Wastewater Omnibus Draft Rule Changes as of 12/9/2019

Changes in Blue

Reason for changes in dark blue

Sections that don't need changes in purple

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Regulatory Plan Language:

- Separation Distances The proposed rule changes will bring consistency to the descriptions of and distances established for the separation of water supply wells from potential sources of contamination. Due to the independent nature of the development of the drinking water and wastewater rules, there are discrepancies between the language used and the separation distances in the existing rule provisions. The drinking water and wastewater rules have distinct and differing separation distances from identical or similar potential sources of contamination. This rule change will remove discrepancies and incorporate all required separation distances for water and wastewater treatment into easily accessible portions of the rules instead of the current scattered locations, providing regulatory consistency and transparency. As these distances will be applicable to future installations and the maximum current separation distances will not be exceeded, no additional costs will be incurred by the state or permittees.
- NRE Nutrient Reduction Practice Registry (Nutrient Reduction Exchange (NRE)). The proposed rule will provide a regulatory framework to support possible future nutrient regulatory incentive programs. The NRE is a tracking system developed by the lowa DNR, United States Department of Agriculture, the lowa League of Cities, and the United States Army Corps of Engineers that allows nutrient sources In lowa to register and track nutrient reductions resulting from the installation of non-point source best management practices (BMPs). This system will encourage point source permittees to make immediate investments in non-point source BMPs. Municipal and industrial point source permittees may be eligible for potential regulatory incentives depending on the specifics of the investments they make in registered BMPs. Without a system in place for tracking nutrient reductions attributable to BMP investments, permittees cannot be confident that investments will qualify for any future regulatory incentive programs. The proposed rule changes can provide permittees with such assurance. No additional costs will be incurred as a result of this potential action, as the rule will not require the installation of BMPs.
- NPDES General Wastewater Forms, Effluent Guidelines, Monitoring and Reporting Update, General Permit Rule Cleanup, and Private Sewage System Rule Cleanup. Rule changes will ensure that the monitoring frequencies in permits are being determined using the most recent Water Quality Standards, that the monitoring requirements for land application systems are appropriate, and that the department complies with the federal NPDES electronic reporting rule. It will also ensure that the language regarding fees matches the fee amounts set in Iowa Code section 455B.197, and that the general permit language in Chapter 64 matches the requirements in the reissued, proposed, and new general permits.

- o **Forms** Remove the list of NPDES forms from Chapter 60 while maintaining the requirement to submit appropriate forms as provided by the department. It is no longer necessary to list the NPDES forms (including application, Notice of Intent, Notice of Discontinuation, and reporting forms) in Chapter 60, as all of these forms are now available on the internet. The rule listing the forms was written before the forms could be easily obtained on the department's website. No additional costs will be incurred as a result of the form list removal. This rule change will benefit permittees by removing unnecessary form references.
- O Dental Add a reference to the new federal effluent standard for the Dental Office Point Source Category at 40 CFR Part 441 to the list of referenced federal effluent and pretreatment standards in Chapter 62. The federal effluent limitation guidelines and standards for the dental category became effective on 7/14/2017. The addition of the reference to this new federal effluent standard will complete the list of referenced federal effluent and pretreatment standards in Chapter 62. The requirements of the new federal effluent standard for the Dental Office Point Source Category have already been implemented and no additional costs will be incurred from the inclusion of the reference. This change will benefit permittees by completing the list of federal effluent standards.
- Supporting Document Revise the rule-referenced document "Supporting Document for Permit Monitoring Frequency Determination, August 2008" and the associated reference language in Chapter 63. This document is used in conjunction with the monitoring tables in Chapter 63 to determine the monitoring frequencies in permits for organic and inorganic waste dischargers and significant industrial users. The document has not been updated since 2008. The document needs to be revised to incorporate recent changes to the Water Quality Standards (567 IAC Chapter 61), to incorporate new parameters, to correct the rule citations in the document, and to correct typographical errors. These changes will have a minimal effect on permittees for two reasons; 1) the monitoring frequencies for the parameters currently included in the document will not change, and 2) monitoring frequencies in permits for the parameters that are not currently included in the supporting document are based on the frequencies for similar parameters, thus the addition of these parameters to the document will not increase the monitoring requirements for permittees. As this rule change will not increase monitoring requirements for permittees, no additional costs will be incurred. The revision to the supporting document will benefit permittees by clarifying the permit monitoring and reporting requirements.
- Land Application Table Rescind Table III "Minimum Self-Monitoring in Permits for Land Application Systems" from Chapter 63. The monitoring requirements in Table III were based on the assumption that only domestic wastewater is land applied in Iowa. In fact, the vast majority of wastewater that is land applied is industrial wastewater. Monitoring requirements for most facilities will be based on Chapter 21 of the Wastewater Design Standards per the recent process improvement event. This rule change will reduce the number of variances that the department needs to review, and it will a better mirror the monitoring requirements in the Design Standards. It is not anticipated that this will change the costs of monitoring for most land application facilities, but a further analysis of costs will be done as part of the rulemaking.
- Electronic reporting Revise the reporting requirements in Chapter 63 to include the requirements of the federal NPDES Electronic Reporting rule (40 CFR Part 127), finalized on 12/21/2016. The federal rule requires the electronic submittal of all documents related to NPDES permits, except for individual permit applications. The rule does not change the information that permitted facilities are required to submit; it simply changes the format of the submittal. The department must update the wastewater rules to clarify that electronic reporting is required and that electronic submissions must be compliant with 40 CFR Part 127 and 40 CFR Part 3 (Cross-Media Electronic Reporting). Existing EPA regulations at 40 CFR 123.62(e) require states to update their rules to conform with 40 CFR Part 127. This rule change is intended to result in a more complete and accurate set of NPDES program data. This rule change will result in costs to the state associated with the needed additions to the department's wastewater databases. EPA addressed these costs in the federal rule preamble, and the costs are necessary to comply with the federal rule. As most permittees already report electronically using the

existing department online databases. It is not anticipated that this action will result in significant costs to permittees. However, a further analysis of potential costs for permittees will be done as part of the rulemaking.

- **Typos** Update and correct typographical errors and rule references in Chapter 63 and Chapter 64. These corrections will not result in any costs to the state or to permittees.
- o **Fees** Update the specific fee amounts for the NPDES and operation permit fees and construction permit fees, as established in Iowa Code section 455B.197, into subrule 64.16(3). This will not change the fee amounts. No additional costs will be incurred as a result of this rule change.
- General Permits Update the General Permit language to accord with the current and proposed general permits. The general permit rule language to be adjusted includes the portions on fees, suspension and revocation, and public notice. No additional costs will be incurred as a result of this rule change, as none of the requirements in any of the General Permits will change. This rule change will benefit permittees by simplifying and clarifying the general permit requirements.
- Onsite Cleanup the language regarding private sewage disposal systems in Chapter 69. It is not
 anticipated that this rule change will result in significant costs to permittees. However, a further
 analysis of potential costs for permittees will be done as part of the rulemaking.
- **Biosolids:** Update the sewage sludge classifications, terms, land application pathogen reduction methods, and other methods to be consistent with 40 CFR Part 503. As biosolids facilities in Iowa are already complying with the requirements in 40 CFR Part 503, no additional costs are anticipated as result of this action. This rule change will also revise the biosolids annual reporting rules to comply with the federal electronic reporting requirements in 40 CFR Part 127. The electronic submittal of the biosolids annual program reports saves permittees' time and avoids the submittal of duplicate information. As biosolids facilities in Iowa have already submitted their annual reports electronically to EPA, no additional costs are anticipated as result of this action.

Chapter 40

Amend the following definitions in rule 567—40.2(455B):

"Septic tank" means a watertight tank which receives sewage a watertight structure into which wastewater is discharged for solids separation and digestion (referred to as part of the closed portion of the treatment system).

The new language has been copied from Chapter 69. Other definitions are not being changed (except for Chapter 60) because this rulemaking is intended to correct the separation distances. Other definitions can be addressed in future rulemakings, and stakeholders can contact the specific programs for more info on definitions.

Chapter 41

Amend numbered paragraph 41.5(1)"c"(7)"4" as follows:

4. Proximity of supplies to commercial or industrial use, disposal or storage of volatile synthetic organic chemicals. Wells that are not separated from sources of contamination by at least the following distances will be considered vulnerable.

Sources of Contamination	Shallow Wells as defined	Deep Wells as defined
	in 567—40.2(455B)	in 567-40.2(455B)
Sanitary and industrial point discharges	400 ft	400 ft
Mechanical wastewater treatment works plant	400 ft	200 ft
Lagoons	1,000 ft	400 ft
Chemical and storage (aboveground)	200 ft	100 ft
Chemical and mineral storage including	400 ft	200 ft
underground storage tanks on or below ground		
Solid waste disposal site	1,000 ft	1,000 ft

The proposed change will match Table A in Chapter 43.3(7). The term "plant" is more specific than "works", which includes the sewer system. Lagoons and the mechanical portion of the WWTP are two different things, so "Lagoons" is not being changed.

Chapter 43

Strike subparagraph 43.3(2)"a"(3) and replace with new subparagraphs (3) and (4) as follows:

- (3) Separation of Water Mains from Sanitary and Combined Sewers:
- 1. Horizontal Separation of Water Mains from Gravity Sanitary and Combined Sewers. Water mains shall be separated from gravity sanitary and combined sewer mains by a horizontal distance of at least 10 feet measured edge to edge unless the bottom of the water main is at least 18 inches above the top of the sewer, and either:
 - the water main is placed in a separate trench; or
- the water main is located on a bench of undisturbed earth at a minimum horizontal separation of three feet from the sewer.

If it is not possible to obtain a horizontal separation of three feet and a vertical separation of 18 inches between the bottom of the water main and the top of the sewer, a linear separation of at least two feet shall be provided, and one of the following shall be utilized:

- the water main shall be enclosed in watertight casing pipe with an evenly spaced annular gap and watertight end seals, or
 - the sewer shall be constructed of water main materials.

The separation distance between the water main and the sewer shall be the maximum feasible in all cases.

- 2. Horizontal Separation of Water Mains from Sanitary Sewer Force Mains. Water mains shall be separated from sanitary sewer force mains by a horizontal distance of at least 10 feet measured edge to edge unless the sewer force main is constructed of water main materials and the water main is laid at least four feet horizontally from the sewer force main. The separation distance between the water main and the sanitary sewer force main shall be the maximum feasible in all cases.
- 3. Vertical Separation of Water Mains from Sanitary and Combined Sewer Crossovers. Vertical separation of water mains crossing over any sanitary or combined sewers shall be at least 18 inches when measured from the bottom of the water main to the top of the sewer. If it is not possible to maintain the required vertical separation, one of the following shall be utilized:
 - the bottom of the water main shall not be placed closer than 6 inches above the top of a sewer, or
 - the top of the water main shall not be placed closer than 18 inches below the bottom of a sewer.

When a water main crosses below or less than 18 inches above a sanitary or combined sewer, <u>one</u> of the following shall be utilized within 10 feet measured edge to edge horizontally, centered on the crossing:

- the water main shall be enclosed in watertight casing pipe with an evenly spaced annular gap and watertight ends, or
 - sewer pipe of water main material shall be installed.

The separation distance shall be the maximum feasible in all cases. In all cases where a water main crosses a sanitary or combined sewer, the water main and sanitary or combined sewer pipes must be adequately supported. A low permeability soil shall be used for backfill material within 10 feet of the point of crossing along the water main.

- 4. Horizontal Separation of Water Mains from Sanitary and Combined Sewer Manholes. No water pipe shall pass through or come in contact with any part of a sanitary or combined sewer manhole. A minimum horizontal separation of three feet shall be maintained.
 - (4) Separation of Water Mains from Storm Sewers.
- 1. Horizontal Separation of Water Mains from Gravity Storm Sewers. Water mains shall be separated horizontally from gravity storm sewers by at least 10 feet measured edge to edge. If it is not possible to maintain the required horizontal separation of 10 feet, a minimum of three feet of separation shall be maintained, and <u>one</u> of the following shall be utilized within 10 feet measured edge to edge:
 - the water main shall be constructed of ductile iron pipe with gaskets impermeable to hydrocarbons, or

- the water main shall be enclosed in watertight casing pipe with an evenly spaced annular gap and watertight end seals, or
 - storm sewer pipe of water main material shall be installed, or
- reinforced concrete pipe storm sewers shall be constructed with gaskets manufactured in accordance with ASTM C443.
- 2. Vertical Separation of Water Mains from Storm Sewer Crossovers. Water mains shall be vertically separated from storm sewers by at least 18 inches between the outside edges of the water main and the storm sewer. The separation distance shall be the maximum feasible in all cases. In all cases where a water main crosses a storm sewer, the water main and storm sewer pipes must be adequately supported. A low permeability soil shall be used for backfill material within 10 feet of the point of crossing along the water main. If it is not possible to obtain 18 inches of vertical separation where the water main crosses above a storm sewer, a minimum of 6 inches vertical separation shall be maintained and <u>one</u> of the following shall be utilized within 10 feet measured edge to edge horizontally, centered on the crossing:
 - the water main shall be constructed of ductile iron pipe with gaskets impermeable to hydrocarbons, or
- the water main shall be enclosed in watertight casing pipe with an evenly spaced annular gap and watertight end seals, or
 - storm sewer pipe of water main material shall be installed, or
- reinforced concrete pipe storm sewers shall be constructed with gaskets manufactured in accordance with ASTM C443.

