Bold = new language
~~Strikeout~~ = existing language deleted in this rulemaking

TITLE 327 WATER POLLUTION CONTROL DIVISION

DRAFT RULE
LSA Document #24-428

DIGEST

Adds, amends, and appeals rules at 327 IAC 8 concerning updates to the lead and copper National Primary Drinking Water Regulations at 40 CFR 141; the references to the Recommended Standards for Water Works, also known as the Ten States Standards; the American Water Works Association (AWWA) and American Society for Testing and Materials (ASTM) standards; and existing federal language in the state rule by replacing it with incorporations by reference of the federal rules for all drinking water standards. Effective 30 days after filing with the Publisher.

HISTORY

First Notice of Comment Period: November 13, 2024, Indiana Register (DIN: 20241113-IR-327240428FNA).
Notice of First Hearing: November 13. 2024, Indiana Register (DIN: 20241113-IR-327240428PHA).
Regulatory Analysis: November 13, 2024, Indiana Register (DIN: 20241113-IR-327240428RAA)
Date of First Hearing: March 12, 2025.

327 IAC 8

DRAFT RULE

SECTION 1. 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 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 and 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 to the distribution system" means one (1) of the following points:

(A) In 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) In 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 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:

(A) water treatment plant;
(B) wastewater treatment plant; or
(C) water distribution system.

(5) "Public water system", "public water supply", "public water supply system", "PWS", or "PWSS":

(A) means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if the system:

(i) has at least fifteen (15) service connections; or
(ii) regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year;

(B) includes any:

(i) collection, treatment, storage, and distribution facilities under **the** control of the operator of the system and used primarily in connection with the system; and
(ii) collection or pretreatment storage facilities not under the operator's control that are used primarily in connection with the system; and

(C) is either a CWS, as defined in ~~327 IAC 8-2-1(12)~~ **40 CFR 141.2*,** or an NCWS, as defined in ~~327 IAC 8-2-1(63)~~ **40 CFR 141.2*.**

***This document is incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2947; readopted filed Jul 18, 2012, 2:25 p.m.: 20120815-IR-327120261BFA; readopted filed Jun 6, 2018, 1:59 p.m.:*

20180704-IR-327180171BFA; filed May 5, 2022, 9:24 a.m.: 20220601-IR-327210132FRA)

SECTION 2. 327 IAC 8-2.7 IS ADDED TO READ AS FOLLOWS:

Rule 2.7. Federal Drinking Water Standards

327 IAC 8-2.7-1 Federal standards

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 13-18

Sec. 1. (a) A public water system must comply with the primary drinking water regulations in 40 CFR 141.1 through 141.861*, as amended by 89 FR 5773*, and this article.

(b) Unless otherwise indicated, any reference to a provision of the Code of Federal Regulations (CFR) means the July 1, 2023, edition*.

***These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 327 IAC 8-2.7-1)*

327 IAC 8-2.7-2 Exceptions to federal rule

Authority: IC 13-14-8; IC 13-14-9
Affected: IC 13-11-2; IC 13-18

Sec. 2. (a) The following are deletions to federal regulations in 40 CFR 141 for public water systems (PWSs):

(1) The effective date relating to the total coliform MCL in 40 CFR 141.4(b) for systems that demonstrate the violation of total coliform MCL is due to persistent growth of total coliforms in the distribution system.
(2) Siting requirements for constructing new PWSs or expanding existing PWSs in 40 CFR 141.5.
(3) The definition for "special irrigation district" in 40 CFR 141.2.
(4) Variances and exemptions in 40 CFR 141.4.
(5) Aircraft drinking water standards in 40 CFR 141.800 through 141.810.

(b) The use of unfiltered water systems referenced in 40 CFR 141 is prohibited. *(Water Pollution Control Division; 327 IAC 8-2.7-2)*

327 IAC 8-2.7-3 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

Sec. 3. (a) Unless otherwise indicated, the definitions in the following apply to this article:

(1) IC 13-11-2.
(2) This rule.
(3) 40 CFR 141.2*.

(b) In addition to subsection (a), the following definitions apply to this article:
(1) "Adjustment program" means the addition of fluoride to drinking water by a public water system for the prevention of dental cavities.
(2) "Contaminant" means any of the following introduced or found in drinking water:
(A) Microorganisms.
(B) Chemicals.
(C) Waste.
(D) A physical substance.
(E) A radiological substance.
(F) Wastewater.
(3) "Drinking water violation", for purposes of this rule, means a violation of the:
(A) MCL;
(B) treatment technique (TT);
(C) monitoring requirements;
(D) reporting requirements; or
(E) testing procedures.
(4) "Service interruption" means a disturbance in the provision of water to a customer affecting quality or quantity.
(5) "Surface water" means all water occurring on the surface of the ground, including water in the following:
(A) Streams.
(B) Natural and artificial lakes.
(C) Ponds.
(D) Swales.
(E) Marshes.
(F) Diffused surface water.
(G) Rainwater catchment.
(6) "Undetectable disinfectant residual" means a disinfectant residual level that is less than:
(A) two-tenths (0.2) milligram per liter measured as free chlorine;
(B) five-tenths (0.5) milligram per liter measured as combined chlorine (chloramines); or
(C) one-tenth (0.1) milligram per liter measured as chlorine dioxide.
The commissioner may require a system to demonstrate the level of chloramines present when measured as combined chlorines under clause (B).
(7) "Water loss" means the following:
(A) A calculation based on the difference between the following:
(i) The amount of water purchased.
(ii) The annual volume of water metered, including unmetered water taken by the following:
(AA) Customers authorized to take water.
(BB) The water system.

(CC) Others authorized to take water.

(B) Inclusions of the following:

(i) Unauthorized consumption.

(ii) Metering inaccuracies.

(iii) Data handling errors.

(iv) Leaks, breaks, and overflows on the following:

(AA) Mains.

(BB) Service reservoirs.

(CC) Service connections up to the point of customer metering.

***These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 327 IAC 8-2.7-3)*

SECTION 3. 327 IAC 8-2.8 IS ADDED TO READ AS FOLLOWS:

Rule 2.8. Sanitary Survey Requirements

327 IAC 8-2.8-1 Sanitary surveys

Authority: IC 13-8-3-1; IC 13-13-5; IC 13-14-8-2; IC 13-14-8-7; IC 13-18-3-2; IC 13-18-16-8; IC 13-18-16-9

Affected: IC 13-13-5-2; IC 13-18-2; IC 13-18-11; IC 13-18-16-6

Sec. 1. (a) In addition to the sanitary survey requirements in 40 CFR 141.21* and 40 CFR 141.401*, the requirements of this section must be conducted as follows:

(1) Beginning:

(A) January 1, 2002, a Subpart H system must undergo a sanitary survey every three (3) years; and

(B) December 1, 2009:

(i) a CWS using ground water must undergo a sanitary survey every three (3) years; and

(ii) an NCWS using ground water must undergo a sanitary survey every five (5) years.

(2) The commissioner may conduct a sanitary survey at a CWS using ground water every five (5) years if the CWS:

(A) either:

(i) provides 4-log treatment of viruses before or at the first customer for all the CWS's ground water sources; or

(ii) has an outstanding performance record, as determined by the commissioner and documented in previous sanitary surveys; and

(B) has no history of:

(i) total coliform MCL violations; or

(ii) monitoring violations;

under 40 CFR 141, Subpart Y*.

(b) Until March 31, 2016, the commissioner shall review the results of each sanitary survey to determine:

(1) whether the existing monitoring frequency is adequate;

(2) what measures the PWS needs to undertake to improve drinking water quality; and

(3) whether significant deficiencies exist.

(c) Beginning April 1, 2016, the requirements under 40 CFR 141, Subpart Y* apply to conducting and reviewing a sanitary survey.

(d) In conducting a sanitary survey of a PWS using ground water after the commissioner approves a wellhead protection program under 327 IAC 8-4.1, information on sources of contamination within the delineated wellhead protection area that was collected while developing and implementing the program must be considered instead of collecting new information if the existing information was collected since the last time the PWS using ground water was subject to a sanitary survey.

(e) Sanitary surveys must be performed by the commissioner or an agent approved by the commissioner. The PWS shall ensure that the:

(1) sanitary survey takes place; and

(2) commissioner or agent approved by the commissioner has access to the PWS and its records to verify compliance with this article and the Safe Drinking Water Act (SDWA) (42 U.S.C. 300f through 42 U.S.C. 300j-26).

(f) The Indiana department of environmental management (department) shall evaluate each PWS during a sanitary survey in accordance with this section to determine if deficiencies exist. Deficiencies include the following:

(1) Deficiencies relating to drinking water sources, including the following:

(A) Raw water quality monitoring that is indicative of an immediate sanitary risk.

(B) Activities or pollution sources in the sanitary setback area or immediate source water area that will cause risks.

(C) Failure by the PWS to maintain ownership or control of the sanitary setback area, where the PWS is required to maintain a setback as:

(i) permitted under 327 IAC 8-3 for wells installed after April 30, 1999; or

(ii) specified in a permit issued by the commissioner prior to April 30, 1999.

(D) Uncovered or inadequately sealed reservoirs without treatment that meet the requirements of 40 CFR 141, Subpart H.

(E) Failure by the PWS to put measures in place to prevent unauthorized access to the intakes or wells.

(F) For a Subpart H system, spring boxes that are poorly constructed or subject to flooding.

(G) For a PWS using ground water, in whole or in part, the following must be evaluated for deficiencies:

(i) The location or condition of a well making it vulnerable to surface water runoff or flooding, including:

(AA) the elevation of casing not protected from a one hundred (100) year flood; or

(BB) the presence of a well not properly abandoned under 312 IAC 13-10 in the wellhead protection area for a CWS as defined by 327 IAC 8-4.1 or, for an NCWS, the sanitary setback area required to be maintained under 327 IAC 8-3 for wells installed after April 30, 1999, or as specified in a permit issued by the commissioner before that date.

(ii) Improperly constructed wells.

(iii) The condition of a well creating potential for source water contamination, including a:

(AA) cracked casing;

(BB) missing well cap; or

(CC) casing not properly sealed.

(iv) When required by the commissioner, a well must be evaluated to determine if it is under the influence of surface water.

(2) Deficiencies relating to drinking water treatment, including the following:

(A) For a Subpart H system and a PWS using ground water with 4-log virus inactivation at or before the first customer, inadequate disinfection contact time.

(B) At least one (1) of the treatment processes is incapable of producing water that meets the standards under the conditions of raw water quality.

(C) There are no provisions to warn operators of treatment failures.

(D) Failure by the PWS to have a disinfection profile as required under 40 CFR 141.172* or 40 CFR 141, Subpart T*.

(E) Treatment processes required to meet log removal requirements under 40 CFR 141, Subpart S* or 40 CFR 141, Subpart W* are not maintained or operational.

(F) The treatment capacity for contaminants regulated under this article is not sufficient to meet peak daily demand.

(G) There is unrestricted access by unauthorized personnel to any portion of the treatment components of a PWS.

(H) Treatment processes are uncovered or inadequately sealed where the treatment does not meet the requirements of 40 CFR 141, Subpart H* and 40 CFR 141, Appendix A to Subpart O*.

(3) Deficiencies relating to drinking water distribution and transmission, including the following:

(A) For a Subpart H system, a raw water transmission main equipped with a bypass around the treatment.

(B) Improper operation of a bypass on a raw water transmission line that produces finished water that does not meet the requirements of this article.

(C) Pressures in the distribution system below twenty (20) pounds per square inch (psi) during all flow conditions, except the following:

(i) Scheduled maintenance.

(ii) Corrected distribution system failures.

(iii) Fire flow.

(D) Greater than twenty-five percent (25%) water loss at a CWS based on a one (1) year average.

(E) Failure by the PWS to make treatment or operational changes to correct persistent or recurring bacteriological contamination not attributable to the source water. The commissioner may require treatment to remedy bacteriological contamination.

