

**TITLE IV
WASTEWATER TREATMENT AND DISPOSAL**

CHAPTER 60

SCOPE OF TITLE—DEFINITIONS—FORMS—RULES OF PRACTICE

[Prior to 7/1/83, see DEQ Chs 15 and 24]

[Prior to 12/3/86, Water, Air and Waste Management[900]]

567—60.1(455B,17A) Scope of title. The department has jurisdiction over the surface water and groundwater of the state to prevent, abate and control water pollution by establishing standards for water quality and for direct or indirect discharges of wastewater to waters of the state and by regulating potential sources of water pollution through a system of general rules or specific permits. The construction and operation of any wastewater disposal system and the discharge of any pollutant to a water of the state require a specific permit from the department, unless exempted by the department.

This chapter provides general definitions applicable in this title and rules of practice, including forms, applicable to the public in the department's administration of the subject matter of this title.

Chapter 61 contains the water quality standards of the state, including classification of surface waters. Chapter 62 contains the standards or methods for establishing standards relevant to the discharge of pollutants to waters of the state. Chapter 63 identifies monitoring, analytical and reporting requirements pertaining to permits for the operation of wastewater disposal systems. Chapter 64 contains the standards and procedures for obtaining construction, operation and NPDES permits for wastewater disposal systems other than those associated with animal feeding operations. Chapter 65 specifies minimum waste control requirements and permit requirements for animal feeding operations. Chapter 66 specifies restrictions on pesticide application to waters. Chapter 67 contains standards for the land application of sewage sludge. Chapter 68 contains standards and licensing requirements applicable to commercial septic tank cleaners. Chapter 69 specifies guidelines for private sewage disposal systems.

[ARC 7625B, IAB 3/11/09, effective 4/15/09]

567—60.2(455B) Definitions. The following definitions apply to this title, unless otherwise specified in the particular chapter of this title:

“*Act*” means the Federal Water Pollution Control Act as amended through July 1, 2007, 33 U.S.C. §1251 et seq.

“*Acute toxicity*” means that level of pollutants which would rapidly induce a severe and unacceptable impact on organisms.

“*Application for a construction permit*” means the engineering report, plans and specifications and other data deemed necessary by the department for the construction of a proposed wastewater disposal system or part thereof.

“*Application for an operation permit*” means a written application for an operation or NPDES permit made on forms provided by the department.

“*Approved pretreatment program*” means a program administered by a publicly owned treatment works that meets the criteria established in 40 CFR Part 403 and which has been approved by the director.

“*Aquatic pesticide*” means any pesticide, as defined in Iowa Code section 206.2, that is labeled for application to surface water.

“*ASTM*” means “Annual Book of Standards, Part 31, Water.” The publication is available from the American Society for Testing and Materials, 1916 Race St., Philadelphia, Pennsylvania 19103.

“*Average dry weather flow*” or “*ADW*” means the daily average flow when the groundwater is at or near normal and runoff is not occurring.

“*Average wet weather flow*” or “*AWW*” means the daily average flow for the wettest 30 consecutive days for mechanical plants or for the wettest 180 consecutive days for controlled discharge lagoons.

“*Best management practice (BMP)*” means a practice or combination of practices that is determined, after problem assessment, examination of alternative practices, and appropriate public participation, to be the most effective, practicable (including technological, economic and institutional

considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

“Biochemical oxygen demand (five-day)” means the amount of oxygen consumed in the biological processes that break down organic matter in water by aerobic biochemical action in five days at 20°C.

“Bypass” means the diversion of waste streams from any portion of a treatment facility or collection system. A bypass does not include internal operational waste stream diversions that are part of the design of the treatment facility, maintenance diversions where redundancy is provided, diversions of wastewater from one point in a collection system to another point in a collection system, or wastewater backups into buildings that are caused in the building lateral or private sewer line.

“Carbonaceous biochemical oxygen demand (five-day)” means the amount of oxygen consumed in the biological processes that break down carbonaceous organic matter in water by aerobic biochemical action in five days at 20°C.

“CFR” or *“Code of Federal Regulations”* means the federal administrative rules adopted by the United States in effect as of July 1, 2008. 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.

“Chronic toxicity” means that level of pollutants which would, over long durations or recurring exposure, cause a continuous, adverse or unacceptable response in organisms.

“Combined sewer overflow” means the discharge from a combined sewer system at a point prior to the treatment works.