The changes are being made because:

- Current rules are based on sewer construction, not water main construction.
- Current rules are inflexible for situations where a proposed water main is being constructed in an area with existing sewer infrastructure. Cutting into and replacing existing sewer pipe is not ideal.
- Current rules treat sanitary and storm sewers equally, which is problematic because storm sewers tend to be buried at a more shallow depth than water mains, thus creating separation conflicts.

The current rules have contributed to the issuance of many variances in order to proceed with permitting while still providing adequate protection to water supplies. Several of the solutions used in the variance process have been included in the proposed rule change. Those solutions include:

- 1. Separate definitions of the crossing requirements for sanitary sewers and storm sewers.
- 2. Casing pipe around water mains instead of replacing sewers with water main material as an option for crossing conflicts (both sanitary and storm sewer conflicts).
 - 3. Options for horizontal separation and crossing conflicts with storm sewers, including:
 - a. Construct water main of DIP with gaskets impermeable to hydrocarbons
 - b. Construct storm sewer of RCP with gaskets impermeable to hydrocarbons

In summary, we are proposing to change the rules on sewer separation to allow for more options to manage sewer separation distances for water main projects while maintaining protection for water supplies. In addition, the new subparagraphs will match the proposed revisions to Chapter 12 of the Wastewater Engineering Design Standards.

Chapter 43.3(7) – Table A

Amend subrule 43.3(7), Table A, as follows:

TABLE A: SEPARATION DISTANCES

SOURCE OF CONTAMINATION	REQUIRED MINIMUM DISTANCE FROM WELL, IN FEET	
	Deep Well ¹	Shallow Well ¹
Other		
Cesspools Private sewage disposal systems – open portion of treatment system, including earth pit privies & earth pit privies	200	400

SOURCE OF CONTAMINATION	REQUIRED MINIMUM DISTANCE FROM WELL, IN FEET	
	Deep Well ¹	Shallow Well ¹
Concrete vaults & septic tanks Private sewage disposal systems – closed portion of treatment system ⁴	100	200
Lagoons	400	1000
Mechanical wastewater treatment plants	200	400
Soil absorption fields	200	400
CHEMICALS:		
Chemical application to ground surface	100	200
Chemical & mineral storage above ground ^{5,6}	100	200
Chemical & mineral storage on or under ground	200	400
Transmission pipelines (such as fertilizer, liquid petroleum, or anhydrous ammonia)	200	400
MISCELLANEOUS:		
Basements, pits, sumps	10	10
Cemeteries	200	200
Cisterns	50	100
Flowing streams or other surface water bodies	50	50
Railroads	100	200
Private wells	200	400
Solid waste landfills and disposal sites ⁴ ⁷	1000	1000

¹Deep and shallow wells, as defined in 567—40.2(455B): A deep well is a well located and constructed in such a manner that there is a continuous layer of low permeability soil or rock at least 5 feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn. A shallow well is a well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

²The separation distances are dependent upon two factors: the type of piping that is in the existing sewer or drain, as noted in the table, and that the piping was properly installed in accordance with the standards.

³Solid wastes are those derived from the treatment of water or wastewater. Certain types of solid wastes from water treatment processes may be land-applied within the separation distance on an individual, case-by-case basis.

⁴Private sewage disposal system is defined in 567 IAC Chapter 69. Examples of closed and open portions of treatment systems are provided in 567 IAC Chapter 69.

⁵The minimum separation distance for liquid fuel storage associated with standby power generators shall be 50 feet if secondary containment is provided. Secondary containment shall provide for a minimum of 110% of the liquid fuel storage capacity. Double walled storage tanks shall not be considered as secondary containment.

⁶Electrical power transformers mounted on a single utility pole are exempt from the minimum separation distance requirements.

⁴⁻⁷Solid waste means garbage, refuse, rubbish, and other similar discarded solid or semisolid materials, including but not limited to such materials resulting from industrial, commercial, agricultural, and domestic activities.

Chapter 69 defines "Private sewage disposal system" as a system which provides for the treatment or disposal of domestic sewage from four or fewer dwelling units or the equivalent of less than 16 individuals on a

continuing basis, including domestic waste, whether residential or nonresidential, but not including industrial waste of any flow rate except as provided for in 567—68.11(455B). "Private sewage disposal system" includes, but is not limited to, septic tanks, holding tanks for waste, chemical toilets, impervious vault toilets and portable toilets. A reference to this definition has been added in new footnote 4.

Closed and open portions of a treatment system are not defined in Chapter 69, but they are discussed in the "Septic Tank" and "Subsurface soil absorption system" definitions.

"Cesspools and earth pit privies" are being combined with "open portion of treatment system", because the distances are the same. "Cesspools" is being removed because the definition of cesspool in Chapter 49 says that they are not an approved method of sewage disposal.

Changing "Concrete vaults and septic tanks" to "closed portion of treatment system", because that is what they are equivalent to, and this will match Table 1 in 69.3(2). Chapter 69, definition of "Septic tank" means a watertight structure into which wastewater is discharged for solids separation and digestion (referred to as part of the closed portion of the treatment system). Also, see 69.17, Requirements for impervious vault toilets, where "closed portion" is cited.

Removing "Soil absorption fields" because they are the same as the open portion of the treatment system, which is now part of "cesspools and earth pit privies". This will match Table I in 69.3(2). In Chapter 69, "Subsurface soil absorption system" is defined as a system of perforated conduits connected to a distribution system, forming a series of subsurface, water-carrying channels into which the primary treated effluent is discharged for direct absorption into the soil (referred to as part of the open portion of the treatment system). Also, see Table I in 69.3(2).

New clarification footnotes (5 and 6) are being added to the "Chemical and mineral storage above ground" source. The number of the footnote associated with the "Solid waste landfills and disposal sites" source is changing, but the footnote text will remain the same.

Chapter 49

Amend subrule **49.6(1)** as follows:

49.6(1) *Minimum distances.* The following minimum lateral distances <u>from all private wells</u> shall apply for the common structures or sources of contamination listed in the following table.

Table 49.6(1) Minimum Lateral Distances, Private Wells

Structure or Sources Source of Contamination	Minimum Lateral Distance (feet)	
	Shallow Well ¹	Deep Well ¹
Any public water supply well, shallow or deep	400	200
Formed manure storage structure, confinement building, feedlot solids settling facility, open feedlot	200	100
Public water supply well	400	200
Transmission pipelines (including, but not limited to, fertilizer, liquid petroleum, or anhydrous ammonia) if a more restrictive setback is not set by the pipeline owner	<u>200</u>	<u>100</u>
		All <u>Private</u> Wells
Earthen manure storage basin, runoff control basins and anaerobic la subrule 49.6(2) below)	agoons (see	1000
<u>Drainage wells</u>		1000
Domestic wastewater lagoon		400
Sanitary landfills Solid waste landfills and disposal sites ²		1000

<u>Domestic wastewater lagoon</u>	<u>400</u>
Preparation or storage area for spray materials, commercial fertilizers or chemicals that may result in groundwater contamination	100 150
Drainage wells	1000
Conforming wells	10
Nonconforming Existing wells that do not conform to Chapter 49	100
Liquid hydrocarbon storage tanks, except for liquid propane gas (LPG)	<u>100</u>
Soil absorption field, any sewage treatment system with an open discharge, pit privy or septic tank discharge line (not conforming to 567—Chapter 69) Private sewage disposal systems – open portion of treatment system ¹	100
Septic tank, concrete vault privy, sewer of tightly joined tile or equivalent material, sewer-connected foundation drain, or sewers under pressure Private sewage	
<u>disposal systems – closed portion of treatment system</u> ¹	50
Flowing streams or other surface water bodies	<u>25</u>
Liquid propane gas (LPG) storage tanks	<u>15</u>
Existing wells that conform to Chapter 49	<u>10</u>
Sewer of cast iron with leaded or mechanical joints, sewer of plastic pipe with glued or compression joints, independent clear water drains, cisterns, well pits, or pump house floor drains	10
<u>Yard</u> Hydrants	10
Property lines (unless a mutual easement is signed and recorded by both parties)	4
Liquid hydrocarbon storage tanks	100
Ditches, streams, ponds, or lakes	25
Roadside ditch and road rights of way	<u>15</u>
Frost pit	10
Property lines (unless a mutual easement is signed and recorded by both parties)	<u>4</u>
1	

^{1&}quot;Deep well" and "Shallow well" are defined in 567—49.2(455B).

The entire table was reorganized so that the lateral distances are in descending order. The changes to the introductory paragraph and the table column header adds clarification, as not all structures in the table (like public wells) are sources of contaminants.

Added a transmission pipeline setback because two other states that border lowa currently apply this category, and because the department does not have a setback that addresses the pipeline scenario. The proposed distances are slightly less restrictive than other states. This term is used in Chapter 43.3(7) Table A, but the setbacks proposed for private wells are 50% of those required for a PWS.

Sanitary landfills is being changed to "Solid waste landfills and disposal sites" to match Chapter 43.3(7) Table A. A definition footnote is also being added.

²Solid waste means garbage, refuse, rubbish, and other similar discarded solid or semisolid materials, including but not limited to such materials resulting from industrial, commercial, agricultural, and domestic activities.

³Private sewage disposal system is defined in 567 IAC Chapter 69. Examples of closed and open portions of treatment systems are provided in 567 IAC Chapter 69.

The change to the distance for the preparation or storage area for chemicals accords with of the Agriculture and Land Stewardship rules, Chapter 44, On-Site Containment of Pesticides, Fertilizers, and Soil Conditioners (21 IAC 44.53(200)), which says: New permanent fertilizer and soil conditioner storage sites shall be located at a minimum of 400 feet from public water supply wells or below ground level finished water storage facilities and a minimum of 150 feet from private water supply wells.

Changed the terms "conforming wells" and "nonconforming wells" to more defined statements to eliminate confusion.

Changed the term "Ditches, streams, ponds, or lakes" to "Flowing streams or other surface water bodies", to clarify that this term applies to waterbodies and to agree with Chapter 43.3(7) Table A.

Added a separate category for Liquid Propane Gas (LPG) storage tanks and assigned a setback similar to all of the surrounding states. Previously, lowa used the same setback for liquid propane (LP) and other liquid fuel storage tanks of 100 feet. Other surrounding states have adopted a lesser setback because an LPG spill is not like other gas spills, as propane is volatile.

The new language for open and closed portions of private sewage disposal systems matches the changes proposed for 43.3(7), Table A. See the discussion in that section.

Adding the word "yard" in front of "hydrants" because this applies specifically to private wells near yard hydrants.

Removed "ditch" from Ditches, Streams, Ponds, or Lakes" and added a separate setback for roadside ditch and rights of way that is similar to several surrounding states. This will help reduce confusion with the current setback that lumps ditches in with streams, ponds, and lakes,

Adding a new "Deep well" and "Shallow well" footnote to distinguish the two types based on geologic setting.

Adding a new solid waste footnote to support the "solid waste landfills and disposal sites" setback term change.

Chapter 60

Amend rule 567—60.2(455B,17A), Definition, as follows:

"CFR" or "Code of Federal Regulations" means the federal administrative rules adopted by the United States in effect as of January 1, 2015 July 1, 2020. The amendment of the date contained in this definition shall constitute the amendment of all CFR references contained in 567—Chapters 60 to 69, Title IV, unless a date of adoption is set forth in a specific rule.

"Regional administrator" means the regional administrator of the United States Environmental Protection Agency, Region VII, 901 N. 5th Street, Kansas City, Kansas 66101 11201 Renner Blvd. Lenexa, KS 66219, or the authorized representative of the Regional Administrator.

"Shallow well" means a well located and constructed in such manner that there is not a continuous 5 foot layer of low permeability soil or rock between the aquifer from which the water supply is drawn and a point 25 feet below the normal ground surface (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

Updating the CFR date.

The change to "regional administrator" corrects the address for the EPA Region VII office and matches the language in 40 CFR 122.2.

Changing the definition of "shallow well" to match Chapter 40, which says: "Shallow well" means a well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn. This definition is also used in 69.3(2), Table 1.

Amend rule 567—60.3(455B,17A), introductory paragraph, as follows:

567—60.3(455B,17A) Construction Permit, Operation and NPDES Permit, and Other Wastewater

Application and Reporting Forms. The following forms Forms provided by the department shall be used to apply for departmental approvals and permits and to report on activities related to the department's

wastewater programs of the department. Electronic forms may be accessed on the department's website or obtained from the appropriate regional field office. Paper forms, when available, may be obtained from the Web site of the department department's website or by contacting the appropriate regional field office. Properly completed application forms, reporting forms, and all attachments shall be submitted in accordance with the departmental instructions. Reporting forms shall be submitted to the appropriate field office.

Expanded title of section to include the names of the subrules that are being struck. Allows for the use of the GP 589 Database and the storm water database, and for any future e-reporting tools. All forms need to be submitted in accordance with their instructions. The last sentence is being struck because application forms and some reporting forms (GP 5 annual monitoring report) are not submitted to the field office.