(F) For a PWS that serves water to the public and fails to meet the following:

(i) The following PWS types must meet the requirements under item (ii):

(AA) A PWS using ground water that meets 4-log inactivation of viruses at or before the first customer using chlorine or chloramine.

(BB) A PWS using ground water that feeds chlorine or chloramines to meet the conditions of a permit or setback requirements.

(CC) Any PWS using ground water that is required by the commissioner to provide disinfection due to a history of persistent or recurring bacteriological contamination.

(DD) Any PWS adding a disinfectant to control bacterial regrowth in the distribution system.

(EE) Any Subpart H system.

(ii) The following requirements must be met by the PWSs under item (i):

(AA) The residual disinfectant concentration in the distribution system, measured as free chlorine, combined chlorine, or chlorine dioxide, is undetectable in more than five percent (5%) of the samples each month for two (2) consecutive months.

(BB) A PWS may request that the commissioner allow a lower detection level than specified in 327 IAC 8-2.7-3(6), if the PWS can show that the bacteriological quality of the water in the distribution system is not being compromised. The request must be made in writing, and the commissioner shall respond to the request in writing.

(CC) If required by the commissioner to maintain public health, a PWS may be required to meet higher minimum disinfectant residual levels than specified under subitem (AA).

(4) Deficiencies relating to finished water storage, including the following:

(A) Inadequate sealing of a storage tank to prevent entry of contaminants.

(B) Inadequate maintenance of a storage tank that results in:

(i) a violation of standards; or

(ii) the storage tank being structurally unsound.

(C) Venting of a storage tank that fails to prevent the entrance of:

(i) surface water;

(ii) rainwater;

(iii) birds;

(iv) animals;

(v) insects; or

(vi) dust.

(D) Construction and screening of an overflow pipe and drain that does not meet the following criteria:

(i) Located twelve (12) to twenty-four (24) inches above the ground surface.

(ii) Discharge over a drainage inlet structure or splash plate.

(iii) Opens downward.

(iv) For ground level storage, the overflow drain is screened with twenty-four (24) mesh noncorrodible screen.

(v) For elevated tanks, the overflow drain is screened with a twenty-four (24) mesh noncorrodible screen.

(vi) If a flapper valve is used, a screen must be provided inside the valve.

(vii) An overflow pipe of sufficient diameter to allow waste of water exceeding the filling rate.

(E) An uncovered finished water reservoir.

(F) Failure to maintain access restrictions where necessary to prevent contamination.

(5) Deficiencies relating to drinking water pumps, pump facilities, and controls, including the following:

(A) Storage of materials at the pumping station that:

(i) offer potential for contamination of the water; or

(ii) pose safety risks to operators.

(B) Pumps and facilities that are not:

(i) designed appropriately; or

(ii) properly operated and maintained.

(6) Deficiencies relating to monitoring, reporting, and data verification, including the following:

(A) The use of improper procedures or methods when conducting required onsite laboratory analyses.

(B) Failure to use a certified laboratory.

(C) Falsification of data.

(D) Failure to collect required samples.

(E) A sampling plan required under any of the following rules is not available, not being followed, or not representative of the water distribution system:

(i) Total coliform rule (TCR), in 40 CFR 141, Subpart Y*.

(ii) Stage 1 disinfectants and disinfection byproducts rule, in 40 CFR 141, Subpart L.

(iii) Stage 2 disinfectants and disinfection byproducts rule, in 40 CFR 141, Subpart V.

(iv) Ground water rule (GWR) triggered monitoring plan, in 40 CFR 141, Subpart S.

(F) Failure to submit properly documented monthly reports of operation under 327 IAC 8-11.

(7) Deficiencies relating to system management and operations, including the following:

(A) The PWS has inadequate personnel to meet the requirements of 327 IAC 8-12.

(B) Emergency response plan requirements that fail to meet the following:

(i) The following PWSs must develop an emergency response plan:

(AA) A CWS.

(BB) An NCWS that is required or plans to maintain operation during an emergency.

(ii) An emergency response plan must include the following core elements:

(AA) System specific information.

(BB) Water system personnel roles and responsibilities.

(CC) Communication procedures.
(DD) Personnel safety.
(EE) Identification of alternate water sources.
(FF) Replacement equipment and chemical supplies.
(GG) Property protection.
(HH) Water sampling and monitoring.

(C) The PWS does not have an updated emergency response plan that includes annual certification of the following:

(i) Proof that the emergency response plan was:
(AA) reviewed in the past year; and
(BB) updated if necessary.

(ii) Current contact information is included in the emergency response plan.

(D) Failure by the PWS to protect the water supply from contamination when any part of the PWS is out of service for:

(i) repair;
(ii) construction;
(iii) alteration; or
(iv) replacement.

(E) Failure by the PWS to operate and maintain the PWS in a manner to ensure providing water that meets all requirements of the SDWA (42 U.S.C. 300f through 42 U.S.C. 300j-26) and IC 13-18-16-6. Measures to meet these requirements must include having and carrying out a written or otherwise documented approach for the following:

(i) Maintaining a record of system components, including information necessary to:
(AA) operate;
(BB) maintain; and
(CC) repair;
system components.

(ii) Ensuring system components are operated and maintained to:
(AA) meet requirements of the SDWA; and
(BB) provide water that is suitable for ordinary domestic consumption.

(iii) Ensuring timely response and repair if component failure occurs.
(iv) Maintaining an inventory of critical spare parts.
(v) Performing compliance monitoring.
(vi) Maintaining records pertaining to these requirements.

The requirements of this clause apply to all CWSs and any NCWS required to meet the standards in 410 IAC 16.2-5-1.6(d). The commissioner may also require an NCWS with unaddressed deficiencies, including service outages, monitoring and reporting violations, or public notification violations, to meet the requirements of this clause.

(F) Failure by the PWS to notify the department within twenty-four (24) hours of a service interruption lasting at least eight (8) hours. Notification must be made by one (1) of the following means:

(i) Email.
(ii) Telephone.

(iii) Other means approved by the commissioner.

(8) Deficiencies relating to operator certification, including the PWS being in noncompliance with 327 IAC 8-12.

(g) The following may be classified as significant deficiencies:

(1) Any of the:

(A) deficiencies included in subsection (e); or

(B) other conditions that are found during a sanitary survey or other site visit that may have a potential to cause an immediate risk to human health.

(2) Any deficiency:

(A) under the control of the PWS and was found by the department during a previous sanitary survey, but has not been corrected; or

(B) for which the PWS is not in compliance with a correction schedule approved by the commissioner.

(h) Subpart H systems shall respond in writing to any deficiency found during a sanitary survey and reported to the Subpart H system by the commissioner. Response requirements are as follows:

(1) The response must:

(A) be made within forty-five (45) days after receiving the report; and

(B) indicate:

(i) how the PWS will address deficiencies found during the sanitary survey; and

(ii) on what schedule the PWS will address deficiencies found during the sanitary survey.

(2) The commissioner's report must indicate whether deficiencies found during the sanitary survey are under the control of the PWS.

(i) A PWS using ground water shall respond in writing to any deficiency found during a sanitary survey that is reported to the PWS using ground water by the commissioner. Response requirements are as follows:

(1) The response must:

(A) be made within thirty (30) days after receiving the report; and

(B) indicate:

(i) how the PWS will address deficiencies found during the sanitary survey; and

(ii) on what schedule the PWS will address deficiencies found during the sanitary survey.

(2) The commissioner's report must indicate whether deficiencies found during the sanitary survey are under the control of the PWS.

(j) If a comprehensive performance evaluation is required under 40 CFR 141.563*, the PWS shall implement any follow-up recommendations that result as part of the program.

(k) The commissioner may require a shorter time frame than required by this section for response or addressing deficiencies if the commissioner determines the deficiency poses an immediate health risk.

***This document is incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 327 IAC 8-2.8-1)*

SECTION 4. 327 IAC 8-3-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3-1 Definitions and general requirements

Authority: IC 13-14-8; IC 13-14-9

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 in IC 13-11-2 and 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) "Early warning order" means an order imposed by the commissioner in accordance with section 4.2 of this rule.

(3) "Experimental permit" means a construction permit issued for an installation, **a** treatment process, or **a** 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.

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

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

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

(10) "Small nontransient noncommunity public water system" means a ~~public water system~~ **PWS** that:

(A) meets the definition of a nontransient noncommunity ~~public water system~~ **PWS** under ~~327 IAC 8-2-1;~~ **327 IAC 8-2.7-3;**

(B) serves one hundred (100) or fewer individuals; and

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

(11) "Small transient noncommunity public water system" means a ~~public water system~~ **PWS** that:

(A) meets the definition of a transient noncommunity ~~public water system~~ **PWS** under ~~327 IAC 8-2-1;~~ **327 IAC 8-2.7-3;**

(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.

(12) "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~~ **PWS's** monthly report of operations on record with the department. If the ~~public water system~~ **PWS** 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~~ **PWS's** monthly report of operations on record with the department.

(13) "Water main" means any pipe located between all entry points to the water distribution system and the premises of the consumer.

(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2948; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 5. 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~~ **A person shall not** cause or allow the construction, installation, or modification of any facility, equipment, or device for ~~any public water system~~ **a PWS** 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:

(1) the plant operation;

(2) its hydraulic design or waste products; or

(3) 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:

(1) 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)~~ **(A)** the plant operation;

~~(2)~~ **(B)** its hydraulic design or waste products; or

~~(3)~~ **(C)** the water distribution system design, operation, or capacity;

without first submitting in writing to the commissioner a detailed statement of the proposed changes and receiving an amended construction permit from the commissioner; **and**

(2) the construction ~~permits~~ **permit** shall become void if the construction is not started within one (1) year ~~from~~ **after** the date of issuance of the permit unless the duration of the permit has been extended:

(A) by the commissioner after receiving a written request from the permittee;

(B) before the expiration of the permit; ~~requesting the extension~~ **and**

(C) with no other changes to the permit, application, plans, or specifications as approved by the commissioner.

(c) The commissioner ~~shall have~~ **has** 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 **either of the following reasons:**
(1) Noncompliance with the limits and conditions specified in the permit. ~~or if~~
(2) Significant and unapproved changes are made in construction that differ from the:
(A) application; **or**
(B) plans and specifications;
on which the issuance of the permit was based.

(e) The commissioner may issue construction permits for ~~public water system~~ **PWS** 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:~~ **phases.**

~~(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 before the construction of 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~~ **types** 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 **for an emergency condition that is the result of:**

(1) a drought;

(2) a storm;
(3) a flood; or
(4) any other natural or manmade disaster.

(h) **The following requirements apply to** an after-the-fact construction permit: ~~must be obtained~~
(1) Except as described in subdivision (2), a PWS that lacks a valid construction permit issued from the department must obtain an after-the-fact construction permit from the commissioner ~~upon notification to~~ **when** the ~~public water system~~ **PWS is notified** by the commissioner of completed or progressing:

(A) construction;
(B) installation; or
(C) modification;

of any facility, equipment, or device. ~~for any public water system lacking a valid construction permit issued from the department, except~~
(2) An after-the-fact construction permit is not required where: ~~replacement of~~

(A) equipment **is replaced with equipment** of similar design and capacity; **and**
(B) the replacement done under clause (A) will not change adversely the plant:

(i) operation; ~~its~~
(ii) hydraulic design; ~~or~~
(iii) waste products; or ~~the~~
(iv) water distribution system design, operation, or capacity. ~~The following additional conditions apply to after-the-fact construction permits:~~

~~(1)~~ **(3)** The commissioner may order that no additional construction may commence or continue **to** progress until the after-the-fact construction permit has been ~~obtained.~~ **issued to the PWS.**
~~(2)~~ **(4)** As-built plans and specifications **must be submitted to the commissioner according to the following:**

(A) A PWS must submit the plans and specifications within one hundred twenty (120) days after notification by the commissioner.
(B) Plans must be certified by a professional engineer registered in Indiana. ~~covering~~
(C) Plans must cover 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)~~ **(5)** Modifications ~~as~~ required by the commissioner after review of the as-built plans and specifications ~~shall~~ **must** be made within the time limits specified by the commissioner.
~~(4)~~ **(6)** The commissioner may require interim measures **to be** taken **by the PWS** during **the department's** review of **the submitted as-built plans and specifications as required under subdivision (4) while considering the issuance of** an after-the-fact construction permit, including, **but not limited to,** boil orders to ensure: ~~safe~~

(A) drinking water of satisfactory quality; and
(B) normal operating pressure at the peak operating flow rate;

in accordance with this article.
~~(5)~~ **(7)** An after-the-fact construction permit does not relieve a ~~public water system~~ **PWS** or any other person of ~~any~~ liability for construction without a valid permit from the commissioner.