“Combined sewer system” means a wastewater collection system owned by a municipality which conveys sanitary wastewater (domestic, commercial, and industrial) and storm water through a single pipe system to the treatment plant.

“Construction permit” means a written approval from the director to construct a wastewater disposal system or part thereof in accordance with the plans and specifications approved by the department.

“Continuing planning process (CPP)” means the continuing planning process, including any revision thereto, required by Sections 208 and 303(e) of the Act (33 U.S.C. §§1288 and 1313(e)) for state water pollution control agencies. The continuing planning process is a time-phased process by which the department, working cooperatively with designated areawide planning agencies:

a. Develops a water quality management decision-making process involving elected officials of state and local units of government and representatives of state and local executive departments that conduct activities related to water quality management.

b. Establishes an intergovernmental process (such as coordinated and cooperative programs with the state conservation commission in aquatic life and recreation matters, and the soil conservation division, department of agriculture and land stewardship in nonpoint pollution control matters) which provides for water quality management decisions to be made on an areawide or local basis and for the incorporation of such decisions into a comprehensive and cohesive statewide program. Through this process, state regulatory programs and activities will be incorporated into the areawide water quality management decision process.

c. Develops a broad-based public participation (such as utilization of such mechanisms as basin advisory committees composed of local elected officials, representatives of areawide planning agencies, the public at large, and conservancy district committees) aimed at both informing and involving the public in the water quality management program.

d. Prepares and implements water quality management plans, which identify water quality goals and established state water quality standards, defines specific programs, priorities and targets for preventing and controlling water pollution in individual approved planning areas and establishes policies which guide decision making over at least a 20-year span of time (in increments of 5 years).

e. Based on the results of the statewide (state and areawide) planning process, develops the state strategy to be updated annually, which sets the state’s major objectives, approach, and priorities for preventing and controlling pollution over a five-year period.

f. Translates the state strategy into the annual state program plan (required under Section 106 of the federal Act), which establishes the program objectives, identifies the resources committed for the state

program each year, and provides a mechanism for reporting progress toward achievement of program objectives.

g. Periodically reviews and revises water quality standards as required under Section 303(c) of the federal Act.

“Crossover point” means that location in a river or stream in which the flow shifts from being principally along one bank to the opposite bank. This crossover point usually occurs within two curves or an S-shaped curve of a water course.

“Culture water” means reconstituted water or other acceptable water used for culturing test organisms.

“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.

“Diluted effluent sample” means a sample of effluent diluted with culture water at the same ratio as the dry weather design flow to the applicable receiving stream flow contained in the zone of initial dilution as allowed in 567—subrule 61.2(4), regulatory mixing zones, including paragraphs “b,” “c” and “d.”

“Dilution ratio” means, for a specific wastewater discharger, the ratio of the seven-day, ten-year low stream flow to the effluent design flow, e.g., a dilution ratio of 2:1 has two parts stream flow to one part effluent flow.

“Discharge of a pollutant” means any addition of any pollutant or combination of pollutants to navigable waters or waters of the state from any point source. “Discharge of a pollutant” includes additions of pollutants into navigable waters or waters of the state from surface runoff which is collected or channeled by human activity; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. “Discharge of a pollutant” does not include an addition of pollutants by any indirect discharger.

“Disposal system” means a system for disposing of sewage, industrial waste, or other wastes, or for the use or disposal of sewage sludge. “Disposal system” includes sewer systems, treatment works, point sources, dispersal systems, and any systems designed for the usage or disposal of sewage sludge.

“Effluent toxicity test” means a test to determine the toxicity of a chemical or chemicals contained in a wastewater discharge on living organisms in a static 48-hour exposure under laboratory conditions.

“EPA methods” means “Methods for Chemical Analysis of Water and Wastes,” 1979 U.S. EPA, EPA-600/4-79/020, Environmental Monitoring and Support Laboratory, National Environmental Research Center, Cincinnati, Ohio 45268. This publication is available from the National Technical Information Service, Springfield, Virginia 22151.

“Excessive infiltration/inflow (I/I)” as referred to in the discussion of secondary treatment is the quantity of I/I which is more economical to remove from the sewer system than to transport and treat at a wastewater facility. Within the cost-effectiveness analysis performed to determine excessive I/I, the transportation and treatment costs will be based on the percent removal requirements specified in the appropriate subrule, 567—subrule 62.3(1) or 62.3(3).