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Strike subrules 60.3(2) and 60.3(3).
    60.3(2) Operation and NPDES permit application forms.
    a. Form 30 — public or private domestic sewer systems (municipal and semipublic facilities) 542-3220.
    (1) Part A — basic information for all applicants.
    (2) Part B — expanded effluent testing data.
    (3) Part C — toxicity testing data.
    (4) Part D — industrial user discharges and RCRA/CERCLA wastes.
    (5) Part E — combined sewer systems.
    (6) Part F — certification.
    b. Form 31 — treatment agreement 542-3221.
    c. Form 34 - open feedlots 542-4001.
    d. Form 1 — general information for industrial, manufacturing or commercial systems 542-1376.
    e. Form 2 — facilities which do not discharge process wastewater—industrial, manufacturing or
commercial systems 542-1377.
   f. Form 3 — facilities which discharge process wastewater existing sources—industrial, manufacturing, and
commercial systems 542-1378.
    q. Form 4 — facilities which discharge process wastewater—new sources—industrial, manufacturing or
commercial systems 542 1379.
    h. EPA Form 2F — application for NPDES individual permit to discharge storm water discharge associated with
industrial activity 542-1380.
    i. Form 5 — Certification for Industrial Facilities and Operation Permits 542-1382.
   i. Form 6 — Operation Permit Application 542 1390.
    k. NPDES Permit Application Supplement 542-1383.
    I. Notice of Intent for Coverage Under Storm Water NPDES General Permit No. 1 "Storm Water Discharge
Associated with Industrial Activity" or General Permit No. 2 "Storm Water Discharge Associated with Industrial
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m. Notice of Intent for Coverage Under NPDES General Permit No. 4 "Discharge from Private Sewage Treatment and Disposal Systems" 542-1541.

n. Notice of Intent for Coverage Under NPDES General Permit No. 5 "Discharge from Mining and Processing Facilities" 542-4006.

Activity for Construction Activities" or General Permit No. 3 "Storm Water Discharge Associated with Industrial Activity from Asphalt Plants, Concrete Batch Plants, Rock Crushing Plants and Construction Sand and Gravel

o. Notice of Discontinuation From Coverage Under General Permit No. 5 542 8038.

p. Information Required to Accompany Application for the Municipal Separate Storm Sewer System (MS4) Permit 542-8039.

q. NPDES Application Fee Invoice for Open Feedlots and Designated Confinement Feeding Operations 542-1240. r. NPDES Application Fee Invoice 542-1251.

s. NPDES Application Fee Invoice for a New Discharger 542-1253.

Facilities" 542-1415.

t. Storm Water Discharge - NPDES General Permit #1 Notice of Discontinuation 542-8814.

u. Storm Water Discharge — NPDES General Permit #2 Notice of Discontinuation 542 8815.

- v. Storm Water Discharge NPDES General Permit #3 Notice of Discontinuation 542-8816.
- w. Public Notice of Storm Water Discharge 542-8117.
- x. Notice of Intent for Coverage Under NPDES General Permit No. 7, "Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States From the Application of Pesticides."
 - y. Notice of Discontinuation From Coverage Under General Permit No. 7.
 - 60.3(3) Wastewater records of operation and other report forms.
- a. Individual operation and NPDES permit, discharge monitoring report forms as given to the permittee by the department.
- b. General Permit No. 5, "Discharge from Mining and Processing Facilities," Annual Monitoring Report 542-8035.
- c. General Permit No. 6, "Iowa DNR Water Well Construction and Services Wastewater Discharge Field Office Notification Form," 542-0018.
- d. General Permit No. 7, "Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States From the Application of Pesticides," Annual Monitoring Report.
 - e. "Acute Whole Effluent Toxicity Testing Report Form," 542-1381.
 - f. Other forms as provided by the department, including electronic forms.
- Removes obsolete forms and allows for the use of the GP 589 Database and the storm water database, and allows for any future e-reporting tools.

Amend paragraph 60.4(2)"a" as follows:

- **60.4(2)** Operation and NPDES permit applications.
- a. General. A person required to obtain or renew a wastewater operation permit or an Iowa NPDES permit pursuant to 567—Chapter 64, 567—Chapter 65, or 567—Chapter 69 must complete the appropriate application form as identified in subrule 60.3(2) rule 567-60.3.
- (1) Complete applications. A permit application is complete and approvable when all necessary questions on the application forms have been completed and the application is signed pursuant to 567—subrule 64.3(8), and when all applicable portions of the application, including the application fee and required attachments, have been submitted. The director may require the submission of additional information deemed necessary to evaluate the application, including an antidegradation alternatives analysis. The due date for a renewal application is 180 days prior to the expiration date of the current permit, as noted in 567—64.8(455B). For a POTW, permission to submit an application at a later date may be granted by the director. The due date for a new application is 180 days prior to the date the operation is scheduled to begin, unless a shorter period is approved by the director.

Subrule 60.3(2) is being removed, so the reference needs to be fixed. The antidegradation alternative analysis language is being added because applications for new permits or for expanded discharges cannot be evaluated without such an analysis.

Amend paragraph 60.4(2)"b" as follows:

- b. Amendments. A permittee seeking an amendment to its operation permit shall make a written request in the form of a detailed letter or email to the department which shall include the nature of and the reasons supporting the requested amendment. A variance or amendment to the terms and conditions of a general permit shall not be granted. If a variance or amendment to a general permit is desired, the applicant must apply for an individual permit following the procedures in 567—paragraph 64.3(4)"a."
- (1) Schedules of compliance. Requests to amend a permit schedule of compliance shall be made at least 30 days prior to the next scheduled compliance date which the permittee contends it is unable to meet. The request shall include any proposed changes in the existing schedule of compliance, and any supporting documentation for the time extension. An extension may be granted by the department for cause. Cause may include unusually adverse weather conditions, equipment shortages, labor strikes, federal grant regulation requirements, or any other extenuating circumstances beyond the control of the requesting party. Cause does not include economic hardship, profit reduction, or failure to proceed in a timely manner.

- (2) Interim effluent limitations. A request to amend interim effluent limitations in an existing permit shall include the proposed amendments to existing effluent limitations and any documentation in support of the proposed limitations. The department will evaluate the request based upon the capability of the disposal system to meet interim effluent limitations, taking into account the contributions to treatment capability which can be made by good operation and maintenance of the disposal system and by minor alterations which can be made to the system to improve its capability. The department may deny a request where the inability of the disposal system to meet interim effluent limitations is due to increased waste loadings on the system over those loadings upon which the interim limitations were based.
- (3) Monitoring requirements. An amendment request for a change in the minimum monitoring requirements in an existing permit is considered a variance request. A <u>An electronic or paper</u> request for a variance shall include a <u>letter and the a completed</u> Petition for Waiver or Variance form (542-1258). This form can be obtained from the <u>NPDES section as noted in 60.3(455B) department's website or by contacting the NPDES Section</u>. The requesting permittee must provide monitoring results which are frequent enough to reflect variations in actual wastewater characteristics over a period of time and are consistent in results from sample to sample. The department will evaluate the request based upon whether or not less frequent sample results accurately reflect actual wastewater characteristics and whether operational control can be maintained. Upon receipt of a request, the department may grant, modify, or deny the request. If the request is denied, the department may notify the permittee of any violation of its permit and may proceed administratively on the violation or may request that the commission refer the matter to the attorney general for legal action.

The proposed changes allow for electronic submittal of amendment and variance requests, and specifies that the variance form can be obtained on the department's website.

Chapter 62

Amend rule 62.4(455B), introductory paragraph, as follows:

567—62.4(455B) Federal effluent and pretreatment standards. The federal standards, 40 Code of Federal Regulations (CFR), revised as of January 1, 2015 2020, are applicable to the following categories: New date will ensure all references are current and it reflects the new dental ELGs.

Amend subrule 62.4(41) as follows:

62.4(41) *Industrial laundries point source category.* Reserved. *Dental Office Point Source Category.* The following is adopted by reference: 40 CFR Part 441.

Adding a reference to the new dental Effluent Limitation Guidelines (ELGs).

Chapter 63

Amend rule 567—63.1(455B) as follows:

- **567—63.1(455B)** Guidelines establishing test procedures for the analysis of pollutants. Only the procedures prescribed in this chapter shall be used to perform the measurements indicated in an application for an operation permit submitted to the department, a report required to be submitted by the terms of an operation permit, and a certification issued by the department pursuant to Section 401 of the Act.
- **63.1(1)** Identification of test procedures, application for alternative test procedures, and method modifications.
- *a.* The following is adopted by reference: 40 Code of Federal Regulations (CFR) Part 136 Guidelines Establishing Test Procedures for the Analysis of Pollutants, as amended through August 28, 2017.
- b. All parameters for which testing is required by a wastewater discharge permit, permit application, or administrative order, except operational performance testing, must be analyzed using one of the following:
 - (1) an approved methods method specified in 40 CFR Part 136.3;
- (2) or, under certain circumstances, by other methods that may be more advantageous to use when such other methods have an alternative method that has been previously approved by the director pursuant to 63.1(2) pursuant to 40 CFR Part 136.4 or Part 136.5; or

(3) a method identified by the department, when no approved method is specified for the parameter in 40 CFR Part 136.

Samples collected for operational testing pursuant to 63.3(4)(3) need not be analyzed by approved analytical methods; however, commonly accepted test methods should be used.

- c. Applications for alternative test procedures shall follow the requirements of 40 CFR Part 136.4 or Part 136.5.
 - d. Method modifications shall follow the requirements of 40 CFR Part 136.6.
 - 63.1(2) Application for alternate test procedures.
- a. Any person may apply to the EPA regional administrator through the director for approval of an alternate test procedure.
 - b. The application for an alternate test procedure may be made by letter and shall:
- (1) Provide the name and address of the responsible person or firm holding or applying for the permit (if not the applicant) and the applicable ID number of the existing or pending permit and type of permit for which the alternate test procedure is requested and the discharge serial number, if any.
- (2) Identify the pollutant or parameter for which approval of an alternate testing procedure is being requested.
 - (3) Provide justification for using testing procedures other than those specified in 40 CFR Part 136.3.
- **63.1**(3)(2) Required containers, preservation techniques and holding times. All samples collected in accordance with self-monitoring requirements as defined in an operation permit shall comply with the container, preservation techniques, and holding time requirements as specified in Table IV 40 CFR Part 136.3 Table II Required Containers, Preservations Techniques, and Holding Times. Sample preservation should be performed immediately upon collection, if feasible.
- **63.1**(4)(3) All laboratories conducting analyses required by this chapter must be certified in accordance with 567—Chapter 83. Routine on-site monitoring for pH, temperature, dissolved oxygen, total residual chlorine, other pollutants that must be analyzed immediately upon sample collection, settleable solids, physical measurements such as flow and cell depth, and operational monitoring tests specified in 63.3(4) are excluded from this requirement. All instrumentation used for conducting any analyses required by this chapter must be properly calibrated according to the manufacturer's instructions.

Adds the adoption date of the last federal Method Update Rule (Part 136).

Clarifies the requirements regarding testing methods by adding subparagraphs and using the correct terminology, and by allowing the department to specify analysis methods for parameters that do not have analysis methods in 40 CFR Part 136, such as glycol and peracetic acid.

Removes confusion regarding the application for alternative test procedures and method modifications by directly referencing the CFR.

Removes confusion regarding the proper containers, preservation techniques, and holding times by directly referencing the CFR. 40 CFR Part 136.3 Table II will be made available on the department's website for reference, as Table IV will no longer be part of the rule.

Amend subrule 63.3(1), as follows:

- **63.3(1)** *Monitoring by organic waste dischargers*. The minimum self-monitoring requirements to be incorporated in operation permits for facilities discharging organic wastes shall be the appropriate requirements in Tables I, II, and III and II. Additional monitoring may be specified in the operation permit based on a case-by-case evaluation of the impact of the discharge on the receiving stream, toxic or deleterious effects of wastewaters, industrial contribution to the system, complexity of the treatment process, history of noncompliance or any other factor which requires strict operational control to meet the effluent limitations of the permit, as described in the Supporting Document for Permit Monitoring Frequency Determination, August 2008 new date, located on the NPDES Web site department's website.
- **63.3(2)** *Monitoring by inorganic waste dischargers.* The self-monitoring requirements to be incorporated in the operation permit for facilities discharging inorganic wastes shall be determined on a case-by-case evaluation of the impact of the discharge on the receiving stream, toxic or deleterious effects of wastewaters,

complexity of the treatment process, history of noncompliance or any other factor which requires strict control to meet the effluent limitations of the permit, as described in the Supporting Document for Permit Monitoring Frequency Determination, August 2008 new date, located on the NPDES Web site department's website.

63.3(3) Monitoring of significant industrial users of publicly owned treatment works. Monitoring for significant industrial users as defined in 567—60.2(455B) shall be determined as described in the Supporting Document for Permit Monitoring Frequency Determination, August 2008 new date, located on the NPDES Web site department's website. Results of such monitoring shall be submitted to the department in accordance with the reporting requirements in the operation permit. The monitoring program of a publicly owned treatment works with a pretreatment program approved by the department may be used in lieu of the supporting document.

Updates website references and the Supporting Document. See separate draft.