(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2949; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 6. 327 IAC 8-3-4 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3-4 Issuance 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. 4. The commissioner may deny ~~the~~ **an** application for ~~any~~ **a** permit required by this rule unless the applicant submits evidence that the following issuance requirements are met:

(1) The facility is designed to be constructed, modified, or installed and operated in ~~such~~ a manner that ~~it~~ will not violate ~~any of~~ the:

(A) sanitary or health regulations; or

(B) requirements;

existing at the time of application for the permit.

(2) The facility:

(A) conforms to the **applicable** design criteria in the:

(i) "Recommended Standards for Water Works", **2022 Edition,** established by the Great Lakes—Upper Mississippi River Board of State Public Health and Environmental Managers*; ~~the~~ **and**

(ii) American Water Works Association (AWWA) standards**; or

(B) is based on ~~such~~ criteria acceptable to the commissioner, which the applicant shows will produce:

(i) drinking water of satisfactory quality; and

(ii) normal operating pressure at the peak operating ~~flowrate~~ **flow rate;**

in accordance with this article.

(3) The facility ~~will conform~~ **conforms** to any additional requirements specified by the commissioner **necessary** to produce consistently satisfactory results.

(4) The plans for wastewater disposal meet the requirements of the commissioner **in 327 IAC 3 and 327 IAC 5.**

(5) All additional substantiating information requested by the commissioner ~~has been~~ **is** submitted.

***This document is incorporated by reference. Copies may be obtained from Minnesota Government Publications, 2980 Commers Drive, Suite 500, Eagan, MN 55121 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204.**

****These documents are incorporated by reference. The version incorporated by reference is the version in effect as of December 31, 2023. Copies may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204.** *(Water Pollution*

Control Division; 327 IAC 8-3-4; filed Sep 24, 1987, 3:00 p.m.: 11 IR 710; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2496; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 7. 327 IAC 8-3.1-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.1-2 Units for water main extension construction; permitting authority and responsibilities

Authority: IC 13-14-8; IC 13-14-9

Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2; IC 36-1-2-23

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, **as defined in IC 36-1-2-23,** concerning the design or construction of a public water main.

(2) A professional engineer prepared the plans.

(3) The unit, **as defined in IC 36-1-2-23,** provided a review **and approval** 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 board are met.

(b) The proposed construction of a water main must be in accordance with the following:

(1) The ~~Safe Drinking Water Act~~ **SDWA,** 42 U.S.C. 300f-300j-26*.

(2) The Clean Water Act, 33 U.S.C. 1251-1387*.

(c) ~~The other requirements specified in rules that have been adopted by the board and must be adhered to in the permitting of~~ A **permit for a** public water main ~~include~~ **must comply with** the following:

(1) 327 IAC 8-1: Public Water Supply Direct Additive and Indirect Additive Standards.

(2) ~~327 IAC 8-2~~ **327 IAC 8-2.7: Federal** Drinking Water Standards.

(3) 327 IAC 8-2.8: Sanitary Survey Requirements.

~~(3)~~ **(4)** 327 IAC 8-3.2: Technical Standards for Water Mains.

~~(4)~~ **(5)** 327 IAC 8-3.3: Public Water System Quantity Requirement Standards.

~~(5) 327 IAC 8-3.3-4: Additional public water system quantity requirement standards for school buildings and related facilities.~~

~~(6) 327 IAC 8-3.3-5: Additional public water system quantity requirement standards for mobile home parks.~~

~~(7) 327 IAC 8-3.3-6: Additional public water system quantity requirement standards for agricultural labor camps.~~

~~(8)~~ **(6)** 327 IAC 8-10: Cross Connections; Control; Operation.

(d) Units, **as defined in IC 36-1-2-23,** shall ~~notify the commissioner of all public water main construction permits that the unit has issued by submitting~~ **submit** to the department, on the effective date of the permit, a copy of each issued permit **for public water main construction.** Each submission must contain the following information for each issued permit:

(1) The identification number ~~that has been~~ issued by the local unit, **as defined in IC 36-1-2-23.**

(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.

*Copies of these publications may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, ~~Indiana~~ **IN** 46204. *(Water Pollution Control Division; 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; errata filed Feb 6, 2006, 11:15 a.m.: 29 IR 1937; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2951; readopted filed Jul 18, 2012, 2:25 p.m.: 20120815-IR-327120261BFA; readopted filed Jun 6, 2018, 1:59 p.m.: 20180704-IR-327180171BFA; filed Sep 6, 2018, 11:50 a.m.: 20181003-IR-327170278FRA)*

SECTION 8. 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~~ **must** 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/A21.4-03 American National~~ **C104-22/A21.4-22 AWWA** Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water*.
(B) ~~C105/A21.5-99 American National~~ **C105/A21.5-18 AWWA** Standard for Polyethylene Encasement for Ductile-Iron Pipe Systems*.
(C) ~~C110/A21.10-03 American National~~ **C110/A21.10-21 AWWA** Standard for Ductile-Iron and Gray-Iron Fittings*. ~~for Water~~

(D) ~~C111/A21.11-00 American National~~ **C111/A21.11-23 AWWA** Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings*.
(E) ~~C115/A21.15-99 American National~~ **C115/A21.15-20 AWWA** Standard for Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges*.
(F) ~~C150/A21.50-02~~ **C150/A21.50-21 AWWA Standard for** Thickness Design of Ductile-Iron Pipe*.
(G) ~~C151/A21.51-02 American National~~ **C151/A21.51-17 AWWA** Standard for Ductile-Iron Pipe, Centrifugally Cast*. ~~for Water~~
(H) ~~C153/A21.53-00 American National~~ **C153/A21.53-19 AWWA** Standard for Ductile-Iron Compact Fittings*. ~~for Water Service~~

(2) For steel pipe, the following standards apply:
(A) ~~C200-97~~ **C200-17** AWWA Standard for Steel Water Pipe-6 In. (150 mm) and Larger*.
(B) ~~C203-02~~ **C203-20** AWWA Standard for Coal-Tar Protective Coatings and Linings for Steel Water ~~Pipelines-Enamel and Tape-Hot Applied~~ **Pipe*.**
(C) ~~C205-00~~ **C205-18** AWWA Standard for Cement-Mortar Protective Lining and Coating for Steel Water Pipe-4 In. (100 mm) and Larger-Shop Applied*.
(D) ~~C206-97~~ **C206-17** AWWA Standard for Field Welding of Steel Water Pipe*.
(E) ~~C207-01~~ **C207-18** AWWA Standard for Steel Pipe Flanges for Waterworks Service-Sizes 4 In. through 144 In. (100 mm through 3,600 mm)*.
(F) ~~C208-01~~ **C208-22** AWWA Standard for Dimensions for Fabricated Steel Water Pipe Fittings*.
(G) ~~C209-00~~ **C209-19** AWWA Standard for ~~Cold-Applied~~ Tape Coatings for ~~the Exterior of Special Sections, Connections, and Fittings for~~ Steel Water ~~Pipelines~~ **Pipe and Fittings*.**
(H) ~~C210-03~~ **C210-15 AWWA Standard for** Liquid-Epoxy ~~Coating Systems for the Interior~~ **Coatings** and **Linings for** ~~Exterior of~~ Steel Water ~~Pipelines~~ **Pipe and Fittings*.**
(I) ~~C213-01~~ **C213-22** AWWA Standard for Fusion-Bonded Epoxy Coating for ~~the Interior and Exterior of~~ Steel Water ~~Pipelines~~ **Pipe and Fittings*.**
(J) ~~C214-00~~ **C214-20** AWWA Standard for **Machine-Applied Polyolefin** Tape ~~Coating Systems for the Exterior of~~ **Coatings for** Steel Water ~~Pipelines~~ **Pipe*.**
(K) ~~C215-04~~ **C215-22 AWWA Standard for** Extruded Polyolefin Coatings for ~~the Exterior of~~ Steel Water ~~Pipelines~~ **Pipe*.**
(L) ~~C216-00~~ **C216-22** AWWA Standard for Heat-Shrinkable Cross-Linked Polyolefin Coatings for ~~the Exterior of Special Sections, Connections, and Fittings for~~ Steel Water ~~Pipelines~~ **Pipes*.**
(M) ~~C217-04 Cold-Applied Petrolatum and Petroleum~~ **C217-23 AWWA Standard for Microcrystalline** Wax **and Petroleum** Tape Coatings for ~~the Exterior of Connections and Fittings for~~ Steel Water ~~Pipelines~~ **Pipe and Fittings*.**
(N) ~~C218-02~~ **C218-23** AWWA Standard for ~~Coating the Exterior of~~ **Liquid Coatings for** Aboveground Steel Water ~~Pipelines~~ **Pipe** and Fittings*.
(O) ~~C219-01~~ **C219-17** AWWA Standard for Bolted Sleeve-Type Couplings for Plain-End Pipe*.
(P) ~~C220-98~~ **C220-17** AWWA Standard for Stainless-Steel Pipe, ~~4~~ **4 1/2** In. ~~(100~~ **(13** mm) and Larger*.

(3) For concrete pipe, the following standards apply:
(A) ~~C300-04~~ **C300-22 AWWA Standard for** Reinforced Concrete Pressure Pipe,

Steel-Cylinder Type*.

(B) ~~C301-99~~ **C301-14(R19)** AWWA Standard for Prestressed Concrete Pressure Pipe, Steel-Cylinder Type*.

(C) ~~C302-04~~ **C302-22 AWWA Standard for** Reinforced Concrete Pressure Pipe, Noncylinder Type*.

(D) ~~C303-02~~ **C303-17 AWWA Standard for** Concrete Pressure Pipe, Bar-Wrapped, Steel-Cylinder Type*.

(E) ~~C304-99~~ **C304-14(R19)** AWWA Standard for Design of Prestressed Concrete Cylinder Pipe*.

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

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

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

~~(C) C402-00 AWWA Standard for Asbestos-Cement Transmission Pipe, 18 In. through 42 In. (450 mm through 1,050 mm), for Water Supply Service.~~

~~(D) C403-00 AWWA Standard for the Selection of Asbestos-Cement Transmission Pipe, Sizes 18 In. through 42 In. (450 mm through 1,050 mm), for Water Supply Service.~~

~~(5)~~ **(4)** For valves and hydrants, the following standards apply:

(A) ~~C500-02~~ **C500-19 AWWA Standard for** Metal-Seated Gate Valves for Water Supply Service*.

(B) ~~C502-94~~ **C502-18** AWWA Standard for Dry-Barrel Fire Hydrants*. ~~(includes addendum C502a-95).~~

(C) ~~C503-97~~ **C503-21** AWWA Standard for Wet-Barrel Fire Hydrants*.

(D) ~~C504-00~~ **C504-23** AWWA Standard for Rubber-Seated Butterfly Valves*.

(E) ~~C507-99~~ **C507-18** AWWA Standard for Ball Valves, 6 In. through ~~48~~ **60** In. (150 mm through ~~1,200~~ **1,500** mm)*.

(F) ~~C508-01~~ **C508-17** AWWA Standard for Swing-Check Valves for Waterworks Service, 2 In. through ~~24~~ **48** In. (50 mm through ~~600~~ **1,200** mm) NPS*.

(G) ~~C509-01~~ **C509-23** AWWA Standard for Resilient-Seated Gate Valves for Water Supply Service*.

(H) ~~C510-97~~ **C510-17(R21)** AWWA Standard for Double Check-Valve Backflow Prevention Assembly*.

(I) ~~C511-97~~ **C511-17(R21)** AWWA Standard for Reduced-Pressure Principle Backflow Prevention Assembly*.

(J) ~~C512-04~~ **C512-15 AWWA Standard for** Air-Release, Air/Vacuum, and Combination Air Valves for ~~Waterworks~~ **Water and Wastewater** Service*.

(K) ~~C540-02 Power-Actuating Devices~~ **C541-16(R21) AWWA Standard for Hydraulic and Pneumatic Cylinder and Vane-Type Actuators** for Valves and Slide Gates*. ~~for Waterworks Service~~

(L) C542-16(R21) AWWA Standard for Electric Motor Actuators for Valves and Slide Gates*.

~~(L) C550-01~~ **(M) C550-17** AWWA Standard for Protective ~~Epoxy~~ Interior Coatings for Valves and Hydrants*.

~~(M) C560-00~~ **(N) C560-21** AWWA Standard for Cast-Iron Slide Gate*.

~~(6)~~ **(5)** For plastic pipe, the following standards apply:

(A) ~~C900-97~~ **C900-22** AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. through ~~12~~ **60** In. (100 mm through ~~300~~ **1,500** mm)*. ~~for Water Distribution~~

(B) ~~C901-96~~ **C901-20** AWWA Standard for Polyethylene (PE) Pressure Pipe and Tubing, ~~1/2~~ **3/4** In. (~~13~~ **(19** mm) through 3 In. (76 mm), for Water Service*.

~~(C) C905-97 AWWA Standard for Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14 In. through 36 In (350 mm through 1,200 mm), for Water Transmission and Distribution.~~

~~(D)~~ ~~C906-99~~ **(C) C906-21** AWWA Standard for Polyethylene (PE) Pressure Pipe and Fittings, 4 In. (100 mm) through ~~63~~ **65** In. (~~1,575~~ **1,650** mm), for ~~Water Distribution and Transmission~~ **Waterworks*.**

~~(E)~~ ~~C907-91~~ **(D) C907-17** AWWA Standard for **Injection-Molded** Polyvinyl Chloride (PVC) Pressure Fittings ~~for Water~~, 4 In. through ~~8~~ **12** In. (100 mm through ~~200~~ **300** mm), **for Water, Wastewater, and Reclaimed Water Service*.**

~~(F) American Society for Testing and Materials~~ **(E)** ASTM ~~D2239-03~~ **D2239-22** Standard Specifications for Polyethylene (PE) Plastic Pipe (SIDR-PN) Based on Controlled Inside Diameter*.

~~(G)~~ **(F)** ASTM ~~D2241-04b~~ **D2241-20** Standard Specification for Polyvinyl Chloride (PVC) Pressure-Rated Pipe (SDR Series)**.

~~(H)~~ **(G)** ASTM ~~D3350-04~~ **D3350-21** Standard Specification for Polyethylene Plastic Pipe and 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~~ **must** 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) comply with the requirements of subsection (a); and

(2) have been restored to their original condition.

(d) All connections between pipes ~~shall~~ **must** 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 thermo jointed by a person who is a manufacturers certified thermo jointer; 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~~ **must** be cased in conformance with AWWA Standard ~~C900-97 or AWWA Standard C905-97~~ **C900-22 Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings (4 In. through 60 In. or 100 mm through 1,500 mm) *.**

(f) Water mains that are cased ~~shall~~ **must** conform to AWWA Standard ~~C600-99~~ **C600-17*.**

(g) Water mains constructed with nonmetallic materials must be equipped with tracing wire or other metallic identification equipment.

***These documents are incorporated by reference. The version incorporated by reference is the version in effect as of December 31, 2023. Copies may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204.**

****These documents are incorporated by reference. Copies of this standard may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235 or from the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204.**

(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2953; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 9. 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~~ **must** be installed and pressure and leak tested in accordance with the applicable provisions of one (1) of the following:

(1) ~~C600-99~~ **C600-17** AWWA Standard for Installation of Ductile-Iron ~~Water~~ Mains and Their Appurtenances*.

(2) ~~C602-00~~ **C602-23** 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~~ **(3) C605-21** AWWA Standard for Underground Installation of Polyvinyl Chloride (PVC) **and Molecularly Oriented Polyvinyl Chloride (PVCO)** Pressure Pipe and Fittings*. ~~for Water~~

~~(5) C606-04~~ **(4) C606-22 AWWA Standard for** Grooved and Shouldered Joints*.

If an AWWA Standard is not available for the particular installation, the manufacturers recommended installation procedure ~~shall~~ **must** be followed.

(b) Continuous and uniform bedding ~~shall~~ **must** be provided in the trench for all buried pipe. Backfill material ~~shall~~ **must** 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~~ **that cannot** 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~~ **must** 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~~ **must** be installed to prevent movement in conformance with AWWA Standard ~~C600-99~~ **C600-17*.**

(d) Water mains ~~shall~~ **must** 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]~~ **(e)** The cover dimension is measured from the top of pipe to the proposed finish grade.

***These documents are incorporated by reference. The version incorporated by reference is the version in effect as of December 31, 2023. Copies may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204.**
(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2956; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 10. 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~~ **must** be disinfected in accordance with ~~C651-99~~ **C651-14** AWWA Standard for Disinfecting Water Mains*.

(b) ~~All~~ Chlorinated water ~~shall~~ **must** be disposed of by either disposal to a:
(1) sanitary sewer with the approval of the local sewer authority; or

(2) location other than a sanitary sewer after obtaining a discharge permit from the commissioner.

(c) ~~All~~ Laboratory reports documenting the conformance with AWWA Standard ~~C651-99, Section 7 shall~~ **C651-14, Section 5* must** be submitted to the commissioner before the water main is brought into service. The laboratory used ~~shall~~ **must** be approved by the commissioner. The laboratory report presenting the sample results ~~shall~~ **must** be sent to the commissioner within ten (10) working days ~~of receipt~~ **after receiving the report** from the laboratory. The laboratory results ~~shall~~ **must** have the commissioner's assigned permit number marked on the upper right hand corner of the top page.

***These documents are incorporated by reference. The version incorporated by reference is the version in effect as of December 31, 2023. Copies may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235 or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, Thirteenth Floor, 100 North Senate Avenue, Indianapolis, IN 46204.** *(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2957; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 11. 327 IAC 8-3.3-3 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.3-3 Determination of public water system capacity

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. (a) A ~~public water system's~~ **PWS's** daily capacity ~~shall be~~ **is** determined by adding together the production capacity determined under subsection (b) and the ~~purchased~~ **purchase** capacity, if any, determined under subsection (c).

(b) The production capacity is the lesser of the following amounts:

(1) The "design daily production" in gallons per day as reported on the most recent Public Water System Sanitary Survey conducted by the commissioner ~~pursuant to 327 IAC 8-2-8.2.~~ **under 40 CFR 141.401*, 40 CFR 141.723*, and 327 IAC 8-2.8.**

(2) The sum of the rated daily capacity of all primary pumps utilized by a public water supplier less the primary pump with the largest rated capacity. ~~For example, a public water system with a five hundred (500) gallons per minute pump and a four hundred (400) gallons per minute pump would have a system capacity of four hundred (400) gallons per minute.~~

(c) A ~~public water system~~ **PWS** that supplements its own capacity by purchasing water may add the amount of the purchase capacity to the ~~public water system~~ **PWS** daily capacity. The purchase capacity is one (1) of the following amounts:

(1) The contractual amount, expressed as a daily quantity, of water purchased from a separate ~~public water system~~ **PWS.**

(2) The commissioner's approved amount expressed as a daily quantity of water purchased from a separate ~~public water system~~ **PWS.** The commissioner's approval of the purchase capacity is

required when **no:**

(A) ~~no~~ purchase water contract exists; or

(B) ~~no~~ finite daily quantity of water is specified in the purchase water contract.

***This document is incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 327 IAC 8-3.3-3; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2510; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 12. 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~~ **must** 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~~ **must** be supplied at the flow rate and pressure required by 327 IAC 8-3.2-11, at the quality required by ~~327 IAC 8-2~~ **327 IAC 8-2.7,** and in accordance with the following:

(1) The water supply and water distribution system ~~shall~~ **must** 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 system shall~~ **PWS must** be made with its potable water used exclusively wherever 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 system~~ **PWS** is not available, a properly located and

constructed private water supply ~~shall~~ **must** be provided. Beginning on ~~the effective date of this rule~~ **May 1, 1999,** all new and modified ~~public water systems~~ **PWSs** exclusively serving schools and related facilities ~~shall~~ **must** 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~~ **must** be sized to meet peak daily consumer demands. The minimum usable capacity of the pressure tank, in gallons, ~~shall~~ **must** 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~~ **must** 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 **at least** two (2) ~~or more~~ school potable water supply systems are located on the same site, the water supply systems ~~shall~~ **must** 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~~ **must** have a water supply system capable of furnishing ~~a minimum of:~~ **at least:**

(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 Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2958; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 13. 327 IAC 8-3.4-9 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-9 Separation of production well from potential or existing 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 15-16-4; IC 15-16-5

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

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

Table 9-1
Sanitary Setback Radius Provisions (Linear Feet Measured from the Outside Edge of the Well Casing)

~~Public Water System~~ **PWS** Type	Sanitary Setback Radius	Well Subjected to Automatic Disinfection[1]	Favorable Hydrogeologic Conditions are Present[2]
Community	200	100	100
Noncommunity greater than or equal to 70 gpm[3]	200	100	100
Noncommunity, Susceptible Populations[4]	200	100	100
Noncommunity, Nonsusceptible, less than 70 gpm[3]	100	100	100
[1] Automatic disinfection as described in subdivision (2).			
[2] Favorable hydrogeologic conditions as described in subdivision (3).			
[3] 70 gallons per minute (gpm) as measured per pump (rated capacity).			
[4] Schools, correctional facilities, health care facilities, and agricultural labor camps.			

(2) ~~The radius creating the sanitary setback shall be one hundred (100) feet for a well that will be subject to automatic disinfection treatment before entering the water distribution system.~~ **A well subject to automatic disinfection treatment before entering the water distribution system must meet a sanitary setback of at least one hundred (100) feet.** To meet this provision at systems using chlorine or chlorine dioxide, the:

(A) 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

(B) 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).~~ **40 CFR 141.132*.**

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 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, 327 IAC 8-2-8.6, and 327 IAC 8-2.6 shall~~ **40 CFR 141, Subpart H* and 40 CFR 141, Subpart P* is** not ~~be held~~ **subject** to a sanitary setback requirement.

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

(A) The separation distance between **at least** two (2) ~~or more~~ wells of a ~~public water system shall~~ **PWS must** 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~~ **must** 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~~ **must** not be located closer than one hundred (100) feet from another production well.

(iii) A ~~public water system~~ **PWS** drinking water well that is ~~a~~ part of a transient noncommunity ~~public water system shall~~ **PWS must** 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~~ **must** not be located within the 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 system~~ **PWS** 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 sanitary setback for a ~~public water system~~ **PWS** production well ~~shall~~ **must** conform to the following requirements concerning transportation routes:

(i) **A sanitary setback does not apply to** 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 system;~~ **PWS;** and

(CC) are restricted from access by the public.

~~shall not be held to a sanitary setback requirement.~~

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

(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~~ **must not be located within the sanitary setback as measured from the outside edge of the well casing to the traveled portion of the transportation route, if the transportation route 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 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 system~~ **PWS** production well casing and a surface water body ~~such as~~ **must be at least twenty-five (25) feet, including for:**

(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 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~~ **can** provide the same factor of safety for filtering pathogenic contaminants as the sanitary setback or separation distance. The commissioner's decision to allow an alternative sanitary setback or separation distance ~~shall~~ **must** 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 water monitoring provisions.
(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 **be signed and sealed by a professional engineer, licensed well driller, or licensed professional geologist.**

~~(i) be signed and sealed by a professional engineer, licensed well driller, or 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~~ **PWS must** own or control the sanitary setback by recorded deed, easement, or long term lease. A small nontransient noncommunity ~~public water system~~ **PWS** or small transient noncommunity ~~public water system shall~~ **PWS must** 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 15-16-4, IC 15-16-5, 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 sanitary setback if the following requirements are met by the ~~public water system~~ **PWS:**

(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~~ **SDWA,** 42 U.S.C. 300f et seq., as amended August 6, 1996**, may be used, stored, mixed, loaded, and transported within the standard 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

(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~~ ***These documents are** incorporated by reference. Copies ~~of this law~~ may be obtained from the ~~Superintendent of Documents,~~ Government ~~Printing~~ **Publishing** Office, ~~Washington, D.C. 20402 or from the~~ **www.gpo.gov, or are available for review at the** Indiana Department of Environmental Management, Office of ~~Water Quality~~ **Legal Counsel,** Indiana Government Center North, 100 North Senate Avenue, ~~Room N1255~~ **Thirteenth Floor,** Indianapolis, ~~Indiana~~ **IN** 46204.

****The Safe Drinking Water Act, 42 U.S.C. 300f et seq., as amended August 6, 1996, can be found at https://www.govinfo.gov/app/collection/uscode/1996/title42/chapter6.** *(Water Pollution Control Division; 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; errata filed Feb 6, 2006, 11:15 a.m.: 29 IR 1937; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2963; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; errata filed Jul 31, 2017, 11:06 a.m.: 20170809-IR-327170349ACA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 14. 327 IAC 8-3.4-10 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.4-10 Production well design criteria

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. 10. (a) A new ~~public water supply~~ ~~system~~ **PWS** production well must have capacity to meet the pressure and flowrate demands of the system as calculated in section 12 of this rule.

(b) A ~~public water supply system~~ **PWS** production well that is equipped with a well screen ~~shall~~ **must:**

(1) possess a sustainable yield that prevents the pumping level from dropping below the top of the well screen; and

(2) operate with an entrance velocity less than or equal to one-tenth (0.1) foot per second.

(c) A ~~public water supply system~~ **PWS** production well ~~shall~~ **must** be evaluated to determine whether it is under the direct influence of surface water as required under ~~327 IAC 8-2-8.5(b).~~ **40 CFR 141.72*.**

***This document is incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 327 IAC 8-3.4-10; filed Jun 17, 1999, 1:50 p.m.: 22 IR 3372; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 15. 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~~ **must comply with the following:**

(1) Grouting materials ~~shall~~ **must** consist of the following:

(A) Neat cement grout ~~shall~~ **must** consist of cement conforming to ASTM ~~C150-04~~ **C150M-22** Standard Specification for Portland Cement, **as revised July 26, 2022*,** and contain at least two percent (2%), but 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~~ **must** consist of equal amounts of:

(i) cement, conforming to ~~AWWA A100-97~~ **A100-20** AWWA Standard for Water Wells,**effective December 31, 2023**;** 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 not more than five percent (5%), by weight of bentonite additive.

(2) The installation of grouting materials ~~shall~~ **must** be in accordance with the following:

(A) Except as provided in section 21(2) of this rule, neat cement and bentonite slurry ~~shall~~ **must** 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~~ **must** be introduced in a manner to prevent bridging of the borehole annulus.

(C) Concrete grout ~~shall~~ **must** 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~~ **must** 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~~ **described** 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~~ **must** 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 (1/2) 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~~ **must** be accomplished ~~upon~~ **on** the earlier of the following events:

(A) Within twenty-four (24) hours ~~following~~ **after** 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~~ **must stop** during the grout setup time ~~as~~ specified by the grout material supplier.

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SECTION 16. 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~~ **must** 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~~ **must** be disinfected with calcium hypochlorite or sodium hypochlorite 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~~ **must** 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~~ **must** be added to the well, ~~following~~ **after** 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~~ **must** 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~~ **must** be chlorinated before installation by spraying exposed areas with a solution containing a chlorine residual of not less than two hundred (200) mg/l.

(e) A new or modified well proposed to be a production well ~~shall~~ **must** be chlorinated in accordance with one (1) of the following:

(1) The water in the well casing ~~shall~~ **must** be treated ~~for disinfection~~ **with a disinfectant** as follows:

(A) To create a chlorine residual of one hundred (100) 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

(ii) surged at least three (3) times ~~following~~ **after** chlorination.

(C) The chlorinated water must remain in the well casing at least twelve (12) hours ~~following~~ **after** the surging activity of clause (B)(ii).

(2) The water in the well casing ~~shall~~ **must** be treated ~~for disinfection~~ **with a disinfectant** 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

(ii) surged at least three (3) times ~~following~~ **after** chlorination.

(C) The chlorinated water must ~~then~~ remain in the well casing at least twenty-four (24) hours ~~following~~ **after** the surging activity of clause (B)(ii).

The following table demonstrates the amount of ~~chemical compound~~ **disinfectant** needed for chlorination of wells:

Table 24-1

Amount of ~~Chemical Compound~~ **Disinfectant** Needed for Chlorination of Wells

Well-Hole or Well Casing Diameter (in.)	Volume per 100 Feet of Water Depth (gal)	Calcium Hypochlorite[1] (65 percent available Cl_2)	Sodium Hypochlorite[2] (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:
[1]Quantities of Ca $(OCl)_2$ based on 65 percent **(65%)** available chlorine by dry weight (16 oz = 1 lb).
[2]Quantities of NaOCl based on 12 trade percent available chlorine by U.S. 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 **is** accomplished in accordance with subsection (e), a new or modified ~~public water system~~ **PWS** production well and a flowing well ~~shall~~ **must** be sampled for the presence of coliform at least twice, with sampling done not less than twenty-four (24) hours apart, by a ~~laborat+ory~~ **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~~ **40 CFR 141.21*.** If the presence of coliform is indicated by the sample results, the disinfection of the well ~~shall~~ **must** be repeated.

(g) Disposal of chlorinated water from well disinfection ~~shall~~ **must** 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.

***This document is incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2969; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 17. 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 system~~ **PWS** and a nontransient noncommunity ~~public water system~~ **PWS** serving more than two hundred fifty (250) individuals. The PWPT information submitted to the commissioner ~~shall~~ **must** include the following:

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

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

(C) Water level at:

(i) start up and at interim readings; and

(ii) the end of the PWPT.

(D) Specific capacity at the end of the PWPT.

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

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

(4) The results of:

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

(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~~ **40 CFR 141.23*** 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.

***These documents are incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2970; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 18. 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 13-18-3; 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 **by the NOI applicant** to the ~~public water system~~ **PWS** before the commencement of the water main construction.

(c) All documentation supporting the project must be readily accessible for review and 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~~ **must** be onsite and readily accessible for review and 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~~ **must** be producible for review and copying throughout the duration of water main construction activities at the site within sixty (60) minutes upon notification by the commissioner.

(d) ~~Persons~~ **A person** in violation of this rule shall take ~~all~~ **the** reasonable steps to correct any adverse impact on the public health resulting from ~~their~~ **the** 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~~ **must** ensure that the construction to the ~~public water system~~ **PWS** achieves compliance with the terms and conditions of this rule.

~~(g) During construction, where the:~~
~~(1) public water system;~~
~~(2) responsible person; or~~
~~(3) responsible persons:~~
~~(A) professional engineer;~~
~~(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 an NOI, the responsible person shall promptly submit the facts or corrected information to the commissioner in writing utilizing certified mail and the address on the NOI form.~~

(g) During construction, if any of the following entities or persons discover a failure to submit any relevant facts or that incorrect information has been submitted in an NOI, the entity or person shall submit the missing facts or corrected information to the commissioner within thirty (30) days, by any of the entities or persons, in writing, using certified mail at the address on the NOI form, or by email as soon as possible and not later than seven (7) days after discovery:

(1) The PWS.

(2) The responsible person.

(3) The following designee of the responsible person:

(A) Professional engineer.

(B) Developer.
(C) Resident project representative.
(D) The person that by other means is representing the construction aspects of the proposed project.

(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 **the following:**

(1) AWWA ~~C700-02~~ **C700-20*.**
(2) AWWA ~~C701-02, AWWA C702-01, or AWWA C703-96(04)~~ **C701-19*.**
(3) AWWA C702-19*.
(4) AWWA C703-19*.

(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~~ **must** 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~~ **PWS** for the entire water main extension.
(B) Zero (0), if the ~~public water system~~ **PWS** 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" as specified on Table 1 of **the following:**
(i) AWWA ~~C700-02~~ **C700-20*.**
(ii) AWWA ~~C701-02, AWWA C702-01, or AWWA C703-96(R04)~~ **C701-19.**
(iii) AWWA C702-19*.
(iv) AWWA C703-19*.
(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~~ **Compliance** 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~~ **which** are to be readily accessible in accordance with subsection (c) and at the ~~public water system~~ **PWS** in accordance with subsection (b).

(m) Persons in violation of this rule are subject to enforcement and legal action under IC 13-30.

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SECTION 19. 327 IAC 8-3.6-4 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-3.6-4 Technical capacity of a new public water supply system
Authority: IC 13-13-5; IC 13-15-1-2; IC 13-15-2-1
Affected: IC 13-18-16; IC 25-31

Sec. 4. (a) A ~~water system~~ **PWS** management plan ~~shall~~ **must** provide the following technical capacity information:

(1) Details of the ~~public water supply system~~ **PWS** that include the following:

(A) A description of the type of system, including:

(i) whether it is a:

(AA) community ~~public water supply system;~~ **PWS;** or ~~a~~

(BB) nontransient noncommunity ~~public water supply system and~~ **PWS;**

(ii) the basis for determining the system type; and

~~(ii)~~ **(iii)** the population to be served.

(B) A description of the planned service area, including:

(i) the anticipated growth for the next twenty (20) years; and

(ii) the plans to provide for the demand of the anticipated growth.

(C) A description of the ~~public water supply system~~ **PWS** by:

(i) county;

(ii) section;

(iii) township; and

(iv) range.

(D) A site plan that includes the location of the following, as applicable:

(i) Wells.

(ii) Surface water intakes.

(iii) Treatment facilities.

(iv) Storage facilities.
(v) Pumping facilities.
(vi) Connections to another ~~public water supply system.~~ **PWS.**
(vii) Other applicable facilities.

(E) A description, design basis, and anticipated useful life for treatment and transmission facilities, including the following:
(i) Treatment plants.
(ii) Pipes.
(iii) Pumping stations.
(iv) Storage facilities.

(F) The identification of interconnections with other systems.

(G) A description and design basis of the fire protection demand on the system.

(H) A description of a plan for metering:
(i) water production by source; and
(ii) water use by consumers.

(I) A description of plans to manage waste generated by the treatment processes of the ~~public water supply system.~~ **PWS.**

(J) **If the site is within the one hundred (100) year frequency flood plain,** a description of the highest flood elevation at the site of:
(i) sources; and
(ii) treatment facilities.
~~if the site is within the one hundred (100) year frequency flood plain.~~

(2) Details of an assessment of the water supply source adequacy that include the following:

(A) A site map for each water supply source that must be drawn to scale with the scale disclosed on the map.

(B) A:
(i) narrative describing each **water supply** source; and ~~a~~
(ii) description of land uses within a three thousand (3,000) foot radius of each water supply source.

(C) The design basis for system demands, including:
(i) average daily; and
(ii) peak daily;
consumer demand according to 327 IAC 8-3.3-2.

(D) An analysis of a proposed **water supply** source to reliably meet consumer demand.

(E) A geological or hydrogeological characterization of the **water supply** source of the drinking water supply.

(F) A summary of a ~~source~~ **water supply source's** water quality analysis that includes the applicable primary and secondary drinking water standards.

(G) The proposed activities to protect **a water supply** source. ~~water.~~

(3) A ~~public water supply system~~ **PWS** that proposes to purchase water from another ~~public water supply system~~ **PWS** must provide documentation of a planned purchase agreement with the other ~~public water supply system.~~ **PWS.**

(4) A method to meet the requirements of the following public drinking water rules:

(A) 327 IAC 8-1 concerning drinking water direct ~~additives~~ and indirect additives.

(B) ~~327 IAC 8-2-8.5~~ **40 CFR 141 Subpart H*** concerning filtration and disinfection.

(C) 327 IAC 8-3 concerning ~~public water supply~~ **PWS** construction permits.
(D) 327 IAC 8-3.4 concerning ~~public water system~~ **PWS** wells.
(E) 327 IAC 8-4.1 concerning wellhead protection.
(F) 327 IAC 8-10 concerning cross connection control.

(5) A method to provide for the operation, maintenance, inspection, testing, repair, replacement, and associated record keeping for the following, according to the American Water Works Association Standards, Section A100 through Section F100** ~~(February 1998 Edition)~~, and the "Recommended Standards for Water Works", **2022 Edition***, **established by the** Great Lakes—Upper Mississippi River Board of State Public Health and Environmental Managers: ~~(1997 Edition)***~~

(A) **Water supply** source of supply facilities.
(B) Pumping facilities.
(C) Water meters.
(D) All components of the treatment process.
(E) Storage tanks, including the following:
(i) Cleaning.
(ii) Painting.
(F) Water mains, including the following:
(i) Flushing.
(ii) Exercising valves.
(G) Approved cross connection control devices.

(6) Details of an infrastructure replacement plan that include the following:
(A) A schedule of equipment replacement.
(B) Estimated life expectancy of equipment.
(C) Expected replacement date.
(D) Estimated cost of replacement.

(7) Details for:
(A) providing a certified operator in charge of the ~~public water supply system~~ **PWS;** and
(B) complying with applicable state and federal requirements concerning certified operators, including 327 IAC 8-12.

(b) The technical capacity information required by subsection (a) ~~shall:~~ **must meet the following requirements:**

(1) Be prepared by **the applicable person in accordance with the information required, as follows:**
(A) A professional engineer, as described under IC 25-31, who is registered in Indiana.
(B) A licensed professional geologist, as described in 305 IAC 1-2-5, who is registered in Indiana.~~or~~
(C) A qualified person under the direct supervision of a professional engineer or licensed professional geologist registered in Indiana.
~~as applicable according to the information required; and~~

(2) Demonstrate that the proposed ~~public water supply system shall~~ ~~produce~~ **PWS produces** drinking water that meets ~~public water supply~~ **the PWS** requirements of this article.

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Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.

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.~~ **The version incorporated by reference is the version in effect as of December 31, 2023. Copies ~~of this publication~~ may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, ~~Colorado~~ **CO** 80235 or ~~from~~ **are available for review at** the Indiana Department of Environmental Management, Office of ~~Water Quality,~~ **Legal Counsel,** Indiana Government Center North, **Thirteenth Floor,** 100 North Senate Avenue, ~~Room N1255,~~ Indianapolis, ~~Indiana~~ **IN** 46204.

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SECTION 20. 327 IAC 8-4-2 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-4-2 Construction requirements; noncommunity public water systems serving 250 or fewer individuals

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 noncommunity public water system serving two hundred fifty (250) or fewer individuals must ~~be in accordance~~ **comply** 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, 327 IAC 8-2.5, or 327 IAC 8-2.6~~ **327 IAC 8-2.7,** are not required to obtain a permit:

(1) Ion exchange softeners.
(2) Ultraviolet treatment.
(3) Cartridge filters.
(4) Reverse osmosis.

(5) Other items similar in function or purpose to those listed in subdivisions (1) through (4), determined by the commissioner to not require a permit. The commissioner may make ~~such~~ a determination if the items are installed to alter characteristics or properties of water not regulated under ~~327 IAC 8-2, 327 IAC 8-2.5, or 327 IAC 8-2.6~~ **327 IAC 8-2.7,** including hardness or other aesthetic properties.

(c) A noncommunity **public** water system serving two hundred fifty (250) or fewer individuals 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 noncommunity **public** water system serving two hundred fifty (250) or fewer individuals must notify the commissioner within thirty (30) days ~~of~~ **after** 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 Division; 327 IAC 8-4-2; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2974; readopted filed Jul 18, 2012, 2:25 p.m.: 20120815-IR-327120261BFA; readopted filed Jun 6, 2018, 1:59 p.m.: 20180704-IR-327180171BFA)*

SECTION 21. 327 IAC 8-4.1-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-4.1-1 Definitions

Authority: IC 13-14-8; IC 13-18-3; IC 13-18-17-6

Affected: IC 13-11-2-43; IC 13-13-2; IC 13-18; IC 15-16-4-42; IC 15-16-5; IC 25-17.6-1; IC 25-39-4

Sec. 1. In addition to the definition in IC 13-11-2-43, the following definitions apply throughout this rule:

(1) "Aquifer" means an underground geological formation that has the ability to receive, store, and transmit water in amounts sufficient for the satisfaction of any beneficial use.

(2) "Best management practices" means schedules of activities, prohibitions of practice, treatment requirements, operation and maintenance procedures, use of containment facilities, and other management practices to prevent or reduce the pollution of waters of the state.

(3) "Calibration" means the process of refining the model representation of the hydrogeologic framework, hydraulic properties, and boundary conditions to achieve a desired degree of correspondence between the model simulation and observations of the ground water flow system.

(4) "Certified professional geologist" means a professional geologist certified by the state of Indiana under IC 25-17.6-1.

(5) "Community public water supply system", "CPWSS", "community water system", or "CWS" means a public water supply system that:

(A) serves at least fifteen (15) service connections used by year-round residents; or

(B) regularly serves at least twenty-five (25) year-round residents.

(6) "Conceptual model" means a description of the hydrogeologic system that represents the

movement of ground water, ~~for example~~ **such as:**

(A) geologic and hydrologic framework;

(B) media type;

(C) physical processes;

(D) hydraulic properties; and

(E) water budget.

(7) "Confined aquifer" means an aquifer in which ground water is confined under pressure that is significantly greater than atmospheric pressure.

(8) "Critical water users" means water users whose immediate health or welfare would **adversely** be affected ~~in an adverse manner~~ if water use is denied.

(9) "Customers" means the number of persons served by the public water supply system.

(10) "Delineation" means a process used to define boundaries of the wellhead protection area.

(11) "Department" means the department of environmental management created under IC 13-13-2.

(12) "Emergency condition" means a condition related to ground water contamination that threatens to disrupt water supply service from a community public water supply system wellfield.

(13) "Hydrogeology" means the study of the geology of ground water, with particular emphasis on the chemistry and movement of water.

(14) "Hydrostratigraphic unit" means a grouping of geologic units of similar hydrogeologic properties, ~~for example~~ **such as** aquifers and confining units.

(15) "Large community public water supply system" means a public water supply system serving greater than fifty thousand (50,000) customers.

(16) "Medium community public water supply system" means a public water supply system serving from three thousand three hundred one (3,301) up to and including fifty thousand (50,000) customers.

(17) "Model" means an investigative technique using a mathematical or physical representation of a system or theory that accounts for all or some of its known properties.

(18) "Pesticide review board" means the Indiana pesticide review board created by IC 15-16-4-42 to collect, analyze, and interpret information on matters relating to the use of pesticides.

(19) "Potential source of contamination" means a facility, **a** site, **a** practice, or **an** activity that possesses the ability to contaminate ground water.

(20) "Public water supply system", "public water system", "public water supply", "PWSS", or "PWS":

(A) means a system for ~~the provision~~ **providing** to the public ~~of~~ water for human consumption through pipes or other constructed conveyances, if the system:

(i) has at least fifteen (15) service connections; or

(ii) regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year;

(B) includes any:

(i) collection, treatment, storage, and distribution facilities under **the** control of the operator of the system and used primarily in connection with the system; and

(ii) collection or pretreatment storage facilities not under the operator's control that are used primarily in connection with the system; and

(C) is either a CWS, as defined in ~~327 IAC 8-2-1(12)~~ **40 CFR 141.2*,** or an NCWS, as defined in ~~327 IAC 8-2-1(63)~~ **40 CFR 141.2*.**

(21) "Qualified ground water scientist" means an individual who possesses a bachelor's degree or

higher in the physical sciences, ~~for example~~ **such as** geology or engineering, with a sufficient level of experience to make sound professional judgments regarding site characterization and hydrogeology. This level of experience may be demonstrated by certification or registration as a professional geologist or engineer, either of whom ~~shall~~ **must** have education or professional experience in hydrogeology or ground water hydrology.

(22) "Sanitary setback" means an area established around a CPWSS production well to protect ground water from direct contamination.

(23) "Small community public water supply system" means a public water supply system serving up to and including three thousand three hundred (3,300) customers.

(24) "State chemist" means the office of the Indiana state chemist authorized by IC 15-16-4 and IC 15-16-5 to administer the use, application, storage, mixing, loading, transportation, and disposal of pesticides in Indiana under those chapters.

(25) "Time of travel" or "TOT" means the calculated length of time a particle of water takes to reach a CPWSS production well from a certain point.

(26) "Time of travel **threshold" or** "TOT threshold" means a threshold determined by the community or CPWSS to suit the hydrogeologic conditions and needs of the community; however, a minimum five (5) year TOT for modeled wellhead protection areas and three thousand (3,000) feet for fixed radius wellhead protection area is allowed.

(27) "Wellhead protection area" or "WHPA" means the surface and subsurface area, delineated by fixed radius, hydrogeological mapping, analytical, semianalytical, or numerical flow or solute transport methods, or both, which contributes water to a CPWSS production well or wellfield and through which contaminants are likely to move through and reach the well within a specified period.

(28) "Wellhead protection program" or "WHPP" means a program to sustain drinking water quality in ground waters that supply public water supply wells and wellfields. ~~The program is mandated by the 1986 amendments to the federal Safe Drinking Water Act, Title II, Section 205, Subsection 1428.~~

(29) "Well log" means a drilling record that describes the subsurface formations that have been drilled through and gives details of well completion as required by IC 25-39-4 and 312 IAC 13-2-6.

***This document is incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 327 IAC 8-4.1-1; filed Feb 28, 1997, 4:18 p.m.: 20 IR 1723; filed Mar 6, 2000, 7:56 a.m.: 23 IR 1627; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; errata filed Jul 31, 2017, 11:06 a.m.: 20170809-IR-327170349ACA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA; filed May 5, 2022, 9:24 a.m.: 20220601-IR-327210132FRA; errata filed Jun 15, 2022, 3:26 p.m.: 20220622-IR-327220220ACA)*

SECTION 22. 327 IAC 8-4.1-8 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-4.1-8 Phase I submittal requirements

Authority: IC 13-14-8; IC 13-18-3; IC 13-18-17-6

Affected: IC 9-21-2; IC 9-21-3; IC 13-11; IC 13-13; IC 13-18; IC 15-16-4; IC 15-16-5; IC 25-31; IC 25-39-4-6

Sec. 8. To have Phase I of a WHPP approved by the department, a CPWSS must submit the following material as ~~prescribed~~ **described** in section 16 of this rule:

(1) The names and affiliations of the members of the local planning team, as well as any subcommittees designated by the local planning team.

(2) A complete WHPA delineation as described in section 7 of this rule. Items submitted in compliance with section 7(a)(1)(C), 7(a)(1)(E)(iv), 7(a)(1)(E)(vi), and 7(c) of this rule must be performed by or under the supervision of a certified professional geologist and bear ~~his/her~~ **the** seal **of the certified professional geologist.** Items submitted in compliance with section 7(a)(1)(C), 7(a)(1)(E)(iv), 7(a)(1)(E)(vi), and 7(c) of this rule are exempt from certification by a certified professional geologist when performed by:

(A) an officer or employee of the United States government, state government, or local government while engaged in providing geological services for the officer's or employee's employers;

(B) a person engaged solely in geological research or instruction of geology; or

(C) a professional engineer registered under IC 25-31 who applies geology to the practice of engineering.

(3) An inventory of potential sources of contamination containing a complete list of existing facilities, sites, practices, and activities for both regulated and unregulated potential sources of contamination. The inventory of potential sources of contamination must be submitted in the following forms:

(A) A narrative description of land use within the WHPA.

(B) A land use map with potential sources of contamination plotted, showing their locations relative to the WHPA boundaries.

(C) A table containing information describing the potential sources of contamination, including the following:

(i) Facility identification number, cross-referenced to clause (B).

(ii) Facility name and location.

(iii) Site description.

(iv) Any environmental permits issued for the site, including **the** number and agency issuing the permit.

(v) Types of contaminants at **the** site.

(vi) Operating status of **the** site.

(4) A management plan that must include the following:

(A) A plan to manage the sanitary setback area that includes the following:

(i) Measures for the management of the area, consistent with the requirements of 327 IAC 8-3.

(ii) Measures to prohibit the storage and mixing of chemicals, other than:

(AA) those used for drinking water treatment; or

(BB) pesticides that are regulated by the pesticide review board through IC 15-16-4 and IC 15-16-5.

(iii) Provisions to secure the wellhead to prevent unauthorized access.

(iv) Guidelines that employ best management practices for transportation routes

within the sanitary setback area.

(B) A plan to manage the WHPA that addresses the following:

(i) Management or monitoring measures for all potential sources of contamination as identified in subdivision (3) to effectively protect the ground water and drinking water supply. The management or monitoring measures must consider the locations and type of potential sources of contamination and hydrogeologic characteristics of the WHPA.

(ii) Compliance of CPWSS production wells with state construction standards and permit requirements under 327 IAC 8-3 and 312 IAC 13.

(iii) Monitoring for contaminants associated with identified potential sources of contamination according to the department's standardized monitoring framework ~~under 327 IAC 8-2~~ **in 327 IAC 8-2.7**.

(iv) Methods or procedures for maintaining and updating records concerning changes to potential sources of contamination within the WHPA.

(v) Identification of abandoned wells not in compliance with IC 25-39-4-6 and 312 IAC 13-10.

(vi) Use, application, storage, mixing, loading, transportation, and disposal of pesticides in accordance with IC 15-16-4, IC 15-16-5, and the rules and guidance thereunder, developed by the pesticide review board and ~~the~~ state chemist.

(vii) Notification of property owners, mineral owners, and leaseholders of record that they are located within a WHPA.

(viii) Provide owners and operators of identified potential sources of contamination access to a copy of the local WHPP.

(ix) The establishment of a public outreach program to educate the public and owners or operators of identified potential sources of contamination about the consequences of ground water contamination, and the methods available for preventing ground water contamination.

(x) The posting of wellhead protection signs along major thoroughfares at the perimeter of the WHPA.

(xi) Other management measures required to comply with this section.

(5) A contingency plan to provide safe drinking water in emergency conditions must include the following:

(A) Description of **the** plan to train local responders.

(B) Description of **the** emergency response to leaks, spills, or illegal discharges.

(C) A list of information to be provided to local responders, including the following:

(i) Location of WHPA boundaries.

(ii) CPWSS operators to contact during an emergency.

(iii) A twenty-four (24) hour telephone number for the following:

(AA) IDEM, office of emergency response.

(BB) State **and** local ~~and city/county~~ police.

(CC) State **and** local ~~and city/county fire/hazmat~~ **fire and hazmat** team.

(DD) City or county disaster services agency.

(EE) Water supply owner, superintendent, and operator.

(FF) City or county hospital.

(D) Identification and description of potential alternate sources of water.

(E) Identification of procedures and description of methods to notify critical water users of an emergency.

(F) The posting of procedures to follow in an emergency and information on the location and availability of the complete contingency plan.

(Water Pollution Control Division; 327 IAC 8-4.1-8; filed Feb 28, 1997, 4:18 p.m.: 20 IR 1726; errata filed Jun 25, 1997, 3:55 p.m.: 20 IR 3016; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; errata filed Jul 31, 2017, 11:06 a.m.: 20170809-IR-327170349ACA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 23. 327 IAC 8-4.1-13 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-4.1-13 New well site submittal requirements

Authority: IC 13-14-8; IC 13-18-3; IC 13-18-17-6

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

Sec. 13. (a) All CPWSSs subject to this rule must receive approval for a new well site and ~~shall~~ submit the following:

(1) A United States Geological Survey seven and one-half (7.5) minute series topographic map illustrating the area surrounding the well and proposed well site.

(2) A detailed map, drawn to a scale between 1" = 400' and 1" = 1,000', showing the following:

(A) Proposed well site with ownership or easement boundaries.

(B) The location of the proposed well.

(C) The sanitary setback area.

(3) A WHPA delineated using the following:

(A) Fixed radius method, with a radius of three thousand (3,000) feet, regardless of the pumping capacity of the system.

(B) An analytical, **a** semianalytical, or **a** numerical model, executed by a qualified ground water scientist, using input parameters calculated from:

(i) regional data from published reports; or

(ii) site-specific data.

(C) Any approved method described in section 5 of this rule.

(4) ~~A~~ Potential sources of contamination inventory performed by methods outlined in section 8(3) of this rule.

(5) A summary of geologic and ground water quality information for the aquifer system ~~utilized~~ **used** by a proposed well, where available.

(6) A schedule for the development of a Phase I WHPP.

(b) Approval of a CPWSS proposed well site is dependent on the ability of each CPWSS to provide safe drinking water, as determined by the department under ~~327 IAC 8-2~~ **327 IAC 8-2.7.**

(c) To maintain well site approval status, the CPWSS must meet the following requirements:

(1) Allow no new potential sources of contamination to locate within the sanitary setback area.

(2) The CPWSS is operated in ~~such~~ a manner that it will not violate any sanitary or health regulations or requirements.

(3) Maintenance of additional requirements specified by the CPWSS construction permit.
(Water Pollution Control Division; 327 IAC 8-4.1-13; filed Feb 28, 1997, 4:18 p.m.: 20 IR 1729; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 24. 327 IAC 8-4.1-14 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-4.1-14 Well site denial criteria
Authority: IC 13-14-8; IC 13-18-3; IC 13-18-17-6
Affected: IC 13-11; IC 13-13; IC 13-18

Sec. 14. The department may deny a well site if:
(1) a source of chemical or pathogenic contamination is found within the sanitary setback area that is so severe that it cannot be consistently treated or managed to a level considered safe by standards under ~~327 IAC 8-2~~ **327 IAC 8-2.7;** or
(2) a chemical or pathogenic contaminant reported in the ground water quality information submitted under section ~~13(b)(6)~~ **13(a)(6)** of this rule is so severe that it cannot be consistently treated or managed to a level considered safe by standards under ~~327 IAC 8-2~~ **327 IAC 8-2.7.**
(Water Pollution Control Division; 327 IAC 8-4.1-14; filed Feb 28, 1997, 4:18 p.m.: 20 IR 1729; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)

SECTION 25. 327 IAC 8-4.1-15 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-4.1-15 Alternative approaches to WHPP
Authority: IC 13-14-8; IC 13-18-3; IC 13-18-17-6
Affected: IC 13-11; IC 13-13; IC 13-18

Sec. 15. (a) The department may approve alternate approaches to section 8(4)(A) of this rule upon a showing that water from a well or wellfield providing ground water to a CPWSS exceeds the standard for conventional ground water treatment ~~as set forth~~ in ~~327 IAC 8-2~~ **327 IAC 8-2.7.**

(b) In reviewing the alternative management plan under this section, the department shall consider whether the proposed alternative management plan will result in ~~the consistent provision of~~ **consistently providing** finished water in compliance with ~~327 IAC 8-2~~ **327 IAC 8-2.7.** *(Water Pollution Control Division; 327 IAC 8-4.1-15; filed Feb 28, 1997, 4:18 p.m.: 20 IR 1729; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 26. 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:~~
~~(1) any public water system, 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~~
~~(2) that the water obtained therefrom fails to meet the drinking water standards of 327 IAC 8-2;~~ ~~the person, firm, corporation or municipality owning or operating, or both, the public water 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 the changes, extensions, or improvements or to institute the changes in the methods of operation of the public water system or water treatment works as may be necessary to abate the conditions.~~

Sec. 1. (a) If the commissioner determines a PWS, water treatment works, or part of a PWS or water treatment works is:
(1) inadequate;
(2) improperly located or constructed;
(3) operated in a manner to cause disease; or
(4) supplying water that fails to meet the drinking water standards of 327 IAC 8-2.7;
the person, firm, corporation, or municipality owning or operating, or both, the PWS or water treatment works, after receiving an official order from the commissioner, must comply with the order to abate the conditions.

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

(c) The official order ~~shall~~ **must** not be issued by the commissioner until an opportunity for a hearing has been given to the person, firm, corporation, or municipality owning or operating, or both, the ~~public water system~~ **PWS** or water treatment works. At ~~which~~ **the** hearing, the facts as shown by the investigation made by the commissioner ~~shall~~ **must** be presented to the person, firm, corporation, or municipality. Notice of the hearing ~~shall~~ **must** be given not less than ten (10) days before the date set for the hearing. *(Water Pollution Control Division; 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; filed Apr 24, 2006, 3:00 p.m.: 29 IR 2974; readopted filed Jul 18, 2012, 2:25 p.m.: 20120815-IR-327120261BFA; readopted filed Jun 6, 2018, 1:59 p.m.: 20180704-IR-327180171BFA)*

SECTION 27. 327 IAC 8-10-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-10-1 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 13-18-4-1
Affected: IC 13-11-2; IC 13-13-5-1; IC 13-18-2

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

(1) "Air gap" means an unobstructed vertical distance through atmosphere between the:

(A) discharge end of a pipeline supplied from a public water supply; and

(B) overflow rim of the receiving portion of the customer water system.

(2) "Atmospheric vacuum breaker backsiphonage prevention assembly" means an assembly containing:

(A) an air inlet valve;

(B) a check valve seat; and

(C) an air inlet port.

(3) "Backflow" means the flow of water or contaminants into the public water supply distribution system from a source other than the public water supply.

(4) "Booster pump" means a pump installed on a pipeline to increase water pressure or flow.

(5) "Commissioner" means the commissioner of the Indiana department of environmental management, or the commissioner's authorized representative.

(6) "Cross connection" means any physical arrangement, including cross connection control devices not in working order, whereby a public water supply distribution system is directly connected, either continuously or intermittently, with any secondary source of supply, sewer, drain, conduit, pool, piping, storage reservoir, plumbing fixture, or other device that contains, or may contain, and is capable of imparting to the public water supply, contaminants, contaminated water, sewage, or other waste or liquid of unknown or unsafe quality.

(7) "Cross connection control device" means any device or assembly, approved by the commissioner for construction on or installation in water supply piping, that is capable of preventing contaminants from entering the public water supply distribution system.

(8) "Cross connection control device inspector" means a person who has:

(A) successfully completed training in testing and inspection of cross connection control devices from a training provider approved by the commissioner;

(B) received a registration number from the commissioner; and

(C) not been notified by the commissioner that the registration number has been revoked in accordance with section 11(b) of this rule.

(9) "Cross connection hazard" means any customer facility that, because of the nature and extent of activities on the premises or the materials used in connection with the activities or stored on the premises, would present an immediate or potential danger or health hazard to customers of the public water supply should backflow occur.

(10) "Customer" means any person who receives water from a public water supply.

(11) "Customer service line" means the pipeline from the public water supply to the:

(A) first tap, fixture, receptacle, or other point of customer water use; or

(B) secondary source of supply or pipeline branch in a building.

(12) "Customer water system" means all piping, fixtures, and appurtenances, including secondary sources of supply, used by a customer to convey water on the customer's premises.

(13) "Double check valve assembly" means a device or **an** assembly composed of two (2) tightly closing shutoff valves surrounding two (2) independently acting check valves, with four (4) test cocks, one (1) upstream of the four (4) valves and one (1) between each of the four (4) check and shutoff valves.

(14) "Downstream" means the direction of flow when only the public water supply is supplying water through the customer water system and backflow is not occurring.

(15) "Pressure vacuum breaker" means a device or assembly containing an independently

operating, internally loaded check valve and an independently operating, loaded air inlet valve located on the downstream side of the check valve for relieving a vacuum or partial vacuum in a pipeline.

(16) "Public water system", "public water supply", "public water supply system", "PWS", or "PWSS":

(A) means a system for ~~the provision to~~ **providing** the public ~~of~~ water for human consumption through pipes or other constructed conveyances, if the system:

(i) has at least fifteen (15) service connections; or

(ii) regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year;

(B) includes any:

(i) collection, treatment, storage, and distribution facilities under **the** control of the operator of the system and used primarily in connection with the system; and

(ii) collection or pretreatment storage facilities not under the operator's control that are used primarily in connection with the system; and

(C) is either a CWS, as defined in ~~327 IAC 8-2-1(12)~~ **40 CFR 141.2*,** or an NCWS, as defined in ~~327 IAC 8-2-1(63)~~ **40 CFR 141.2*.**

(17) "Reduced pressure principle backflow preventer" means a device composed of two (2) tightly closing shutoff valves surrounding two (2) independently acting pressure reducing check valves that, in turn, surround an automatic pressure differential relief valve, and four (4) test cocks, one (1) upstream of the five (5) valves and one (1) between each of the four (4) check and shutoff valves. The check valves effectively divide the structure into three (3) chambers. Pressure is reduced in each downstream chamber allowing the pressure differential relief valve to vent the center chamber to the atmosphere should either or both check valves malfunction.

(18) "Registration number" means a unique number assigned to a person by the commissioner demonstrating that the person:

(A) has fulfilled the education and examination requirements as described in section 11 of this rule; and

(B) is recognized by the state as a cross connection control device inspector.

(19) "Secondary source of supply" means any well, spring, cistern, lake, stream, or other water source, intake structure, pumps, piping, treatment units, tanks, and appurtenances used, either continuously or intermittently, to supply water other than from the public water supply to the customer, including tanks used to store water to be used only for firefighting, even though the water contained therein is supplied from the public water supply.

(20) "Spill resistant vacuum breaker" means an assembly containing an independently operating, internally loaded check valve, and an independently operating, loaded air inlet valve, located on the discharge side of the check valve. The assembly is to be equipped with a properly located, resilient seated test cock, a properly located bleed or vent valve, and tightly closing, resilient seated shutoff valves, attached at each end of the assembly.

(21) "Supplier of water" means any person ~~who~~ **that** owns or operates a public water supply.

(22) "Training provider" means an organization that conducts or presents a cross connection control device inspector course approved by the commissioner in conformance with section 12 of this rule.

(23) "Upstream" means the direction of flow opposite to downstream.

***This document is incorporated by reference. Copies may be obtained from the Government**

Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204. *(Water Pollution Control Division; 327 IAC 8-10-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 714; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2515; errata filed Aug 30, 1999, 12:06 p.m.: 23 IR 25; filed Mar 6, 2000, 7:56 a.m.: 23 IR 1629; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA; filed May 5, 2022, 9:24 a.m.: 20220601-IR-327210132FRA)*

SECTION 28. 327 IAC 8-10-5 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-10-5 Secondary sources of supply; installation of air gaps or other devices

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) Customers shall construct an air gap, or install a reduced pressure principle backflow preventer or ~~a~~ double check valve assembly, in accordance with section 7 of this rule, on the customer service line to:

(1) tanks used only to store water from the ~~public water supply~~ **PWS** for fire suppression that are constructed to maintain the bacteriological quality of the water, in compliance with ~~327 IAC 8-2~~ **327 IAC 8-2.7;** or

(2) secondary sources of supply that:

(A) use well water as the only private source of supply;

(B) are constructed to maintain the bacteriological quality of the water, in compliance with ~~327 IAC 8-2~~ **327 IAC 8-2.7;** and

(C) produce, without treatment, water meeting the drinking water quality standards enumerated in ~~327 IAC 8-2~~ **327 IAC 8-2.7.**

(b) Customers shall construct an air gap, or install a double check valve assembly or reduced pressure principle backflow preventer, in accordance with section 7 of this rule, for a fire sprinkler system, to prevent stagnant water from backflowing into the drinking water supply. For a fire sprinkler system with a chemical additive, customers shall install a reduced pressure principle backflow preventer to prevent the chemical additive backflowing into the drinking water supply.

(c) ~~No~~ **A** secondary source of supply of a type other than those enumerated in subsections (a) and (b) ~~shall~~ **must not** be physically connected on the customer service line to or into the facility. *(Water Pollution Control Division; 327 IAC 8-10-5; filed Sep 24, 1987, 3:00 p.m.: 11 IR 716; filed Mar 31, 1999, 1:50 p.m.: 22 IR 2517; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; readopted filed Nov 21, 2007, 1:16 p.m.: 20071219-IR-327070553BFA; filed Nov 13, 2012, 11:39 a.m.: 20121212-IR-327100414FRA; readopted filed Jul 29, 2013, 9:21 a.m.: 20130828-IR-327130176BFA; readopted filed Jun 14, 2019, 1:59 p.m.: 20190710-IR-327190246BFA)*

SECTION 29. 327 IAC 8-11-1 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-11-1 Water purification or treatment works; operation; reports

Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13

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

Sec. 1. (a) All purification or treatment works producing water to be used or available for drinking purposes by the public ~~shall~~ **must** be properly and efficiently operated under the supervision of a competent operator or superintendent.

(b) The commissioner may require the qualified operator or superintendent in responsible charge to attend training whenever, in the opinion of the commissioner, the training is deemed necessary for the protection of the public health.

(c) Monthly reports of operation of the following system classifications must be submitted by the operator to the commissioner:

(1) WT2.

(2) WT3.

(3) WT4.

(4) WT5.

(5) ~~Community public water systems~~ **A community PWS** purchasing water from WT4 or WT5 systems.

(6) Other systems determined by the commissioner to require monthly reporting.

(d) Reports of operation required under subsection (c) must be submitted on forms to be provided or approved by the commissioner and must include the following data, if applicable:

(1) Daily quantities of the following:

(A) Water treated.

(B) Water distributed.

(C) Chemicals added to the water.

(2) Daily operation of treatment processes, including backwashing of filters by **the** amount of filter run time and total gallons of backwash.

(3) Results of the following:

(A) All chemical, physical, and other tests performed for plant control.

(B) Disinfectant residual in the distribution system where disinfection is provided.

(4) Totals and averages of the ~~above~~ measurements **in subdivision (3)** where spaces are provided on the report form.

(5) Other data found to be necessary by the commissioner.

(e) The commissioner may reduce or modify the reporting requirements for any of the items in subsection (d).

(f) ~~All~~ Monthly reports of operation must be:

(1) submitted to the commissioner:

(A) within the first ten (10) days following the month for which the report is prepared; and

(B) using the methods specified in ~~327 IAC 8-2-13(e);~~ **40 CFR 141.31*;** and

(2) retained by the water systems for five (5) years.

***This document is incorporated by reference. Copies may be obtained from the Government Publishing Office, www.gpo.gov, or are available for review at the Indiana Department of Environmental Management, Office of Legal Counsel, Indiana Government Center North, 100 North Senate Avenue, Thirteenth Floor, Indianapolis, IN 46204.** *(Water Pollution Control Division; 327 IAC 8-11-1; filed Sep 24, 1987, 3:00 p.m.: 11 IR 718; readopted filed Jan 10, 2001, 3:23 p.m.: 24 IR 1518; filed Oct 24, 2006, 3:03 p.m.: 20061122-IR-327050255FRA; readopted filed Jul 18, 2012, 2:25 p.m.: 20120815-IR-327120261BFA; readopted filed Jun 6, 2018, 1:59 p.m.: 20180704-IR-327180171BFA)*

SECTION 30. 327 IAC 8-12-3.5 IS AMENDED TO READ AS FOLLOWS:

327 IAC 8-12-3.5 Facility specific operator

Authority: IC 13-14-8; IC 13-18-11-1.5; IC 13-18-11-13
Affected: IC 13-18-11

Sec. 3.5. (a) Operators of nontransient noncommunity ~~public water systems~~ **PWSs** of the following facility classifications may be granted facility specific operator (FSO) certifications:

(1) Class DSS systems.

(2) Class WT1 systems.

~~(3)~~ **(b)** Noncommunity public water systems of other facility classifications may be granted FSO certifications for their classifications if the commissioner determines that the FSO applicant will adequately perform the tasks necessary for proper operation of the system.

~~(b)~~ **(c)** Operators of community ~~public water systems~~ **PWSs** serving one hundred (100) or fewer people with the following facility classifications may be granted FSO certifications:

(1) Class DSS systems.

(2) Class WT1 systems.

~~(c)~~ **(d)** The following requirements must be met ~~in order~~ for ~~a~~ **an** FSO certification to be granted for a ~~public water system~~ **PWS:**

(1) The owner of the system shall designate a person to be in responsible charge of the system.

(2) The designee (applicant) must be an employee or **a** member of the public water system.

(3) Each applicant shall do the following:

(A) Demonstrate proficiency to the commissioner in accordance with section 4.5 of this rule.

(B) Meet the requirements of section 3(b)(1) of this rule.

(C) Be able to do the following:

(i) Maintain inventories.

(ii) Order supplies.

(iii) Interpret chemical and bacteriological sample reports.

(4) A person may hold only one (1) FSO certification at a time unless the commissioner has determined ~~that~~ the FSO operator can maintain each system that an FSO certification is requested.

~~(d)~~ **(e)** An FSO certification is valid as follows:

(1) Only at the facility that the FSO certification is granted.

(2) For three (3) years, during which time the operator shall fulfill the continuing education requirements for the FSO certification as listed in section 7.5 of this rule ~~in order~~ to be eligible for certification renewal in accordance with section 7(e)(3) of this rule.

~~(e)~~ **(f)** An FSO certification will be invalid if the classification of water treatment plant or water distribution system changes to one (1) requiring a certified operator with more extensive education or experience, such as any of the following:

(1) Increased capacity.

(2) An increase in population served.

(3) A basic change in the method of water treatment.

(4) Another change in conditions that causes a more difficult or complex operation.

~~(f)~~ **(g)** If a person granted an FSO certification fails to meet the continuing education requirements of section 7.5 of this rule within the required time set forth in subsection ~~(d)(2), then:~~ **(e)(2):**

(1) the FSO certification is voided; and

(2) the operator must become certified according to the requirements of this rule.

~~(g)~~ **(h)** The commissioner may revoke an FSO certification due to failure to do any of the following:

(1) Conduct ~~any of the following:~~ **monitoring and reporting to meet the requirements of 327 IAC 8-2.7.**

~~(A) Monitoring and reporting to meet the requirements of 327 IAC 8-2.~~

~~(B) Reporting to meet the requirements of 327 IAC 8-2.1.~~

~~(C) Monitoring and reporting to meet the requirements of 327 IAC 8-2.5.~~

(2) Operate and maintain the system in a manner that protects human health.

(Water Pollution Control Division; 327 IAC 8-12-3.5; filed Oct 24, 2006, 3:03 p.m.: 20061122-IR-327050255FRA)

SECTION 31. THE FOLLOWING ARE REPEALED: 327 IAC 8-2; 327 IAC 8-2.1; 327 IAC 8-2.3; 327 IAC 8-2.4; 327 IAC 8-2.5; 327 IAC 8-2.6; 327 IAC 8-3-8; 327 IAC 8-3.5-2.