“Fecal coliform” means the portion of the coliform group which is present in the gut or the feces of warm-blooded animals. It includes organisms which are capable of producing gas from lactose broth in a suitable culture medium within 24 hours at 44.5 + / - 0.2°C.

“FR” means the Federal Register, published daily by the Office of the Federal Register, National Archives and Record Service, General Services Administration, Washington, D.C. 20408 and distributed by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

“General permit” means an NPDES permit issued to a class of facilities which could be conditioned and described by a single permit.

“Human health criteria” means that level of pollution which, in the case of noncarcinogens, prevents adverse health effects in humans, and in the case of carcinogens, represents a level of incremental cancer risk of 1 in 100,000. The numerical criteria are based on the human consumption of an average of 6.5 grams of fish and shellfish per day by a 70-kilogram individual for a life span of 70 years.

“Indirect discharger” means a non-domestic discharger introducing pollutants to a publicly owned treatment works.

“Industrial waste” means any liquid, gaseous, radioactive, or solid waste substance resulting from any process of industry, manufacturing, trade, or business, or from the development of any natural resource.

“Interference” means a discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

1. Inhibits or disrupts a POTW, its treatment process or operations, or its sludge processes, use or disposal; and

2. Is a cause of a violation of any requirement of a POTW NPDES permit including an increase in the magnitude or duration of a violation or the prevention of sewage sludge use or disposal.

“Intermittent watercourses” means watercourses which contain flow associated with rainfall/runoff events and which periodically go dry even in pooled areas.

“Local public works department” means a city or county public works department, a board of trustees of a city utility organized pursuant to Iowa Code chapter 388, or a sanitary sewer district organized pursuant to Iowa Code chapter 358.

“Losing streams” means streams which lose 30 percent or more of their flow during the seven-day, ten-year low stream flow periods to cracks and crevices of rock formations, sand and gravel deposits, or sinkholes in the streambed.

“Low permeability” means a soil layer of well-sorted, fine grain-sized sediments or of rock that under normal hydrostatic pressures would not be significantly permeable. Low permeability soils may include homogeneous clays below the zone of weathering, mudstone, claystone, shale, and some glacial till.

“Major,” for municipalities, means a facility having an average wet weather design flow of 1.0 million gallons per day (MGD) or greater. For industries “major” means a facility which is designated by EPA as being a major industry based on the EPA point rating system.

“Major permit amendment” or *“major modification”* means a permit modification that is not a minor permit amendment as defined in this rule.

“Maximum wet weather flow” or *“MWW”* means the total maximum flow received during any 24-hour period when the groundwater is high and runoff is occurring.

“Milligrams per liter (mg/l)” means milligrams of solute per liter of solution (equivalent to parts per million-assuming unit density). A microgram (ug) is 1/1000 of a milligram.

“Minimum flow” means that established stream flow in lieu of the seven-day, ten-year low stream flow to which the provisions of 567—Chapter 61 apply.

“Minor” means all remaining municipal and industrial facilities which have wastewater discharge flows and which are not designated as major facilities.

“Minor permit amendment” or *“minor modification”* means a permit modification made with the consent of the permittee that occurs as a result of any of the following:

1. Correction of a typographical error;
2. Modification of the monitoring and reporting requirements in the permit to include more frequent monitoring or reporting;
3. Revision of an interim date in a compliance schedule, provided that the new date is not more than 120 days after the date specified in the permit and does not interfere with the attainment of the final compliance date;
4. Change in facility name or ownership;
5. Deletion of a point source outfall that does not result in the discharge of pollutants from other outfalls; or
6. Incorporation of an approved local pretreatment program.

“Mixing zone” means a delineated portion of a stream or river in which wastewater discharges will be allowed to combine and disperse into the water body. The chronic criteria of 567—subrule 61.3(3) will apply at the boundary of this zone.

“Mortality” means, for the purpose of the 48-hour acute toxicity test, death, immobilization, or serious incapacitation of the test organisms.

“Navigable water” means a water of the United States as defined in 40 CFR Part 122.2.

“Nephelometric” means the nephelometric method of determining turbidity as stated in Standard Methods, pp. 132-134.

“New source” means any building, structure, facility or installation from which there is or may be a discharge of pollutants to a navigable water, the construction of which commenced after the promulgation of standards of performance under Section 306 of the Act which are applicable to such source, provided that:

1. The building, structure, facility or installation is constructed at a site at which no other source is located; the building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or the production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors, such as the extent to which the new facility is integrated with the existing plant and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.

2. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraph “1” but otherwise alters, replaces, or adds to existing process or production equipment.

3. Construction of a new source as defined pursuant to this rule has commenced if the owner or operator has:

- Begun, or caused to begin, as part of a continuous on-site construction program, any placement, assembly, or installation of facilities or equipment; or significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
- Entered into a binding contractual obligation for the purchase of facilities or equipment which is intended to be used in the operation of the new source within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this definition.

“Nonpoint source” means a source of pollutants that is not a point source.

“NPDES permit” means an operation permit, issued after the department has obtained approval of its National Pollutant Discharge Elimination System (NPDES) program from the administrator, that authorizes the discharge of any pollutant into a navigable water.

“Operation permit” means a written permit by the director authorizing the operation of a wastewater disposal system or part thereof or discharge source and, if applicable, the discharge of wastes from the disposal system or part thereof or discharge source to waters of the state. An NPDES permit will constitute the operation permit in cases where there is a discharge to a water of the United States and an NPDES permit is required by the Act.

“Other waste” means heat, garbage, municipal refuse, lime, sand, ashes, offal, oil, tar, chemicals, and all other wastes which are not sewage or industrial waste.

“Pass through” means a discharge which, alone or in conjunction with a discharge or discharges entering the treatment facility from other sources, exits a POTW or semipublic sewage disposal system in quantities or concentrations which cause a violation of any requirement of the treatment facility's NPDES permit including an increase in the magnitude or duration of a violation.

“Pathogen” means any microorganism or virus that can cause disease.

“Permit rationale” means a document that sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing a draft operation or NPDES permit.

“Pesticide” shall have the definition as stated in Iowa Code section 206.2.

“pH” means the hydrogen ion activity of a solution expressed as the logarithm of the reciprocal of the hydrogen ion activity in moles per liter at 25°C. pH is a measure of the relative acidity or alkalinity

of the solution. The range extends from 0 to 14; 7 being neutral, 0 to 7 being acidic, and 7 to 14 being alkaline.

“Point source” means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, or vessel or other floating craft, from which pollutants are or may be discharged. “Point source” does not include return flows from irrigated agriculture or agricultural storm water runoff.

“Pollutant” means sewage, industrial waste, or other waste.

“Population equivalent” means the calculated number of people who would contribute an equivalent amount of biochemical oxygen demand (BOD) per day as the system in question, assuming that each person contributes 0.167 pounds of five-day, 20 degrees Celsius, BOD per day.

“Positive toxicity test result” means a statistical significant difference of mortality rate between the control and the diluted effluent test.

“POTW” or *“publicly owned treatment works”* means any device or system used in the treatment of municipal sewage or industrial wastes of a liquid nature which is owned by a municipal corporation or other public body created by or under Iowa law and having jurisdiction over disposal of sewage, industrial wastes or other wastes, or a designated and approved management agency under Section 208 of the Act.

“Pretreatment” means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical, or biological processes, by process changes, or by other means, except as prohibited in 40 CFR 403.6(d).

“Pretreatment requirements” means any substantive or procedural requirement related to pretreatment, other than a national pretreatment standard, imposed on an industrial user.

“Pretreatment standard” or *“national pretreatment standard”* means any regulation containing pollutant discharge limits promulgated by EPA in accordance with Section 307(b) and (c) of the Act, which applies to industrial users. “Pretreatment standard” includes prohibitive discharge limits established pursuant to 40 CFR 403.5.

“Primary contact” means any recreational or other water use in which there is direct human contact with the water involving considerable risk of ingestion of water or contact with sensitive body organs such as the eyes, ears and nose, in quantities sufficient to pose a significant health hazard.

“Private sewage disposal system” means 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. This includes domestic waste, whether residential or nonresidential, but does not include industrial waste of any flow rate.

“Qualified volunteer” means a person or group of people acting on their own behalf, and not for a government agency or under contract with the department, to produce water quality monitoring data in accordance with a department-approved volunteer monitoring plan. Qualified volunteers must have the training and experience to ensure quality assurance and quality control for the data being produced, or be under the direct supervision of a person having such qualifications. A person or persons identified as participants in a department-approved volunteer monitoring plan will be considered qualified volunteers.

“Records of operation” means department of natural resources report forms or such other report forms, letters or documents which may be acceptable to the department that are designed to indicate specific physical, chemical, or biological values for wastewater during a stated period of time.

“Regional administrator” means the regional administrator of the United States Environmental Protection Agency, Region VII, 901 N. 5th Street, Kansas City, Kansas 66101.

“Secondary contact” means any recreational or other water use in which contact with the water is either incidental or accidental and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, commercial and recreational boating and any limited contact incidental to shoreline activity. This would include users who do not swim or float in the water body while on a boating activity.

“Semipublic sewage disposal system” means a system for the treatment or disposal of domestic sewage which is not a private sewage disposal system and which is not owned by a city, a sanitary sewer district, or a designated and approved management agency under Section 208 of the Act (33 U.S.C. 1288).

“Seven-day average” means the arithmetic mean of pollutant parameter values for samples collected in a period of seven consecutive days.

“Seven-day, ten-year low stream flow” means the lowest average stream flow which would statistically occur for seven consecutive days once every ten years.

“Severe property damage” means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. “Severe property damage” does not mean economic loss caused by delays in production.

“Sewage” means the water-carried waste products from residences, public buildings, institutions, or other buildings, including the bodily discharges from human beings or animals together with such groundwater infiltration and surface water as may be present.

“Sewage from vessels” means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes that are discharged from vessels and regulated under Section 312 of the Act.

“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.

“Significant industrial user” means an industrial user of a POTW that meets any one of the following conditions:

1. Discharges an average of 25,000 gallons per day or more of process wastewater excluding sanitary, noncontact cooling and boiler blowdown wastewater;
2. Contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW;
3. Is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or
4. Is designated by the department as a significant industrial user on the basis that the contributing industry, either singly or in combination with other contributing industries, has a reasonable potential for adversely affecting the operation of or effluent quality from the POTW or for violating any pretreatment standards or requirements.

Upon a finding that an industrial user meeting the criteria in paragraph “1” or “2” of this definition has no reasonable potential for adversely affecting the operation of the POTW or for violating any pretreatment standard or requirement, the department may, at any time on its own initiative or in response to a request received from an industrial user or POTW, determine that an industrial user is not a significant industrial user.

“Significantly more stringent limitation” relates to secondary treatment CBOD₅ and SS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration-based limitations (i.e., less than 20 mg/l in the case of CBOD₅), or the percent removal limitations in 567—subrules 62.3(1) and 62.3(3), if such limits would, by themselves, force significant construction or other significant capital expenditure.

“Sinkhole” means any depression caused by the dissolution or collapse of subterranean materials in a carbonate formation or in gypsum or rock salt deposits through which water may be drained or lost to the local groundwater system. Such depressions may or may not be open to the surface at times. Intermittently, sinkholes may hold water forming a pond.

“Small municipal separate storm sewer system” means all separate storm sewer systems that are owned or operated by the United States, the state of Iowa or a city, town, county, district, association or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved

management agency under Section 208 of the Clean Water Act that discharges to waters of the United States or of the state of Iowa, and that have a population of less than 100,000 as determined by the 1990 census. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas such as individual buildings.

“*Storm water*” means storm water runoff, snow melt runoff and surface runoff and drainage. (NOTE: Agricultural storm water runoff is excluded by federal regulation 40 CFR 122.3(e) as amended through June 15, 1992.)

“*Storm water discharge associated with industrial activity*” means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122 as amended through June 15, 1992. For the categories of industries identified in paragraphs “1” to “10” of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process wastewaters (as defined at 40 CFR 401 amended through June 15, 1992); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

For the categories of industries identified in paragraphs “1” to “9” and “11,” the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph, material handling activities include the: storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. To qualify for this exclusion, a storm-resistant shelter is not required for: drums, barrels, tanks and similar containers that are tightly sealed with bands or otherwise secured and have no taps or valves, are not deteriorated and do not leak; adequately maintained vehicles used in material handling; and final products other than products that would be mobilized in storm water discharge. The term excludes areas located on plant lands separate from the plant’s industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are federally, state, or municipally owned or operated) that meet the description of the facilities listed in paragraphs “1” to “11” of this definition include those facilities designated under 40 CFR 122.26(a)(1)(v) as amended through December 8, 1999. The following categories of facilities are considered to be engaging in “industrial activity” for purposes of this definition:

1. Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N as amended through June 15, 1992 (except facilities with toxic pollutant effluent standards which are exempted under paragraph “11” of this definition);

2. Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;

3. Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations meeting the definition of a reclamation area under 40 CFR 434.11(1) as amended through June 15, 1992) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable state or federal reclamation requirements after December 17, 1990, and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated

by contact with, or that has come into contact with, any overburden, raw material, intermediate products, finished products, by-products or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);

4. Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

5. Landfills, land application sites, and open dumps that have received any industrial wastes (waste that is received from any of the facilities described under this definition) including those that are subject to regulation under Subtitle D of RCRA;

6. Facilities involved in the recycling of materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile junkyards, including, but not limited to, those classified as Standard Industrial Classifications 5015 and 5093;

7. Steam electric power generating facilities, including coal handling sites;

8. Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-4225), 43, 44, 45 and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs "1" to "7" or "9" or "11" of this definition are associated with industrial activity;

9. Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403 (as amended through June 15, 1992). Not included are farmlands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503 (as amended through June 15, 1992);

10. Construction activity including clearing, grading and excavation activities except operations that result in the disturbance of less than 5 acres of total land area which is not part of a larger common plan of development or sale. Effective March 10, 2003, construction activity including clearing, grading and excavation activities except operations that result in the disturbance of less than 1 acre of total land area which is not part of a larger common plan of development or sale;

11. Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-4225 (and which are not otherwise included within paragraphs "2" to "10").

"Storm water discharge associated with small construction activity" means the discharge of storm water from:

1. Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than 1 acre and less than 5 acres. Small construction activity also includes the disturbance of less than 1 acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb an area equal to or greater than 1 acre and less than 5 acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

2. Any other construction activity designated by the director based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States.

"Storm water point sources" means point sources that serve to collect, channel, direct, and convey storm water and which are subject to Section 402(p) of the federal Clean Water Act and Parts 122, 123, and 124 of Title 40 of the Code of Federal Regulations (as amended through June 15, 1992).

"Temperature" means a measure of the heat content of water.

“Thirty-day average” means the arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

“Toxicity reduction evaluation (TRE) program” means a step-wise process, similar to that found in EPA Document/600/2-88/062, which combines effluent toxicity tests and analysis of the chemical characteristics of the effluent to determine the cause of the effluent toxicity or the treatment methods which will reduce the effluent toxicity, or both.

“Turbidity” is a measure of the optical property of the particles of mud, clay, silt, finely divided organic matter, or microscopic organisms suspended in water that interfere with light transmission, causing the light to be scattered and absorbed rather than transmitted through the water in straight lines.

“Uncontrolled sanitary landfill” means a landfill or open dump, whether in operation or closed, that does not meet the requirements for runon or runoff controls established pursuant to subtitle D of the Solid Waste Disposal Act.

“Valid effluent toxicity test” means the mortality in the control test is not greater than 10 percent and all test conditions contained in 567—subrule 63.4(2) “b” “Standard Operating Procedure: Effluent Toxicity Testing, Iowa Department of Natural Resources” are met.

“Water contact recreational canoeing” means the type of activities associated with canoeing outings in which primary contact with the water does occur. This would include users who swim or float in the water body while on a canoeing outing.

“Water of the state” means any stream, lake, pond, marsh, watercourse, waterway, well, spring, reservoir, aquifer, irrigation system, drainage system, and any other body or accumulation of water, surface or underground, natural or artificial, public or private, which are contained within, flow through or border upon the state or any portion thereof.

“Zone of initial dilution” means a delineated portion of a mixing zone in which wastewater discharges will be allowed to rapidly combine and begin dispersing into the water body. The acute criteria of 567—subrule 61.3(3) will apply at the boundary of this zone.

[ARC 7625B, IAB 3/11/09, effective 4/15/09 (See Delay note at end of chapter)]

567—60.3(455B,17A) Forms. The following forms shall be used to apply for departmental approvals and to report on activities related to the wastewater programs of the department. Electronic forms may be obtained from the appropriate regional field office. Paper forms may be obtained from the Web site of the department or by contacting the appropriate regional field office. Properly completed application forms and all attachments shall be submitted in accordance with the instructions. Reporting forms shall be submitted to the appropriate field office.

60.3(1) Construction permit application forms.

a. Schedules 28 — “A” to “S”

“A” — General Information 542-3129

“B” — Collection System 542-3095

“C” — Lateral Sewer System 542-3096

“D” — Trunk and Interceptor Sewer 542-3097

“E” — Pump Station 542-3098

“F” — Treatment Project Site Selection 542-3099

“G” — Treatment Project Design Data 542-3106

“H1” — Schematic Flow Diagram 542-3101

“H2” — Treatment Process Removal Efficiency 542-3102

“H3” — Mechanical Plant Reliability 542-3239

“I” — Screening, Grit Removal and Flow Measurement 542-3089

“J” — Septic Tank System 542-3090

“K1” — Controlled Discharge Pond 542-3091

“K2” — Aerated Pond 542-3092

“K3” — Anaerobic Lagoon 542-3093

“L” — Settling Tanks 542-3094

“M” — Fixed Film Reactor—Stationary Media 542-3081

“N” — Rotating Biological Contactor 542-3082

“O” — Aeration Tanks or Basins 542-3083

“P” — Gas Chlorination 542-3084

“Q” — Sludge Dewatering and Disposal 542-3085

“R1” — Sludge Dewatering and Disposal 542-3086

“R2A” — Low Rate Land Application of Sludge (Part I) 542-3087

“R2B” — Low Rate Land Application of Sludge (Part II) 542-3088

“S” — Land Application of Wastewater (To be developed)

b. Form 29 — Sewage Treatment Agreement 542-3219

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.

g. 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 542-1382.

j. NPDES Permit Application Supplement 542-1383.

k. 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 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 Facilities” 542-1415.

l. Notice of Intent for Coverage Under NPDES General Permit No. 4 “Discharge from Private Sewage Treatment and Disposal Systems” 542-1541.

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

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

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

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

q. NPDES Application Fee Invoice 542-1251.

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

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

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

u. Storm Water Discharge — NPDES General Permit #3 Notice of Discontinuation 542-8816.

v. Public Notice of Storm Water Discharge 542-8117.

w. 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."

x. Notice of Discontinuation From Coverage Under General Permit No. 7.

60.3(3) Wastewater monitoring report forms.

a. Form 35-1 — general/monthly 542-3226

b. Form 35-2 — general/quarterly 542-3227

c. Form 35-3 — commercial/industrial contributor/monthly 542-3228

d. Form 35-4 — general/monthly 542-3229

e. Form 35-5 — waste stabilization lagoons 542-3230

f. Form 35-6 — trickling filter 542-3231

g. Form 35-7 — activated sludge/contact stabilization 542-3232

h. Form 35-8 — commercial/industrial contributor/quarterly 542-3233

i. General Permit No. 5, "Discharge from Mining and Processing Facilities," Annual Monitoring Report 542-8035.

j. 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.

k. Other forms as provided by the department, including electronic forms.

[ARC 7625B, IAB 3/11/09, effective 4/15/09; ARC 9365B, IAB 2/9/11, effective 3/30/11]

567—60.4(455B,17A) Application procedures and requirements generally. The following procedures and requirements pertain to applications for wastewater permits. More specific and substantive requirements may be found in 567—Chapters 61 to 65.

60.4(1) Construction permit applications.

a. *General.* All applications for a construction permit pursuant to 567—64.2(455B) shall be made in accordance with the instructions for completion of application for wastewater construction permit. The instructions specify the requirements for federal grant and nongrant projects. In addition to the required engineering documents and data the appropriate application schedules (Form 28, "A" to "S") and Sewage Treatment Agreement Form 29 as applicable shall be submitted. The applicant will be promptly notified if the application is incomplete or improperly filled out, and an application will not be reviewed until such time as a complete and proper submission is made. A wastewater construction permit will be denied when the application does not meet all requirements for issuance of a construction permit. For a system with permits conditioned by limitations on additional loads under 567—subrule 64.2(10), paragraphs "a," "b" or "f," subsequent construction permit applications must be accompanied by an accounting of connections and additional loading since the time the initial conditioned permit was issued.

b. *Sewer systems.* If Schedule B, "Collection System," of the construction permit application does not provide sufficient information on which to make a determination to grant or deny a sewer system construction permit under this subrule, additional information, such as the following, may be requested and evaluated:

- (1) Sources of extraneous flows,
- (2) Population trends and density in area to be served,
- (3) Quality and strength of wastes from industrial contributors,
- (4) Existing water used data,
- (5) Historical and experience data,
- (6) Location, capacity, and condition of existing sewer system and stormwater drainage courses,
- (7) Probability of annexation or development of adjacent areas,
- (8) Service agreements with adjacent communities,
- (9) Existence and effectiveness of industrial waste ordinance,
- (10) