit based on the information submitted under subsection (a) in accordance with IC 13-18-16-2. *(Water Pollution Control Board; 327 IAC 8-3.4-25; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3378; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 39. 327 IAC 8-3.4-27 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-27 Alternative to technical standards

Authority: IC 13-14-8; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 27. (a) An alternative to a technical standard required by this rule may be approved by the commissioner for either a single application or for a public water ~~supply~~ **system** system-wide application if the applicant demonstrates, in a written submission, that the alternative will meet the following:

(1) The requirements of 327 IAC 8-3-4.

(2) Provide drinking water of at least the same quality and normal operating pressure at the peak flow rate as the technical standards in this rule would provide.

(b) An alternative to a technical standard required by this rule may be approved by the commissioner for all public water systems or a subset of public water systems if the alternative will meet the following:

(1) The requirements of 327 IAC 8-3-4.

(2) Provide drinking water of at least the same quality and normal operating pressure at the peak flow rate as the technical standards in this rule would provide.

~~(b)~~ **(c)** Continuing operation of the approved alternative technical standard shall require no renewal if the alternative technical standard is operated in the manner approved by the commissioner.

~~(c)~~ **(d)** An alternative to a technical standard **approved under subsection (a)** shall only apply to the application or the public water ~~supply~~ system for which the alternative is requested. *(Water Pollution Control Board; 327 IAC 8-3.4-27; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3379; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 40. 327 IAC 8-3.5-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.5-1 Definitions

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-2; IC 13-18-1; IC 13-18-3; IC 13-18-4; IC 13-18-16-8

Affected: IC 13-11-2; IC 13-15-2; IC 13-18

Sec. 1. In addition to the definitions contained in 327 IAC 8-3-1, the following definitions apply throughout this rule:

(1) "Alternative technical standard" means alternative technical standards as described in 327 IAC 8-3.2-20.

(2) "Average daily customer demand" means the average daily customer demand as determined in accordance with 327 IAC 8-3.3-2.

~~(3) "Entry point of the distribution system" means one (1) of the following points:~~

~~(A) For public water systems that utilize water treatment facilities, the point at which the drinking water has left the treatment~~

~~facilities and has entered the distribution system.~~

~~(B) For public water systems that do not utilize water treatment facilities, the point at which the drinking water has left the supply facilities and has entered the distribution system.~~

~~(4)~~ **(3)** "General construction permit ban" means a decision issued in conformance with section 8 of this rule.

~~(5)~~ **(4)** "Notice of intent letter" or "NOI" means a written notification indicating a responsible person has elected to comply with the terms of this general construction permit rule ~~in lieu~~ **instead** of applying for an individual construction permit.

~~(6)~~ **(5)** "Peaking factor" means the peak daily customer demand factor as determined in accordance with 327 IAC 8-3.3-2.

~~(7) "Public water system" means a public water supply for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves at least twenty-five (25) individuals daily at least sixty (60) days out of the year. The term includes any collection, treatment, storage, and distribution facilities under control of the operator of such system, t and used primarily in connection with such system and any collection or pretreatment storage facilities not under such control that are used primarily in connection with such system.~~

~~(8)~~ **(6)** "Public water system's daily capacity" means the public water system's daily capacity as determined in accordance with 327 IAC 8-3.3-3.

~~(9)~~ **(7)** "Responsible person" means a person as described by section 6 of this rule.

~~(10) "Two (2) year average peak" means the arithmetic mean of the highest five (5) daily pumpages as reported over the previous two (2) year period on the public water system's monthly report of operations on record with the department. If the public water system is less than two (2) years old, the term means the arithmetic mean of the highest five (5) daily pumpages as reported on the public water system's monthly report of operations on record with the department.~~

~~(11) "Water main" means any pipe located between all entry points to the distribution system and all customer service connection meters.~~

~~(12)~~ **(8)** "Transmission main" means ~~a~~ **any** pipe ~~described by any of the following:~~ **that:**

(A) ~~That~~ transports water from a:

(i) surface water intake to a surface water treatment plant; **or**

~~(B) That transports water from a groundwater intake~~ **(ii)** well to a water treatment plant; ~~(if present);~~

~~(C) That~~ **(B)** transports:

(i) finished water from the treatment plant ~~(if present)~~ to the entry point ~~of~~ **to** the **water** distribution system; **or**

(ii) water from a well to the entry point to the water distribution systems if there is no water treatment plant; or

~~(D) That~~ **(C)** is installed for the purpose of interconnecting separate public water systems.

(Water Pollution Control Board; 327 IAC 8-3.5-1; filed Mar 31, 1999, 10:20 a.m.: 22 IR 2522; errata filed Aug 17, 1999, 3:15 p.m.: 23 IR 25; filed Mar 6, 2000, 7:56 a.m.: 23 IR 1627; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 41. 327 IAC 8-3.5-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.5-2 Incorporation by reference

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-2; IC 13-18-1; IC 13-18-3; IC 13-18-4; IC 13-18-16-8
Affected: IC 13-11-2; IC 13-18

Sec. 2. (a) The following materials are incorporated by reference into this rule, to the extent provided in other sections of this rule:

(1) ~~The American Water Works Association~~ **C700-02** AWWA Standard ~~C700-90.~~ **for Cold-Water Meters - Displacement Type, Bronze Main Case.**

(2) ~~The American Water Works Association~~ **C701-02** AWWA Standard ~~C701-88.~~ **for Cold-Water Meters - Turbine Type for Customer Service.**

(3) ~~The American Water Works Association~~ **C702-01** AWWA Standard ~~C702-92.~~ **for Cold-Water Meters - Compound Type.**

(4) ~~The American Water Works Association~~ **C703-96(R04)** AWWA Standard ~~C703-96.~~ **for Cold-Water Meters - Fire Service Type.**

(b) The matters incorporated by reference in subsection (a) may be obtained from either of the following:

(1) American Water Works Association, 6666 West Quincy Avenue, Denver, Colorado 80235.

(2) Indiana Department of Environmental Management, Office of Water ~~Management,~~ **Quality,** Indiana Government Center-North, 100 North Senate Avenue, Room 1255, Indianapolis, Indiana 46206.

(Water Pollution Control Board; 327 IAC 8-3.5-2; filed Mar 31, 1999, 10:20 a.m.: 22 IR 2522; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)

SECTION 42. 327 IAC 8-3.5-5 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.5-5 General construction permit conditions

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-2; IC 13-18-1; IC 13-18-3; IC 13-18-4; IC 13-18-16-8

Affected: IC 13-11-2; IC 13-18; IC 13-30

Sec. 5. (a) The proposed water main extension must meet the issuance requirements of 327 IAC 8-3-4.

(b) A copy of the NOI, all documentation supporting the project, plans, and specifications must be submitted to the public water system before the commencement of the water main construction.

(c) All documentation supporting the project must be readily accessible for review and ~~copy~~ **copying** for the duration of water main construction activities. In addition, a copy of the plans conforming to 327 IAC 8-3.2-5(c) and specifications must be available in accordance with the following:

(1) These items shall be on-site and readily accessible for review and ~~copy~~ **copying** throughout the duration of water main construction activities at the site if an office is present at the site.

(2) If there is no office present at the site, these items shall be producible for review and ~~copy~~ **copying** throughout the duration of water main construction activities at the site within sixty (60) minutes upon notification by the commissioner.

(d) Persons in violation of this rule shall take all reasonable steps to correct any adverse impact on the public health resulting from their noncompliance.

(e) Nothing in this rule shall be construed to relieve anyone from any responsibility, liability, or penalty to which they are or may be subject to under the local, state, or federal laws and regulations.

(f) Responsible persons identified by and regulated by this rule shall ensure that the construction to the public water system achieves compliance with the terms and conditions of this rule.

(g) During construction, where the:

(1) public water system;

(2) responsible person; ~~the~~ **or**

(3) responsible person's:

(A) professional engineer; ~~or the responsible person's~~

(B) developer;

(C) resident project representative; or

(D) person who by other means is representing the construction aspects of the proposed project;

becomes aware of a failure to submit any relevant facts or the submittal of incorrect information in a NOI, the responsible person shall promptly submit ~~such~~ **the** facts or corrected information to the commissioner in writing utilizing certified mail and the address on the NOI form.

(h) The design and construction of the water main must meet all technical standards in 327 IAC 8-3.2, or, if any alternate technical standards are proposed for the project, the alternate technical standard must be approved by the commissioner in accordance with 327 IAC 8-3.2-20, and a copy of this approval must be submitted with the NOI.

(i) All nonresidential service connections must be equipped with a meter, and the size of the meter must be specified on the plans and specification of the water main. The metering devices must not be capable of exceeding the corresponding "Safe Maximum Operating Capacity" as specified on Table 1 of AWWA ~~C700-90~~ **C700-02,** AWWA ~~C701-88~~ **C701-02,** AWWA ~~C702-92,~~ **C702-01,** or AWWA ~~C703-96.~~ **C703-96(04).**

(j) At a peak flow rate equal to the peak daily customer demand as determined in subsection (k), the normal operating pressure in the water main shall not be less than twenty (20) pounds per square inch at the ground level at all points in the water main under all conditions of flow when demonstrated in conformance with subsection (l).

(k) For use in this section, the peak flow rate is equal to the sum of subdivisions (1) and (2) defined as follows:

(1) The fire flow value that is one (1) of the following:

(A) The fire protection flow rate that is provided by the public water system for the entire water main extension.

(B) Zero (0) if the public water system is not providing fire protection.

(2) The peak daily demand for each of the individual service connections defined as follows:

(A) For residential service connections, the peak daily customer demand is determined in accordance with 327 IAC 8-3.3-2(a)(1), or the peak daily customer demand as approved by the commissioner in accordance with 327 IAC 8-3.3-2(a)(4).

(B) For nonresidential service connections with meter sizes less than one (1) inch in diameter, the peak daily customer demand is equal to fifty (50) gallons per minute.

(C) For nonresidential service connections, the peak daily customer demand is equal to the "Safe Maximum Operating Capacity" ~~flowrate~~ as specified on Table 1 of AWWA ~~C700-90,~~ **C700-02,** AWWA ~~C701-88,~~ **C701-02,** AWWA ~~C702-92,~~ **C702-01,** or AWWA ~~C703-96.~~ **C703-96(R04).**

(D) For nonresidential service connections, the peak daily customer demand as approved by the commissioner in accordance with 327 IAC 8-3.3-2(a)(4).

(l) The conformance with subsection (j) must be demonstrated with the use of a computer model or with hydraulic calculations, which must be included with the documentation supporting the project, that are to be readily accessible in accordance with subsection (c) and at the public water system in accordance with subsection (b).

(m) Persons in violation of this rule are subject to enforcement and legal action under IC 13-30. *(Water Pollution Control Board; 327 IAC 8-3.5-5; filed Mar 31, 1999, 10:20 a.m.: 22 IR 2524; errata filed Aug 17, 1999, 3:15 p.m.: 23 IR 26; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 43. 327 IAC 8-4-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-4-1 Public water system plans; approval by board

Authority: IC 13-14-8; IC 13-14-9; IC 13-15-2; IC 13-18-1; IC 13-18-3; IC 13-18-4; IC 13-18-16-8

Affected: IC 13-11-2; IC 13-18

Sec. 1. (a) No city, town, county, public institution, firm, corporation, ~~or~~ officer or employee thereof, or other person shall install or contract for the construction of any public water ~~supply~~ **system** facilities, including water purification or treatment works, or make any material change in any such existing facilities or works, until plans and specifications, together with an engineer report supporting in detail the design set forth in ~~such~~ **the** plans, shall have been submitted to and approved by the commissioner, so far as relates to their sanitary features **except for at small transient noncommunity public water systems which are set forth in section 2 of this rule.**

(b) After ~~such~~ **the** plans and specifications have been approved by the commissioner, no material changes in the location, plans, construction, or operation of any ~~such~~ **the** system or works may be made without first submitting to the commissioner a detailed statement of such proposed changes and receiving its approval.

(c) ~~Said~~ **The** plans, specifications, reports, and other information shall be submitted of ~~such~~ **the** form and contents as may from time to time be specified by the commissioner.

(d) Whenever information regarding:

(1) already existing water ~~supply~~ **system** facilities or water treatment works; or ~~regarding~~

(2) the operation and maintenance thereof;

may be required by the commissioner, the public officials, or person, firm, or corporation having the works in charge shall promptly furnish such information.

(e) All such plans hereafter to be submitted to the commissioner for approval shall:

(1) have been prepared by or under the supervision of a professional engineer legally registered in the state of Indiana;

(2) be certified by ~~him~~ **the professional engineer;** and

(3) bear ~~his~~ **the professional engineer's** official seal;

except as allowed for small transient noncommunity public water systems under section 2 of this rule.

(f) Provided that nothing contained in this rule ~~(327 IAC 8-4)~~ shall apply to water supplies installed or to be installed in connection with a private dwelling or residence. *(Water Pollution Control Board; 327 IAC 8-4-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 711; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

SECTION 44. 327 IAC 8-4-2 IS ADDED TO READ AS FOLLOWS:

327 IAC 8-4-2 Small transient noncommunity public water system construction requirements
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 2. (a) Construction at a small transient noncommunity public water system must be in accordance with section 1 of this rule and 327 IAC 8-3-2.1 except as allowed in subsections (b) and (c).

(b) Construction for the following items, if not installed to meet the requirements of 327 IAC 8-2, are not required to obtain a permit:
(1) Ion exchange softeners.
(2) Ultraviolet treatment.
(3) Cartridge filters.
(4) Reverse osmosis.
(5) Other items determined by the commissioner to not require a permit.

(c) A small nontransient noncommunity water system may proceed with construction of items listed in subsection (b) without meeting the requirements of section 1 of this rule, provided the following criteria are met:
(1) The installed construction or device must meet the requirements of 327 IAC 8-1.
(2) The small nontransient noncommunity public water system must notify the commissioner within thirty (30) days of completion of construction of the installation. The notification must be in writing and must include the following:
(A) The type of construction or device installed.
(B) The date of installation.
(C) Contact information for the contractor (if used).
Any construction must be designed and operated to meet the requirements of 327 IAC 8-6. *(Water Pollution Control Board; 327 IAC 8-4-2)*

SECTION 45. 327 IAC 8-6-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-6-1 Improvements required in public water system or treatment works
Authority: IC 13-14-8; IC 13-14-9; IC 13-15-1-2; IC 13-15-2-1; IC 13-18-3-1; IC 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

Sec. 1. (a) Whenever investigation by the commissioner shall show any public water ~~supply~~ system, ~~or~~ water treatment works, or any part thereof to be inadequate or to be improperly located, constructed, or operated, and by reason thereof to be causative of disease, or that the water obtained therefrom fails to meet the drinking water standards of 327 IAC 8-2, the person, firm, corporation or ~~municipally~~ **municipality** owning ~~and/or~~ **or** operating, ~~said~~ **or both, the** public water ~~supply~~ system or water treatment works, upon receipt of an official order from the commission, shall proceed within such time as is therein provided to carry out ~~such~~ **the** changes, extensions, or improvements, or to institute ~~such~~ **the** changes in the methods of operation of ~~said~~ **the** public water ~~supply~~ system or water treatment works as may be necessary to abate ~~such~~ **the** conditions.

(b) Any order of the commissioner shall:
(1) be a written order; and ~~shall~~
(2) establish a time within which the steps contemplated in ~~said~~ **the** order shall be carried out.

(c) Provided that ~~such~~ **the** official order shall not be issued by the commissioner until an opportunity for a hearing has been given to the person, firm, corporation, or municipality owning ~~and/or~~ **or** operating, ~~said~~ **or both, the** public water ~~supply~~ system or water treatment works, at which hearing the facts as shown by the investigation made by ~~said~~ **the** commissioner shall be presented to ~~said~~ **the** person, firm, corporation, or municipality. Notice of ~~such~~ **the** hearing shall be given not less than ten (10) days ~~prior to~~ **before** the date set for ~~said~~ **the** hearing. *(Water Pollution Control Board; 327 IAC 8-6-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 712; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518)*

Notice of First Meeting/Hearing

Under IC 4-22-2-24, IC 13-14-8-6, and IC 13-14-9, notice is hereby given that on March 9, 2005, at 1:30 p.m., at the Indiana Government Center-South, 402 West Washington Street, Conference Center Room A, Indianapolis, Indiana, the Water Pollution Control Board will hold a public hearing on amendments to 327 IAC 8-1, 327 IAC 8-3, 327 IAC 8-3.1, 327 IAC 8-3.2, 327 IAC 8-3.3, 327 IAC 8-3.4, 327 IAC 8-3.5, 327 IAC 8-4, and 327 IAC 8-6.

The purpose of this hearing is to receive comments from the public prior to preliminary adoption of these rules by the board. All interested persons are invited and will be given reasonable opportunity to express their views concerning the proposed amendments. Oral statements will be heard, but, for the accuracy of the record, all comments should be submitted in writing.

Additional information regarding this action may be obtained from Kiran Verma, Rules Section, Office of Water Quality, (317) 234-0986 or (800) 451-6027 (in Indiana). Technical information concerning these rules may be obtained from Stacy Jones, Drinking Water Branch, Office of Water Quality, (317) 308-3292 or (800) 451-6027 (in Indiana).

Individuals requiring reasonable accommodations for participation in this event should contact the Indiana Department of Environmental Management, Americans with Disabilities Act coordinator at:

Attn: ADA Coordinator
Indiana Department of Environmental Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

or call (317) 233-0855 or (317) 232-6565 (TDD). Speech and hearing impaired callers may contact IDEM via the Indiana Relay Service at 1-800-743-3333. Please provide a minimum of 72 hours' notification.

Copies of these rules are now on file at the Office of Water Quality, Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Twelfth Floor, Indianapolis, Indiana and are open for public inspection.