Amend paragraphs 63.4(2)"a" and "b" as follows:

63.4(2) *Testing procedures.* Dischargers shall be required to conduct effluent toxicity tests in accordance with the following general requirements:

a. The effluent toxicity tests shall be performed using a 24-hour composite sample of the effluent collected at the location stated in the operation permit. All composite samples shall be delivered to the testing laboratory within a reasonable time (approximately 24 hours) after collection and all tests must commence within 36 hours following sample collection. The results of all effluent toxicity tests conducted using approved procedures, including any tests performed at a greater frequency than required in the operation permit, shall be submitted to the department, on Form 542-1381 provided by the department, within 30 days of completing the test.

b. All effluent toxicity tests shall be conducted using the test methodologies methods referenced in 40 CFR Part 136 and protocols described within "Standard Operating Procedure: Effluent Toxicity Testing, lowa Department of Natural Resources," March 1991. This procedure is adopted as part of this subrule and is filed as part of this subrule with the administrative rules coordinator. This procedure is an essential part of the testing procedures and is available upon request to the department although not printed in this subrule. In the EPA document EPA-821-R-02-012, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th Ed., October 2002, Laboratories performing the effluent toxicity tests shall also have a quality assurance plan. All effluent toxicity tests shall be conducted by an lowa certified laboratory.

Removed redundant language ("conducted using approved procedures"), removed old form, and updated toxicity test procedures to the current procedure (as confirmed with DNR lab staff and SHL.) Eliminated the line about having a QA plan since one is required for certification. Added requirement to use a laboratory certified in Iowa. Chronic WETT will be addressed later in a separate rulemaking.

567—63.5(455B) Self-monitoring and reporting for animal feeding operations.

63.5(1) The following self-monitoring requirements may be imposed on an animal-feeding operation in any operation permit issued for such an operation.

- a. Measurement of liquid level in a waste storage facility on a periodic basis.
- b. Measurement of daily precipitation, as appropriate.
- c. Sampling and analysis of groundwater as necessary to determine effects of wastewater application.
- d. Other measurements necessary to evaluate the adequacy of a waste disposal system.

63.5(2) Reports of the self-monitoring results shall be submitted to the appropriate regional field office of the department quarterly. The quarterly reports shall cover the periods January through March, April through June, July through September, and October through December. The quarterly report for each period shall be submitted by the tenth day of the month following the quarter being reported.

No changes needed. Electronic reporting for AFO NPDES permits will be addressed at a later time.

Amend rule 63.7(455B) as follows:

567—63.7(455B) Submission of records of operation.

- **63.7(1)** Electronic Reporting. Except as provided in this rule and subrules 63.3(4) and 63.5(1), records of operation required under NPDES permits shall be submitted electronically to the appropriate regional field office of the department within 15 days following the close of the reporting period specified in 63.8(455B) and in accordance with monitoring requirements derived from this chapter and incorporated in the operation NPDES permit. Records of operation required under operation permits shall be submitted to the department within 15 days following the close of the reporting period specified in 63.8(455B) and in accordance with monitoring requirements derived from this chapter and incorporated in the operation permit.
- <u>63.7(2)</u> Temporary or Permanent Electronic Reporting Waivers under Individual NPDES Permits. The requirement in subrule 63.7(1) to submit records of operation electronically can be waived for individual permittees in accordance with the following requirements.
- a. Written Request. To obtain a temporary or permanent electronic reporting waiver, a permittee must submit a written request for a waiver to the NPDES Section of the department at 502 East 9th St., Des Moines, IA, 50319. The written request must include the following:
 - (1) Facility name;
 - (2) Individual NPDES or operation permit number or general permit authorization number;
 - (3) Facility address;
 - (3) Owner name and contact information;
- (4) Name and contact information of the person submitting records of operation (if different than the owner); and
- (5) Reason for the waiver request, including a justification of why electronic submission is not feasible at this time.

Requests for electronic reporting waivers that do not contain all of the above information will not be considered. Electronic (email) requests for electronic reporting waivers will not be considered.

- b. Temporary electronic reporting waivers under individual NPDES permits.
- (1) The department will approve or deny a request for a temporary electronic reporting waiver within 60 days of receipt of the request. Waiver requests will be approved or denied at the discretion of the director.
- (2) All temporary electronic reporting waivers will expire five years from department approval. After a temporary electronic reporting waiver expires, the permittee must submit all records of operation electronically, unless another waiver is obtained.
 - (3) Approved temporary electronic reporting waivers are non-transferrable.
 - c. Permanent electronic reporting waivers under individual NPDES permits.
- (1) The department will approve or deny a request for permanent electronic reporting waiver within 60 days of receipt of the request. Permanent electronic reporting waivers shall only be granted to facilities and entities owned or operated by members of religious communities (i.e. Amish, Mennonite) that choose not to use certain modern technologies (e.g., computers, electricity). Permanent electronic reporting waivers shall not be granted to any other facilities or entities.
 - (2) Approved permanent electronic reporting waivers are non-transferrable.
- d. Paper Copies. All permittees who have received for a temporary or permanent electronic reporting waiver must submit paper copies of all records of operation to the department within 15 days following the close of the reporting period specified in 63.8(455B) and in accordance with monitoring requirements derived from this chapter and incorporated in the NPDES permit.
 - **63.7(3)** Electronic Reporting Under General NPDES Permits.
- a. General Permits 1, 2, 3, 4, and 5. Both electronic and paper reporting options are currently available to permittees covered under General Permits 1, 2, 3, 4, and 5. Electronic reporting using the options available on the department's website is strongly encouraged, but paper reports will be accepted. Electronic waivers can be obtained by permittees covered under General Permits 1, 2, 3, and 5 according to the procedures in 63.7(2).

<u>b. Electronic Reporting Requirements for General Permits 8 and 9.</u> Permittees covered under General Permits 8 and 9 are required to report electronically using the department's online database, unless an electronic waiver is obtained according to the procedures in 63.7(2).

63.7(4) Episodic Electronic Reporting Waivers. The requirement in subrule 63.7(1) to submit records of operation electronically under NPDES permits can be waived on an episodic basis for permittees in accordance with the following requirements. The department shall provide notice, individually or through means of mass communication, regarding when an episodic waiver is available, the facilities and entities that may use the episodic waiver, and the likely duration of the episodic waiver. The department shall determine if and when an episodic electronic reporting waiver is warranted.

a. Episodic waivers are only available to permittees in the following circumstances:

(1) Large scale emergencies involving catastrophic circumstances beyond the control of a permittee, such as forces of nature (e.g., hurricanes, floods, fires, earthquakes) or other national disasters.

(2) Prolonged electronic reporting system outages (i.e., outages longer than 96 hours).

b. No waiver request from the permittee is required to obtain an episodic electronic reporting waiver. If the department determines that an episodic waiver is warranted (for the reasons listed above), the permittee shall submit paper copies of all records of operation to the department within 15 days following the close of the reporting period specified in 63.8(455B) and in accordance with monitoring requirements derived from this chapter and incorporated in the operation permit.

c. Episodic waivers are not transferrable and cannot last more than 60 days.

<u>63.7(5)</u> *Instances of noncompliance.* The permittee shall report all instances of noncompliance not reported under 63.12(455B) at the time monitoring reports are submitted.

<u>63.7(6)</u> Relevant Facts. If a permittee becomes aware that it failed to submit any relevant facts in any report to the director, the permittee shall promptly submit such facts or information.

The new language incorporates the requirements of the federal NPDES electronic reporting rule (40 CFR Part 127), including the electronic reporting waiver provisions.

A new sentence was added to cover operation permits, as the new land application permits require paper submittal of annual reports, and the federal NPDES electronic reporting rules do not apply to operation permits.

The proposed paragraph 63.7(2)"a" (written request requirements) includes the minimum requirements in 40 CFR Part 217. The five year period for temporary waivers in 63.7(2) "b" is the maximum time period allowed under 40 CFR 127.15.

The 60 day period for episodic electronic waivers in proposed paragraph 63.7(4)"c" is the maximum allowed under 40 CFR 127.15.

AFO facilities are not currently subject to this rule, as noted in the first sentence ("except as provided in 65.3(1)"). Electronic reporting for AFO NPDES permits will be addressed at a later time.

Amend rule 567—63.10(455B) as follows:

567—63.10(455B) Records of operation forms. Records of operation forms shall be those provided by the department unless its forms are not applicable and in such case the records of operation shall be submitted on such other forms as are agreeable to the department a permittee has obtained approval from the department to use an alternative reporting form.

The department's form should always be applicable, but in rare cases, we may allow the submittal of an alternative form.

Amend rule 567—63.15(455B) as follows:

567—63.15(455B) Other noncompliance. The permittee shall provide a written <u>or electronic</u> description of all instances of noncompliance not reported under rule 567—63.12(455B) or 567—paragraph 64.7(4)"c" at the time discharge monitoring reports (DMRs) are submitted. The written <u>or electronic</u> description shall contain the information listed in rule 567—63.12(455B).

Allows permittees to provide electronic notification of noncompliance (email)

Amend superscript number 4 in Chapter 63, Table I Minimum Self-Monitoring in Permits for Organic Waste Dischargers Controlled Discharge Wastewater Treatment Plants, as follows:

4 - Sample types are defined as:

"Grab Sample" means a representative, discrete portion of sewage, industrial waste, other waste, surface water or groundwater taken without regard to flow rate.

"24-Hour Composite" means:

a. For facilities where no significant industrial waste is present, a sample made by collecting a minimum of six grab samples taken four hours apart and combined in proportion to the flow rate at the time each grab sample was collected. (Generally, grab samples should be collected at 8 a.m., 12 a.m. p.m. (noon), 4 p.m., 8 p.m., 12 p.m. a.m. (midnight), and 4 a.m. on weekdays (Monday through Friday) unless local conditions indicate another more appropriate time for sample collection.)

b. For facilities where significant industrial waste is present, a sample made by collecting a minimum of 12 grab samples taken two hours apart and combined in proportion to the flow rate at the time each grab sample was collected. (Generally, grab samples should be collected at 8 a.m., 10 a.m., 12 a.m. p.m. (noon), 2 p.m., 4 p.m., 6 p.m., 8 p.m., 10 p.m., 12 p.m. a.m. (midnight), 2 a.m., 4 a.m., and 6 a.m. on weekdays (Monday through Friday) unless local conditions indicate another more appropriate time for sample collection.)

Fixing Typos

Amend footnote number 9 in Table II Minimum Self-Monitoring in Permits for Organic Waste Dischargers Continuous Discharge Wastewater Treatment Plants, as follows:

9 - Total nitrogen shall be determined by testing for Total Kjeldahl Nitrogen (TKN) and nitrate + nitrite nitrogen and reporting the sum of the TKN and nitrate + nitrite results (reported as N). Total nitrogen (as N) is defined as Total Kjeldahl Nitrogen (as N) plus nitrate (as N) plus nitrite (as N). Nitrate + nitrite can be analyzed together or separately. Total phosphorus shall be reported as P. Analyses must be performed by an lowa certified laboratory.

Added definition of TN and removed strict analysis requirement, which will allow facilities to use more than one TN analysis method. Added requirement to use lab certified in Iowa.

Strike Table III Minimum Self-Monitoring in Permits for Land Application Systems and its associated superscripts, and Table IV Required Containers, Preservation Techniques, and Holding Times and its associated notes from Chapter 567-Chapter 63 (455B).

Table III was rendered obsolete by the new Land Application Operation Permit process.

Rather than copying the required containers, holding times, and preservation techniques table from 40 CFR Part 136.3, we are now referencing it in subrule 567 63.1(2) and removing the table from Chapter 63. This will simplify Chapter 63, as we will not have to update the table whenever a change is made to 40 CFR Part 136.3. We will make a copy of Table II from 40 CFR Part 136.6 and post it on the department's website so that permittees will have access to it.

Chapter 64

Amend paragraph 64.3(4)"b" as follows:

64.3(4) Applications.

b. General permit. A Notice of Intent for coverage under a general permit must be made on the appropriate paper or electronic form provided by the department listed in 567—subrule 60.3(2) and in accordance with 567—64.6(455B). A Notice of Intent must be submitted to the department according to the following:

The change allows for the submittal of electronic NOIs in the GP 589 database and the storm water database. Removes the reference to Chapter 60 as electronic forms are not specifically "listed" in Chapter 60, and because we are proposing to remove the list of forms in Chapter 60.

Amend paragraph 64.4(2)"a" as follows:

567—64.4(455B) Issuance of NPDES permits.

64.4(2) General permit.

- a. The director may issue general permits which are consistent with 64.4(2)"b" and the requirements specified in 567—64.6(455B), 567—64.7(455B), subrule 64.8(2), and 567—64.9(455B) for the following activities to regulate one or more categories or subcategories of discharges where the sources within a covered category of discharges are either storm water point sources, point sources other than storm water point sources, or treatment works treating domestic sewage, if the sources within each category or subcategory all:
- (1) Storm water point sources requiring an NPDES permit pursuant to Section 402(p) of the federal Clean Water Act and 40 CFR 122.26.
- (2) Private sewage disposal system discharges permitted under 567—Chapter 69 where subsoil discharge is not possible as determined by the administrative authority.
- (3) Discharges from water well construction and related well services where the discharge will reach a water of the United States as defined in 40 CFR Part 122.2.
 - (4) For any discharge, except a storm water only discharge, from a mining or processing facility.
- (5) Discharges from the application of biological pesticides and chemical pesticides which leave a residue where the discharge will reach a water of the United States as defined in 40 CFR Part 122.2.
 - (6) Discharges from hydrostatic testing, tank ballasting and water lines.
 - (7) Discharges from dewatering and residential geothermal systems.
 - (1) Involve the same or substantially similar types of operations;
 - (2) Discharge the same types of wastes;
 - (3) Require the same effluent limitations or operating conditions;
 - (4) Require the same or similar monitoring; and
 - (5) Are more appropriately controlled under a general permit than under individual permits.

Replaced the listing of discharges we cover under general permits with the language from 40 CFR 122.28(a)(2), so we don't have to update this section every time a general permit is issued. Paragraphs b and c do not need changes.

Amend subrule 64.6(1) as follows:

- **64.6(1)** Contents of a complete Notice of Intent. An applicant proposing to conduct activities covered by a general permit shall file a complete Notice of Intent by submitting to the department materials required in paragraphs "a" to "c" of this subrule. except that a A Notice of Intent is not required for discharges authorized under General Permit No. Permits Nos. 6 or 7, for certain discharges under General Permit No. 8, or for certain discharges under General Permit No. 9.
- a. Notice of Intent Application-Form. The following Notice of Intent forms must be completed in full.

 Electronic Notice of Intent forms provided by the department must be completed in full on the department's website. Paper Notice of Intent forms must also be completed in full and may be provided at the discretion of the department.
 - (1) General Permit No. 1 "Storm Water Discharge Associated with Industrial Activity," Form 542-1415.
- (2) General Permit No. 2 "Storm Water Discharge Associated with Industrial Activity for Construction Activities," Form 542-1415.
- (3) General Permit No. 3 "Storm Water Discharge Associated with Industrial Activity from Asphalt Plants, Concrete Batch Plants, Rock Crushing Plants and Construction Sand and Gravel Facilities," Form 542-1415.
- (4) General Permit No. 4 "Discharge from On-Site Wastewater Treatment and Disposal Systems," Form 542-1541.
 - (5) General Permit No. 5 "Discharge from Mining and Processing Facilities," Form 542-4006.
- (6) General Permit No. 7, "Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States From the Application of Pesticides."
 - (7) General Permit No. 8 "Discharge from Hydrostatic Testing, Tank Ballasting and Water Lines."

- (8) General Permit No. 9 "Discharge from Dewatering and Residential Geothermal Systems."
- b. General permit fee. The <u>applicable</u> general permit fee according to the schedule in 567—64.16(455B) payable to the <u>lowardial permit fee</u>. The <u>applicable</u> general permit fee according to the schedule in 567—64.16(455B) payable to the <u>lowardial permit fee</u>.
- c. Public notification. The following public notification requirements must be completed for the corresponding general permit only apply to General Permits No. 1, No. 2 and No. 3.
- (1) Applicants for General Permits No. 1, No. 2 and No. 3. A demonstration must demonstrate that a public notice was published in at least one newspaper with the largest circulation in the area in which the facility is located or the activity will occur. The newspaper notice shall, at the minimum, contain the following information:

PUBLIC NOTICE OF STORM WATER DISCHARGE

The (applicant name) plans to submit a Notice of Intent to the Iowa Department of Natural Resources to be covered under NPDES General Permit (select the appropriate general permit—No. 1 "Storm Water Discharge Associated with Industrial Activity, or General Permit No. 2 "Storm Water Discharge Associated with Industrial Activity for Construction Activities" or General Permit No. 3 "Storm Water Discharge Associated with Industrial Activity for Asphalt Plants, Concrete Batch Plants, Rock Crushing Plants, and Construction Sand and Gravel Facilities"). The storm water discharge will be from (description of industrial activity) located in (¼ section, township, range, county). Storm water will be discharged from (number) point source(s) and will be discharged to the following streams: (stream name(s)).

Comments may be submitted to the Storm Water Discharge Coordinator, Iowa Department of Natural Resources, 502 East 9th Street, Des Moines, Iowa 50319-0034. The public may review the Notice of Intent from 8 a.m. to 4:30 p.m., Monday through Friday, at the above address after it has been received by the department.

(2) General Permits No. 4, No. 5, No. 6, No. 7, No. 8 and No. 9. There are no public notification requirements for these permits.

Added NOI exemption for GP7; removed the NOI form listing and replaced it with general language to allow for both electronic NOI and paper NOI submittals at our discretion; clarified GP fee language; adjusted public notice requirements so that we don't need to list all the permits without public notice; and added General Permit 3 to the public notice section.

Amend subrule 64.6(2) as follows:

64.6(2) Authorization to discharge under a general permit. Upon the submittal of a complete Notice of Intent (NOI) in accordance with 64.6(1) and 64.3(4)"b," the applicant is authorized to discharge after evaluation of the Notice of Intent by the department is complete and the determination has been made that the contents of the Notice of Intent satisfy the requirements of 567—Chapter 64. the department has determined that the contents of the NOI satisfy the requirements of 567—Chapter 64, evaluated the (NOI), and determined that the proposed discharge meets the requirements of the general permit. The discharge authorization date for all storm water discharges associated with industrial activity that are in existence on or before October 1, 1992, shall be October 1, 1992. The applicant will receive notification by from the department of coverage under the general permit. If any of the items required for filing a Notice of Intent an NOI specified in 64.6(1) are missing, the department will consider the application incomplete and will notify the applicant of the incomplete items. If the discharge described in the NOI does not meet the requirements of the general permit, the NOI may be denied. The department will notify applicants of denial within 30 days.

Authorization to discharge is automatic only for the General Permits that do not require a Notice of Intent under subrule 64.3(4), provided the discharge is a covered activity and the permittee complies with all applicable permit requirements.

The proposed changes clarify how authorization currently works under GPs 5, 6, 7, 8 and 9. The proposed changes will not alter the authorization requirements for GPs 1, 2, 3, and 4, and will remove an obsolete storm water authorization date.

Amend subrule 64.6(3) as follows:

- **64.6(3)** General permit suspension or revocation. In addition to the causes for suspension or revocation which are listed in 64.3(11), the director may suspend or revoke coverage under a general permit issued to a facility or a class of facilities for the following reasons and require the applicant to apply for an individual NPDES permit in accordance with 64.3(4)"a":
 - a. The discharge would not comply with lowa's water quality standards pursuant to 567—Chapter 61, or
- b. The department finds that the activities associated with a Notice of Intent filed with the department do not meet the conditions of the <u>applicable</u> general permit. The department will notify the affected discharger and establish a deadline, not longer than one year, for submitting an individual permit application, or
- c. The department finds that water well construction and well service any discharge covered under a general permit is are not managed in a manner consistent with the conditions specified in the applicable General Permit. No. 6, or
- d. The department finds that discharges from biological pesticides and chemical pesticides which leave a residue are not managed in a manner consistent with the conditions specified in General Permit No. 7, or
- e. The department finds that discharges from hydrostatic testing, tank ballasting or water line testing are not managed in a manner consistent with the conditions specified in General Permit No. 8, or
- f. The department finds that discharges from dewatering or residential geothermal systems are not managed in a manner consistent with the conditions specified in General Permit No. 9.

The department will notify the affected discharger and establish a deadline, not longer than one year, for submitting an individual permit application.

The proposed changes simplify the language and ensure that all general permits are covered by this subrule without needing to be listed separately.

Amend subrule 567-64.6(4) as follows:

- **64.6(4)** Eligibility for individual permit holders. A person holding an individual NPDES permit for an activity covered by a general permit may apply for coverage under a general permit upon expiration of the individual permit and by filing a Notice of Intent according to procedures described in 64.3(4)"b₋" and 567—64.6(455B). In addition to these requirements, the permittee must submit a written request, with the Notice of Intent (NOI), to close or revoke their individual NPDES permit or to amend the individual NPDES permit to remove the general permit-covered activity.
- a. Upon receipt of a complete NOI and request for closure, revocation or amendment of an individual NPDES permit, the applicant shall be authorized to discharge under the general permit in accordance with subrule 64.6(2). The applicant will receive notification by the department of coverage under the general permit and of the closure, revocation or amendment of the individual permit.
- b. Authorization to discharge under a general permit that does not require an NOI will be automatic in accordance with subrule 64.6(2), and shall commence upon completion of individual NPDES permit closure, revocation, or amendment.

<u>Individual NPDES permit amendments under this subrule shall follow the applicable public notice</u> procedures in 567—64.5(455B).

New language allows permittees to apply for coverage under a general permit before their individual permit expires, includes the appropriate NOI requirements and rule references, and includes a description of how the authorization under the GP will work. The intent is to avoid double coverage and make sure the closure of or change to the individual permit is handled correctly.

Amend subrule 64.6(5), introductory paragraph, as follows:

64.6(5) Filing a Notice of Discontinuation. A notice to discontinue the <u>an</u> activity covered by the <u>an</u> NPDES general permit shall be made <u>electronically or</u> in writing to the department 30 days prior to or after discontinuance of the discharge. For storm water discharge associated with industrial activity for construction activities, the discharge will be considered as discontinued when "final stabilization" has been reached. Final stabilization means that all soil disturbing activities at the site have been completed and that a uniform

perennial vegetative cover with a density of 70 percent for the area has been established or equivalent stabilization measures have been employed in accordance with the conditions established in each general permit.

Expanded language to allow for electronic Notice of Discontinuation (NOD) submittals and to remove the specific conditions for NOD submittal, because the current language is inconsistent with GPs 1, 2, & 3, there are differences between the general permits, and because permittees should follow the specific conditions in the GP for NOD submittal.

Amend paragraph 64.7(5) "e" as follows:

e. Disadvantaged community matrix (DCM). The department hereby incorporates by reference "Disadvantaged Community Matrix," DNR Form 542-1246, effective January 16, 2013. This document may be obtained on the department's NPDES website.

Removing obsolete date so we can update the form without a rule change in the future. The form is not on the NPDES portion of the website; it is on the Rural Community Sewers page, but as it could move in the future, the rule will be more general and reference the department's website.

Amend paragraph 64.7(6) "e" as follows:

e. Disadvantaged unsewered community matrix (DUCM). The department hereby incorporates by reference "Disadvantaged Unsewered Community Matrix," DNR Form 542-1247, effective January 16, 2013. This document may be obtained on the department's NPDES website.

Removing obsolete date so we can update the form without a rule change in the future. The form is not on the NPDES portion of the website; it is on the Rural Community Sewers page, but as it could move in the future, the rule will be more general and reference the department's website.

Amend subrule 64.8(2) as follows:

64.8(2) Renewal of coverage under a general permit. Coverage under a general permit will be renewed subject to the terms and conditions in paragraphs "a" to "d."

a. If a permittee intends to continue an activity covered by a general permit for which a Notice of Intent is required beyond the expiration date of the general permit, the permittee must reapply and submit a complete Notice of Intent in accordance with 64.6(1) the requirements specified in the applicable general permit.

b. A complete Notice of Intent for coverage under a reissued or renewed general permit must be submitted to the department within 180 days after the expiration date of a general permit.

c. A person holding a general permit is subject to the terms of the permit until it either the permit expires, the authorization under the permit expires, or a Notice of Discontinuation is submitted in accordance with 64.6(5). If the person holding a general permit continues the activity beyond the expiration date of the permit, the conditions of the expired general permit will remain in effect provided the permittee submits a complete Notice of Intent for coverage under a renewed or reissued general permit within 180 days after the expiration date of the general permit as required by the applicable general permit. If the person continues an activity for which the general permit has expired and the general permit has not been reissued or renewed, the discharge must be permitted with an individual NPDES permit according to the procedures in 64.3(4)"a."

d. The Notice of Intent requirements shall not include a public notification when a general permit has been reissued or renewed provided the permittee has already submitted a complete Notice of Intent including the public notification requirements of 64.6(1). Another public notice is required when any information, including facility location, in the original public notice is changed.

Clarifies the rule language, as not all activities under GPs require NOIs.

Amend rule 567—64.14(455B) as follows:

567—64.14(455B) Transfer of title and owner or operator address change.

64.14(1) Permits issued under rule 567—64.2(455B), 567—64.3(455B), or 567—64.6(455B), except 64.6(1)"a"(5) and (6). If title to any disposal system or part thereof for which a permit has been issued under these rules is transferred, the new owner or owners shall be subject to all terms and conditions of the permit.

Whenever title to a disposal system or part thereof is changed, the department shall be notified in writing of such change within 30 days of the occurrence. When a discharge is covered by a general permit, the operator of record shall be subject to all terms and conditions of the permit. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notification of the department of the transfer of title. Whenever the address of the owner is changed, the department shall be notified in writing within 30 days of the address change. Electronic notification is not sufficient; all title transfers and address changes must be reported to the department by mail.

64.14(2) Permits issued under 64.6(1)"a"(5) and (6). When the operator of a facility permitted under subparagraphs 64.6(1)"a"(5) and (6) changes, the department must be notified of the transfer within 30 days. When a discharge is covered by the general permit, the operator of record shall be subject to all terms and conditions of the permit. No transfer of the authorization to discharge from the facility represented by the permit shall take place prior to notification of the department of the transfer. Whenever the address of the operator is changed, the department shall be notified in writing within 30 days of the address change. Electronic notification is not sufficient; all transfers and address changes must be reported to the department by mail.

64.6(1)"a"(5) and (6) are being deleted, so the reference and the paragraph need to be removed (it referenced NOIs GPs 5 and 7, respectively). The general permit sentence was moved to the existing paragraph so that the existing paragraph will cover both individual and general permits.

Amend subrule 64.16(2) as follows:

64.16(2) Payment of fees. Fees shall be paid by check, <u>credit card</u>, <u>electronic payment</u>, or money order made payable to the "lowa Department of Natural Resources."

Allows payment by credit card, electronic check, or an electronic funds transfer.

Amend paragraph 64.16(3)"a" as follows:

- a. For coverage under the NPDES general permits the following fees apply: NPDES General Permit fees. No fees shall be assessed for coverage under general permits not listed in this paragraph. The following fees are applicable to the described general NPDES permits:

All fees are to be submitted with the Notice of Intent for coverage under the general permit.

(2) Storm Water Discharge Associated with Industrial Activity for Construction Activities, NPDES General Permit No. 2. The fees are the same as those specified for General Permit No. 1 in subparagraph (1) of this paragraph.

- (3) Storm Water Discharge Associated with Industrial Activity from Asphalt Plants, Concrete Batch Plants, and Rock Crushing Plants, NPDES General Permit No. 3. The fees are the same as those specified for General Permit No. 1 in subparagraph (1) of this paragraph.
 - (4) Discharge from Private Sewage Disposal Systems, NPDES Permit No. 4. No fees shall be assessed.
 - (5) (4) Discharge from Mining and Processing Facilities, NPDES General Permit No. 5.

Annual Permit Fee	5125 (per year)
or	
Five-year Permit Fee	\$500
Four-year Permit Fee	\$400
Three-year Permit Fee	\$300

New facilities seeking General Permit No. 5 coverage shall submit fees with the Notice of Intent for coverage. Maximum coverage is for five years. Coverage may also be obtained for four years, three years, or

one year, as shown in the fee schedule above. Existing facilities shall submit annual fees by August 30 of every year, unless a multiyear fee payment was received in an earlier year. In the event a facility is no longer eligible to be covered under General Permit No. 5, the remainder of the fees previously paid by the facility shall be applied toward its individual permit fees.

Changed the first sentence to match 64.16(3)"b". The proposed changes make it clear that the only GP fees are the ones listed in this paragraph.

Amend 64.16(3)"b", subparagraphs (4), (5), and (6) as follows:

- (4) For every major and minor municipal facility, every semipublic facility, every major and minor industrial facility, every facility that holds an operation permit (no wastewater discharge into surface waters), and every open feedlot animal feeding operation required to hold a non-storm water NPDES permit, an operation and non-storm water NPDES permits not subject to subparagraphs (1) and (2), the following annual fee-fees, as established in lowa Code section 455B.197, is are due by August 30 of each year.:
 - 1. Major municipal facility: \$1,275.
 - 2 .Minor municipal facility: \$210.
 - 3. Semipublic facility: \$340.
 - 4. Major industrial facility: \$3,400.
 - 5. Minor Industrial facility: \$300
 - 6. Facilities that hold an operation permit: \$170.
 - 7. Animal Feeding Operations required to hold a non-storm water NPDES permit: \$340.
- (5) For every municipal water treatment facility with a non-storm water NPDES permit, no fee is charged (as established in Iowa Code section 455B.197) fees shall be assessed.
- (6) For a new facility, an a <u>prorated</u> annual fee, <u>as established in Iowa Code section 455B.197</u> <u>calculated by taking the annual fee amount multiplied by the number of months remaining before the next annual fee due date divided by twelve, is due 30 days after the new permit is issued.</u>

Matches the language in 64.16(3) "b", subparagraph (3), specifies the annual fees, changes the WTP language to match the rest of the rule, and clarifies how the annual fee is pro-rated for a new permit (matches the prorate amount language in 455B.179(3)(i) and (j)).

Rescind subrules 567—64.16(5), 64.16(6), 64.16(7) and 64.16(8).

- **64.16(5)** "Discharge Associated with Well Construction Activities," NPDES General Permit No.6. No fees shall be assessed.—Rescinded IAB XXXX, effective XXXX.
- **64.16(6)** "Pesticide General Permit (PGP) for Point Source Discharges to Waters of the United States From the Application of Pesticides," NPDES General Permit No.7. No fees shall be assessed. Rescinded IAB XXXX, effective XXXX.
- **64.16(7)** "Discharge from Hydrostatic Testing, Tank Ballasting and Water Lines," NPDES General Permit No.8. No fees shall be assessed. Rescinded IAB XXXX, effective XXXX.
- **64.16(8)** "Discharge from Dewatering and Residential Geothermal Systems," NPDES General Permit No.9. No fees shall be assessed. Rescinded IAB XXXX, effective XXXX.

Accords with the change to 64.16(3)"a" such that the only fee assessed for general permits will be the ones listed in 64.16(3)"a".

Chapter 64 - NRE

Add <u>new</u> rule 567-64.17(455B), and renumber rules 567-64.17 and 567-64.18.

567—64.17(455B) Nutrient Reduction Exchange. The department shall maintain a registry of non-point source nutrient reduction practices installed by permittees. Practices listed in the registry may be eligible for future regulatory incentives.

The proposed rule will provide a regulatory framework to support possible future regulatory incentive programs. The Nutrient Reduction Exchange (NRE) is a tracking system that allows nutrient sources from across the state to register and track nutrient reductions resulting from the installation of non-point source best management practices (BMPs). Municipal and industrial permittees may be

eligible for potential regulatory incentives depending on the specifics of investments they make in registered BMPs.

Chapter 67

Amend subrule 67.1(1) as follows:

567—67.1(455B) Land application of sewage sludge.

67.1(1) General. This chapter establishes standards for the land application of sewage sludge generated during the treatment of domestic sewage in a treatment works. This chapter applies to any person who prepares generates a material from sewage sludge (generator), to any person who derives a material from sewage sludge (generator), to any person who applies sewage sludge to the land (applicator), and to sewage sludge applied to the land. No person shall land apply sewage sludge through any practice for which requirements are established in this chapter except in accordance with such requirements.

In areas that are not specifically addressed in this chapter or in 567 IAC Chapter 68, but which are addressed in federal regulations for sewage sludge applied to land at 40 CFR Part 503 as amended through July 1, 2019, the federal regulations shall apply under this rule and are hereby adopted by reference under this chapter.

On a case-by-case basis, this department may impose requirements for the land application of sewage sludge in addition to or more stringent than the requirements in this chapter when necessary to protect public health and the environment from any adverse effect of a pollutant in the sewage sludge.

Federal regulation defines a sludge generator as person who generates sewage sludge or who derives materials from sewage sludge. Proposing to change "prepare" to "generate" to align with the definition and to clarify the language. Adding reference to Chapter 68 as it contains the requirements for the disposal of domestic septage. Updates the reference to 40 CFR Part 503.

Amend subrule 67.1(2) as follows:

567-67.2(455B) Exclusions. This chapter does not establish requirements for the land application of the following solid wastes.

67.2(1) Sludge generated at an industrial facility, not including sludge generated from separately treated domestic sewage at an industrial facility.

Sludge from a sewage treatment plant that treats only domestic sewage (100% domestic, no industrial) is regulated under 40 CFR Part 503, even if that sewage treatment plant is treating the domestic waste from an industrial facility. The proposed addition clarifies that sludge generated at an industrial treatment plant treating only domestic sewage is not excluded from this Chapter.

Amend rule 567—67.4(455B) as follows:

567—67.4(455B) Land application program. All sewage sludge generators wishing to land apply sewage sludge shall establish and maintain in writing a long-range program for land application of sewage sludge. This program shall be developed for a minimum period of five years and shall be updated annually. A copy of this program shall be available at the facility for inspection by the department. At a minimum, this program shall contain the following information in detail for the next calendar year and in general terms for the following four years. The plan shall include, but not be limited to, the following:

67.4(1) An outline of the sewage sludge sampling schedule and procedures which that will be followed to ensure that the sewage sludge being applied to land continues to meet the requirements.

67.4(2) A determination of the amount of land required to allow land application to be conducted in accordance with the requirements.

67.4(3) Identification of the land and application methods which that will be used for land application of the sewage sludge. Those areas and application methods shall be selected as necessary to ensure that land application can be conducted in accordance with the requirements.

67.4(4) The names of the <u>owners-landowners</u> and <u>operators of the applicators for</u> all <u>landareas</u> to be used for land application, and identification of any legal arrangements <u>made relative to related to the</u> use of these

areas. The programs should shall also outline any restrictions or special conditions which that exist regarding the use of these areas for land application of sewage sludge.

- **67.4(5)** An overall schedule for the land application of sewage sludge. This schedule <u>shouldshall</u> indicate the areas being used, the time of year that land application <u>will occur</u> on each area <u>will be conducted</u>, and the <u>proposed</u> estimated application <u>rates</u>-rate for each area.
- **67.4(6)** A determination of the types and capacities of the equipment required for land application of sewage sludge in accordance with the developed application schedule. The program shall also outline how the required application equipment will be made available and who will be responsible for conducting land application operations.
- **67.4(7)** A determination of the volumes and types types and capacities of sludge storage and handling facilities required structures used to allow ensure that the land application of sewage sludge to be is conducted in accordance with the land application schedule. The program shall also outline how if any required additional sludge storage or handling facilities will be provided are needed.
- **67.4(8)** A plan to construct or obtain any additional sludge storage, handling or application facilities or equipment whichthat are required by the land application program.

Language clarification to make this section easier to read and understand.

Add the following <u>new</u> definitions and edit a definition in rule 567—67.5(455B) as follows: **567—67.5(455B) Special definitions.**

"Class I sewage sludge" is sewage sludge that meets the criteria under 567-67.7(1).

"Class II sewage sludge" is sewage sludge that meets the criteria under 567-67.8(1).

<u>"Class III sewage sludge"</u> is any sewage sludge that cannot meet either Class I sewage sludge criteria or Class II sewage sludge criteria.

"Sewage sludge" is solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or the grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

The existing rule does not have definitions of Class I, II, and III sewage sludge, but we use these terms frequently and defining them will provide clarification to the rule.

The new definition for Class I sewage sludge is based on the updated Class I sludge criteria in 67.7(1).

The new definition for Class II sewage sludge is based on the updated Class II sludge criteria in 67.8(1).

The new definition for Class III sewage sludge definition is from 67.9(1).

The definition of sewage sludge is being modified to accord 40 CFR Part 503.9(w). Note; domestic septage is not included in this definition, as the requirements for the disposal of domestic septage are in Chapter 68.

Amend rule 567—67.6(455B) as follows:

567—67.6(455B) Permit requirements. Prior to any land application of sewage sludge, a permit must be obtained by the sewage sludge generator in accordance with the following requirements:-

67.6(1) Any treatment facility proposing to land apply sewage sludge shall apply for a permit for land application of sewage sludge on a properly completed form supplied by the department. Application forms may be obtained from:

Environmental Services Division
lowa Department of Natural Resources
Wallace State Office Building
502 East 9th Street
Des Moines, Iowa 50319

http://www.iowadnr.gov/

Properly completed forms should be submitted in accordance with the instructions for the form.

- a. Permit application for land application of sewage sludge from new facilities shall be filed at least 180 days prior to the date operation is scheduled to begin unless a shorter period of time is approved by the department.
- b. Existing facilities generating sewage sludge shall file an application for land application of sewage sludge within 90 days of September 21, 1994, or at least 180 days prior to the expiration of any state operation or NPDES permit issued to the facility pursuant to 567—64.3(455B) or 567—64.4(455B), whichever date is later.
- c. Sewage sludge disposal operations which are not regulated under 567—Chapter 64 shall apply for a permit for land application of sewage sludge no later than 90 days after September 21, 1994.
- **67.6(21)** The permit for <u>the</u> land application of sewage sludge <u>for any sewage sludge generating facility produced by a wastewater treatment facility that has been issued a construction permit from the department will be issued concurrently and as part of a state operation permit or NPDES permit. The issuance process and permit terms will be the same as that specified for NPDES permits in 567—<u>IAC</u> Chapter 64.</u>
- **67.6(2)** The department will review, on a case-by-case basis, land application of sewage sludge or any material derived from sewage sludge if the sewage sludge is produced outside of the State of lowa or produced by a wastewater treatment plant that has not been issued a construction permit from the department.

The sludge permit requirements are being deleted because the department does not need a separate permit application for sludge land application, as the sludge/biosolids regulations are self-compliant in nature and the sludge requirements are in all NPDES permits for POTWs.

Amend subrule 67.7(1) as follows:

567—67.7(455B) Land application requirements for Class I sewage sludge.

- **67.7(1)** Class I <u>sewage</u> sludge criteria. Class I sludge is sewage sludge that has excellent quality and has been treated in a process equivalent to processes to further reduce pathogens (PFRP). Class I sewage sludge is sewage sludge that meets pollutant concentrations in paragraph "a", Class A pathogen reduction standards in paragraph "b" and one of vector attraction reduction requirements in paragraph "c" below.
- a. <u>Pollutant Concentrations for Class 1 Sewage Sludge</u>. The concentration of each pollutant in the sewage sludge shall not exceed the concentration for the pollutant in Table 1.

TABLE 1—POLLUTANT CONCENTRATIONS

Monthly Average Concentration

Pollutant	milligrams per kilogram*
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800
*Dry weight basis	

- b. <u>Class A Pathogen Requirements for Class 1 Sewage Sludge</u>. One The sewage sludge shall meet one of the monitoring processes in <u>subparagraph</u> (1) below and also one of the analytical and treatment processes in <u>subparagraph</u> (2) below, shall be met for a sewage sludge to be classified as Class I sludge.
 - (1) Monitoring processes. Compliance with pathogen density shall not be based on an average value. Each

individual sample result shall meet the numerical pathogen standards.

- 1. The density of fecal coliform in the sewage sludge shall be less than 1000 Most Probable Number per gram of total solids (dry weight basis).
- 2. The density of Salmonella sp. bacteria in the sewage sludge shall be less than three Most Probable Number per four grams of total solids (dry weight basis).
 - (2) Analytical and treatment processes.
- 1. The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis).
- 2. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis).
- <u>1. Thermally treated sewage sludge. The temperature of the sewage sludge shall be maintained at a specific value for a period of time using one of the procedures detailed below.</u>
- When the percent solids of the sewage sludge is seven percent or higher, the temperature of the sewage sludge shall be 50 degree Celsius or higher; the time period shall be 20 minutes or longer; and the temperature and time period shall be determined using equation 1, except when small particles of sewage sludge are heated by either warmed gases or an immiscible liquid.

 $D = 131,7000,000/10^{0.1400t}$

Equation 1

Where D = time in days; t = temperature in degree Celsius.

- When the percent solids of the sewage sludge is seven percent or higher and small particles of sewage sludge are heated by either warmed gases or an immiscible liquid, the temperature of the sewage sludge shall be 50 degrees Celsius or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using equation 1.
- When the percent solids of the sewage sludge is less than seven percent and the time period is at least 15 seconds, but less than 30 minutes, the temperature and time period shall be determined using equation 1.
- When the percent solids of the sewage sludge is less than seven percent; the temperature of the sewage sludge is 50 degrees Celsius or higher; and the time period is 30 minutes or longer, the temperature and time period shall be determined using equation 2.

 $D = 50,070,000/10^{0.1400t}$

Equation 2

Where D = time in days; t = temperature in degree Celsius.

- 2. High pH High Temperature Process. The sewage sludge shall meet all of the following requirements:
- The pH of the sewage sludge shall be raised to above 12 and shall remain above 12 for 72 hours;
- The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12; and
- At the end of the 72-hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.
- 3. Biosolids Treated in Other Known Processes. The sewage sludge shall be analyzed prior to pathogen treatment to determine whether the sewage sludge contains enteric viruses and viable helminth ova. The density of enteric viruses in the sewage sludge after pathogen treatment shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis). The density of viable helminth ova in the sewage sludge after pathogen treatment shall be less than one per four grams of total solids (dry weight basis). Once the process has been demonstrated to achieve the required pathogen reduction, the process must be operated under the same conditions that were used during the demonstration.
- 4. Biosolids Treated in Unknown Processes. For sewage sludge treated by unknown processes or process operating at conditions less stringent than the operating conditions at which the sewage sludge could qualify as Class A under other alternatives, the following alternative applies. The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis). The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis.
- 35. Sewage sludge shall be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 567—67.11(455B).

- 46. Sewage sludge shall be treated in a process that is equivalent to a Process to Further Reduce Pathogens (PFRP), as determined by the department.
- c. <u>Vector Attraction Reduction Requirements for Class 1 Sewage Sludge</u>. One of the vector attraction reduction requirements shall be met for a sewage sludge to be classified as Class I sludge. The sewage sludge shall meet one of the following vector attraction reduction requirements.
 - (1) The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.
- (2) Digest a portion of the previously anaerobically digested sewage sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. When at the end of the 40 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 17 percent, vector attraction reduction is achieved.
- (3) Digest a portion of the previously aerobically digested sewage sludge that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. When at the end of the 30 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 15 percent, vector attraction reduction is achieved.
- (2)(4) The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.
- (2) Digest a portion of the previously anaerobically digested sewage sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. At the end of the 40 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 17 percent.
- (3) Digest a portion of the previously aerobically digested sewage sludge that has a percent solids of 2 percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. At the end of the 30 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 15 percent.
- (5) Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.
- (6) The pH of sewage sludge shall be raised to 12 or higher, measured at 25° C, by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 2 hours and then at 11.5 or higher for an additional 22 hours.
- (7) The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials.
- (8) The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials.
- (7) (9) Sewage sludge shall be injected below the surface of the land and no significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
- (8) (10) Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

The proposed revisions incorporate the six alternatives for meeting the Class A pathogen requirements in 40 CFR 503.33. The current Class I pathogen criteria only provide alternatives 5 and 6 from 40 CFR 503.

The proposed revisions will update the vector attraction reduction (VAR) methods to be consistent with 40 CFR 503.33. New subparagraphs 2 and 3 in 67.7(1) "c" match 503.33(b)(2) and (3). New subparagraphs 7 and 8 in 67.7(1) "c" match 503.33(b)(7) and (8).

Amend subrule 67.7(2) as follows:

67.7(2) Management practices for Class I sewage sludge. Class I sewage sludge may be land applied in

conformance with the following rules:

- a. Only Class I sewage sludge can may be applied to a lawn or a home garden.
- b. Sewage sludge shall not be applied to land that is 35 feet or less from an open waterway.
- <u>eb</u>. Sewage sludge shall be applied to the land at an annual whole sludge application rate that is equal to or less than the agronomic nitrogen uptake rate, unless otherwise specified by the department.
- <u>dc</u>. An information sheet shall be provided to the person who receives sewage sludge sold or given away in a container for application to the land. The label or information sheet shall contain the following information:
 - (1) The name and address of the sewage sludge generator.
- (2) A statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the information sheet.
 - (3) The annual application rate for the sewage sludge.

Adding clarifying language. Proposing to delete the open waterway site management restriction for Class I sludge because there is no site restriction for such sludge (exceptional quality sludge) in 40 CFR Part 503.

Amend subrule 67.7(3) "a", Table 2 – Frequency of Monitoring, as follows:

67.7(3) Frequency of monitoring for Class I sewage sludge.

a. The frequency of monitoring for the pollutants listed in Table 1, the pathogen density requirements, and the vector attraction reduction requirements shall be the frequency stated in Table 2.

TABLE 2—FREQUENCY OF MONITORING

Amount of sewage sludge	
metric tons per 365-day period	Monitoring
dry weight basis	Frequency
Greater than zero but less than 290 (or 325 English ton)	once per year
Equal to or greater than 290 but less than 1,500 (English ton 325 to 1,680)	once per quarter (4 times per year)
Equal to or greater than 1,500 but less than 15,000 (English ton 1,680 to 16,800)	once per 60 days (6 times per year)
Equal to or greater than 15,000 (or 16,800 English ton)	once per month (12 times per year)

The proposed change removes obsolete units.

Amend paragraph 67.7(4)"b" as follows:

b. Treatment works with a design flow rate of 1 million gallons per day or greater and treatment works that serve 10,000 people or more shall submit the above information to the department EPA, using EPA's NPDES eReporting Tool (NeT), by February 19 of each year for the previous calendar year.

Meets the federal NPDES e-reporting requirements in 40 CFR Part 127 (127.11 specifically).

Amend subrule 67.8(1), introductory paragraph, as follows:

567—67.8(455B) Land application requirements for Class II sewage sludge.

67.8(1) Class II sludge criteria. Class II sludge is sewage sludge that has normal quality and has been treated in a process equivalent to Processes to Significantly Reduce Pathogens (PSRP). Class II sewage sludge is sewage sludge that meets pollutant concentrations in paragraph "a", pathogen reduction standards in paragraph "b", and one of vector attraction reduction requirements in paragraph "c" below.

This change clarifies the Class II sludge criteria and site management restrictions.

Amend paragraph 67.8(1)"a", introductory paragraph, as follows:

a. <u>Pollutant Concentrations for Class II Sewage Sludge</u>. The concentration of any pollutant in the sewage sludge shall not exceed the ceiling concentration for the pollutant in Table 3.

This change matches the proposed change to 67.7(1) "a".

Amend paragraph 67.8(1)"b", introductory paragraph, as follows:

b. <u>Pathogen Reduction Requirements for Class II Sewage Sludge</u>. One <u>The sewage sludge shall meet one</u> of the following Processes to Significantly Reduce Pathogens requirements (PSRP) three alternatives shall be met for a sewage sludge to be classified as Class II sludge.

This change clarifies and simplifies the sentence and matches the change to 67.7(1) "b".

Amend paragraph 67.8(1)"c", as follows:

- c. <u>Vector Attraction Reduction Requirements for Class II Sewage Sludge.</u> One of the vector attraction reduction requirements shall be met for a sewage sludge to be classified as Class II sludge. The sewage sludge shall meet one of the following vector attraction reduction requirements.
 - (1) The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.
- (2) The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.
- (3) (2) Digest a portion of the previously anaerobically digested sewage sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. When at the end of the 40 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 17 percent, vector attraction reduction is achieved.
- (4)-(3) Digest a portion of the previously aerobically digested sewage sludge that has a percent solids of 2 percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. When at the end of the 30 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 15 percent, vector attraction reduction is achieved.
- (4) The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.
- (5) Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.
- (6) The pH of sewage sludge shall be raised to 12 or higher, measured at 25° C, by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 2 hours and then at 11.5 or higher for an additional 22 hours.
- (7) The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials.
- (8) The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials.
- (7)(9) Sewage sludge shall be injected below the surface of the land and no significant amount of the sewage sludge shall be present on the land surface within one hour after the sewage sludge is injected.
- (8)(10) Sewage sludge applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

The proposed ordering will match the sequence in 40 CFR 503 for the vector attraction reduction (VAR) methods and will ensure that the department's biosolids reporting requirements are consistent with 40 CFR 503.33. The Class II VAR methods are identical to the Class I methods.

Amend subrule 67.8(3) as follows:

67.8(2) Management practices for Class II sewage sludge. <u>Class II sewage sludge may be land applied in</u> conformance with the following rules:

Adding clarifying language. This change matches the proposed change to 67.7(2).

Amend paragraphs 67.8(2)"j", and "l" as follows:

- *j.* If the sewage sludge is applied to land subject to flooding-more frequently than once in ten years, the sludge shall be injected or shall be applied to the surface and mechanically incorporated into the soil within 48 hours. Information on which land is subject to flooding more frequently than once in ten years is available from the department.
- *l.* Food crops with harvested parts that touch the sewage sludge/soil mixture shall not be harvested for 3814 months after application of sewage sludge.

The proposed changes align with the best management practices in 40 CFR Part 503 and EPA's Biosolids Management Handbook (see 503.32(b)(5) for 14 month harvesting).

Amend subrule 67.8(3) as follows:

67.8(3) Frequency of monitoring for Class II sewage sludge.

a. The frequency of monitoring for the pollutants listed in Table 3, the pathogen density requirements, and the vector attraction reduction requirements shall be at the frequency stated in Table 5.

TABLE 5—FREQUENCY OF MONITORING

Amount of sewage sludge	
metric tons per 365-day period	Monitoring
dry weight basis	Frequency
Greater than zero but less than 290 (or 325 English ton)	once per year
Equal to or greater than 290 but less than 1,500 (English ton 325 to 1,680)	once per quarter (4 times per year)
Equal to or greater than 1,500 but less than 15,000 (English ton 1,680 to 16,800)	once per 60 days (6 times per year)
Equal to or greater than 15,000 (or 16,800 English ton)	once per month (12 times per year)

The proposed change removes obsolete units.

Amend paragraph 67.8(4)"b" as follows:

b. Treatment works with a design flow rate of 1 million gallons per day or greater and treatment works that serve 10,000 people or more shall submit the above information to the department EPA, using EPA's NPDES eReporting Tool (NeT), by February 19 of each year for the previous calendar year. In addition, a supplemental biosolids report that includes the land application information listed in 567-67.8(4)"a"(6) to (9) is required to be submitted to the department by the same due date.

Meets the federal NPDES e-reporting requirements in 40 CFR Part 127 (127.11 specifically).

Amend rule 567—67.9(455B) as follows:

567—67.9(455B) Class III sewage sludge.

67.9(1) Class III sewage sludge is any sewage sludge that cannot meet either Class I sewage sludge criteria or Class II sewage sludge criteria.

67.9(2)(1) Class III sewage sludge shall not be utilized for beneficial use for land application as specified in the chapter.

67.9(3)(2) Class III sewage sludge shall be disposed according to the surface disposal subpart of the 40 CFR Part 503 regulation and 567—103.6(455B) or the incineration subpart of the 40 CFR Part 503 regulation. We are proposing to move the definition of Class III sewage sludge to 67.5.

Amend rule 567—67.10(455B) as follows:

- 567—67.10(455B) Sampling and analytical methods.
- **67.10(1)** General. Representative samples of sewage sludge that are applied to the land shall be collected and analyzed. Methods listed below shall be used to analyze samples of sewage sludge and calculation procedures shall be used to calculate the percent of volatile solids reduction for sewage sludge.
- **67.10(2)** Enteric viruses. ASTM Designation: D 4994-89 D4994-19, "Standard Practice for Recovery of Viruses From Wastewater Sludges," ASTM International, West Conshohocken, PA, 2019, www.astm.org. Annual Book of ASTM Standards: Section 11 Water and Environmental Technology, ASTM, Philadelphia, PA, 1992.
- 67.10(3) Fecal coliform. Part 9221 E. or Part 9222 D. SM 9221 E-2011 or SM 9222 D-2011, "Standard Methods for the Examination of Water and Wastewater," 18th Edition, American Public Health Association, Washington, D.C., 1992; EPA Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using Lauryl Tryptose Broth (LBT) and EC Medium, EPA-821-R-14-009, September 2014; EPA Method 1681: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using A-1 medium, EPA-821-R-06-013, July 2006.
- **67.10(4)** Helminth ova. Yanko, W.A., "Occurrence of Pathogens in Distribution and Marketing Municipal Sludges," EPA 600/1-87-014, 1987. PB 88-154273/AS, National Technical Information Service, Springfield, Virginia. U.S. Environmental Protection Agency, Washington, D.C., EPA/600/1-87/014 (NTIS PB88154273), 1988.
- 67.10(5) Inorganic pollutants. "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," EPA Publication SW-846, Second Edition (1982) with Updates I and II and Third Edition (1986) with Revision I. Second Edition PB87-120-291, National Technical Information Service, Springfield, Virginia. Third Edition Document number 955-001-00000-1, Superintendent of Documents, Government Printing Office, Washington, D.C.
- <u>a. Metals "Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods" EPA Publication SW-846, Third Edition, Final Updates V (2015), www.epa.gov/hw-sw846/sw-846-compendium.</u>
- <u>b. Nonmetals For nonmetals not identified elsewhere in this chapter, methods approved at 40 CFR Part 136, as amended through August 28, 2017.</u>
- 67.10(6) Salmonella sp. Bacteria. Part 9260 D., SM 9260 B-2011, "Standard Methods for the Examination of Water and Wastewater," 18th Edition, American Public Health Association, Washington, D.C., 1992; EPA Method 1682: Salmonella in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium, EPA-821-R-06-14, July 2006; or Kenner, B.A. and H.P. Clark, "Detection and Enumeration of Salmonella and Pseudomonas aeruginosa," J. Water Pollution Control Federation, 46(9):2163-2171, 1974.
- **67.10(7)** Specific oxygen uptake rate. Part 2710 B., SM 2710 B-2011, "Standard Methods for the Examination of Water and Wastewater," 18th Edition, American Public Health Association, Washington, D.C. 1992.
- **67.10(8)** *Total, fixed, and volatile solids.* Part 2540 G. SM 2540 G-2011, "Standard Methods for the Examination of Water and Wastewater," 18th Edition, American Public Health Association, Washington, D.C., 1992.
- **67.10(9)** Percent volatile solids reduction calculation. "Environmental Regulations and Technology Control of Pathogens and Vectors in Sewage Sludge," EPA-625/R-92/013, U.S. Environmental Protection Agency, Cincinnati, Ohio, 1992 July 2003.
- Updating references. Enteric virus reference is from https://www.astm.org/Standards/D4994.htm. Fecal coliform and salmonella references are from https://www.epa.gov/cwa-methods/approved-cwa-microbiological-methods-wastewater-and-sewage-sludge.

Amend rule 567—67.11(455B) as follows:

567—67.11(455B) Pathogen treatment processes.

67.11(1) Processes to significantly reduce pathogens (PSRP).

-a. Aerobic digestion. Sewage sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20 degrees Celsius and 60 days at 15 degrees Celsius.

b. Air drying. Sewage sludge is dried on sand beds or on paved or unpaved basins. The sewage sludge dries for a minimum of three months. During two of the three months, the ambient average daily temperature is above zero degrees Celsius.

c. Anaerobic digestion.-Sewage sludge is treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

d. Composting. Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile exceeds 55 degrees Celsius.

e.-Lime stabilization.-Sufficient lime is added to the sewage sludge to raise the pH of the sewage sludge to 12 after two hours of contact.—

67.11(2) Processes to further reduce pathogens (PFRP).

a. Composting. Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 55 degrees Celsius or higher for three days.

Using the windrow composting method, the temperature of the sewage sludge is maintained at 55 degrees Celsius or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees Celsius or higher, there shall be a minimum of five turnings of the windrow.

b. Heat drying . – Sewage sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge to 10 percent or lower. Either the temperature of the sewage sludge particles exceeds 80 degrees Celsius or the wet bulb temperature of the gas in contact with the sewage sludge as the sewage sludge leaves the dryer exceeds 80 degrees Celsius.

c. Heat treatment. – Liquid sewage sludge is heated to a temperature of 180 degrees Celsius or higher for 30 minutes.

d. Thermophilic aerobic digestion. Liquid sewage sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge is ten days at 55 to 60 degrees Celsius.

e. Beta ray irradiation. Sewage sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20 degrees Celsius).

f. Gamma ray irradiation. Sewage sludge is irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20 degrees Celsius).

-g. Pasteurization. – The temperature of the sewage sludge is maintained at 70 degrees Celsius or higher for 30 minutes or longer.

h. Lime treatment.

(1) The pH of the sewage that is used or disposed shall be raised to above 12 and shall remain above 12 for 72 hours.

(2) The temperature of the sewage sludge shall be above 52 degrees Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12.

(3) At the end of the 72-hour period during which the pH of the sewage sludge is above 12, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50 percent.

67.11(1) Processes to further reduce pathogens (PFRP).

a. Higher Temperature Composting. Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 55 degrees Celsius or higher for three days.

Using the windrow composting method, the temperature of the sewage sludge is maintained at 55 degrees

Celsius or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees

Celsius or higher, there shall be a minimum of five turnings of the windrow.

- b. Heat Drying. Sewage sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge to 10 percent or lower. Either the temperature of the sewage sludge particles exceeds 80 degrees Celsius or the wet bulb temperature of the gas in contact with the sewage sludge as the sewage sludge leaves the dryer exceeds 80 degrees Celsius.
- c. Heat Treatment. Liquid sewage sludge is heated to a temperature of 180 degrees Celsius or higher for 30 minutes.
- <u>d. Thermophilic Aerobic Digestion.</u> Liquid sewage sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge is ten days at 55 to 60 degrees Celsius.
- <u>e. Beta Ray Irradiation.</u> Sewage sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20 degrees Celsius).
- f. Gamma Ray Irradiation. Sewage sludge is irradiated with gamma rays from certain isotopes, such as Cobalt 60 and Cesium 137, at room temperature (ca. 20 degrees Celsius).
- *g. Pasteurization.* The temperature of the sewage sludge is maintained at 70 degrees Celsius or higher for 30 minutes or longer.
 - **67.11(2)** Processes to significantly reduce pathogens (PSRP).
- <u>a. Aerobic Digestion.</u> Sewage sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20 degrees Celsius and 60 days at 15 degrees Celsius.
- b. Air Drying. Sewage sludge is dried on sand beds or on paved or unpaved basins. The sewage sludge dries for a minimum of three months. During two of the three months, the ambient average daily temperature is above zero degrees Celsius.
- c. Anaerobic Digestion. Sewage sludge is treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.
- d. Low Temperature Composting. Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile exceeds 55 degrees Celsius.
- *e. Lime Stabilization.* Sufficient lime is added to the sewage sludge to raise the pH of the sewage sludge to 12 after two hours of contact.

The Chapter talks about Class I sewage sludge before Class II sewage sludge. The PFRP method is applied to Class I sludge, and the PSRP method is applied to Class II sludge. It is more consistent to describe Class I and its associated pathogen methods before Class II and its associated pathogen methods, so the two paragraphs have been flipped.

Lime treatment was removed from the PFRP section because it is represented in Alternative 2 in Class A alternatives, so there is no need for it to be here.

Chapter 69

Amend rule **567—69.1 (455B)**, definition of "Packed bed media filter," as follows:

"Packed bed media filter" means a watertight structure filled with uniformly sized media that is normally placed over an underdrain system. The wastewater is dosed onto the surface of the media through a distribution network and is allowed to percolate through the media to the underdrain system. The underdrain collects the filtrate and discharges the final effluent.

We are proposing to remove the word "normally" to add specificity to the rule. "Normally" implies that there are situations where watertight structures with media are not placed over an underdrain system, and this is not true.

Amend Table I in Paragraph 69.3(2) as follows:

69.3(2) *Minimum distances.* All private sewage disposal systems shall be located in accordance with the minimum distances shown in Table I.

Table I

Minimum Distance in Feet From	Closed Portion of Treatment System ⁽¹⁾	Open Portion of Treatment System ⁽²⁾
Private water supply well	50	100
Shallow public water supply well ⁽³⁾	200	400
Deep public water supply well ⁽⁴⁾	100	200
Groundwater heat pump borehole Closed Circuit Vertical Heat Exchangers	50	100
Lake or reservoir	50	100
Stream or pond	25	25
Edge of drainage ditch	10	10
Dwelling or other structure	10	10
Property lines (unless a mutual easement is signed and recorded)	10	10
Other type of subsurface treatment system	5	10
Water lines continually under pressure	10	10
Suction water lines	50	100
Foundation drains or subsurface tiles	10	10

- (1) Includes septic tanks, aerobic treatment units, fully contained media filters and impervious vault toilets.
- (2) Includes subsurface absorption systems, mound systems, intermittent sand filters, constructed wetlands, open bottom media filters and waste stabilization ponds.
- (3) "Shallow well" means a well located and constructed in such a manner that there is not a continuous layer of low-permeability soil or rock (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.
- (4) "Deep well" means a well located and constructed in such a manner that there is a continuous layer of low-permeability soil or rock at least 5 feet thick located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.

Changing to the industry standard term. See 49.29, closed circuit vertical heat exchangers.

Amend subrules **567—69.5(2)** as follows:

69.5(2) Private sewage disposal systems that require a maintenance contract shall be inspected by a manufacturer's certified technician trained individual familiar with the operation and maintenance of the system.

The changes to 69.5(2) implement proposed Senate File 511 (SF511), which was never signed into law. SF511 states in the bill explanation that the bill prohibits the commission from adopting rules that require an owner of a peat moss biofilter system, a recirculating textile filter system, or an aerobic treatment unit to enter into a maintenance contract. However, the bill requires owners of these systems to have the system inspected and, if necessary, to have maintenance performed by a technician at least once every three years. In addition, a variance has been granted to allow trained individuals to perform maintenance. When the rule was originally written, these technologies were new, and only certified technicians had any knowledge of the systems. Now, the technologies are no longer new and more people have knowledge of the systems; thus, trained individuals are able to inspect and maintain systems.

Amend paragraph 69.13(6)"d" as follows:

d. Maintenance contract. Prior to installation the use of a peat moss biofilter system, a maintenance contract for the proper monitoring and servicing of the entire treatment system shall be established between the owner of the system and a certified technician trained individual familiar with the operation and maintenance of the system. A maintenance contract is required for the life of the system. All monitoring and servicing of the system shall be performed by a manufacturer's certified technician the trained individual. Manufacturers are responsible for ensuring that an adequate number of certified technicians are available to service all peat moss biofilters at the specified intervals. The certified technician trained individual shall perform the required maintenance and reporting to the owner of the system and to the administrative authority. The certified technician trained individual shall also report any discontinuance of maintenance of the peat moss biofilter system to the administrative authority. Unless otherwise required by this chapter, peat Peat moss biofilter systems shall be inspected at least once annually every two years by the certified technician trained individual. A copy of the maintenance contract shall be on file in the office of the administrative authority.

This implements SF511 for peat moss biofilters. The change from "to installation" to "the use of" and "annually" to "every two years" is based on recommendations made during the 2019 legislative session. The new language "Unless otherwise required by this chapter" complies with 69.5(1).

Amend paragraph 69.13(7)"e" as follows:

e. Maintenance contract. Prior to installation of a recirculating textile filter system, a maintenance contract for the proper monitoring and servicing of the entire treatment system shall be established between the owner of the system and a certified technician trained individual familiar with the operation and maintenance of the system. A maintenance contract is required for the life of the system. All monitoring and servicing of the system shall be performed by a manufacturer's certified technician the trained individual. Manufacturers are responsible for ensuring that an adequate number of certified technicians are available to service all recirculating textile filters at the specified intervals. The certified technician trained individual shall perform the required maintenance and reporting to the owner of the system and to the administrative authority. The certified technician shall also report any discontinuance of maintenance of the system to the administrative authority. Recirculating textile filter systems shall be inspected at least once annually by the certified technician trained individual. A copy of the maintenance contract shall be on file in the office of the administrative authority.

This implements SF511 for recirculating textile filters. The inspection frequency is unchanged.

Amend subrule 69.14(6) as follows:

69.14(6) Maintenance contract. Prior to installation of an aerobic treatment unit, a maintenance contract for the proper monitoring and servicing of the entire treatment system shall be established between the owner of the system and certified technician trained individual familiar with the operation and maintenance of the system. A maintenance contract is required for the life of the system. All monitoring and servicing shall be performed by a manufacturer's certified technician the trained individual. Manufacturers are responsible for ensuring that an adequate number of certified technicians are available to service all aerobic treatment units at the specified intervals. Notwithstanding other requirements in this chapter, aerobic Aerobic treatment units shall be inspected for proper operation at least twice a year at six-month intervals by the certified technician.

This implements SF511 for aerobic treatment units. Inspection frequency not changed. The new language "Unless otherwise required by this chapter" complies with 69.5(1).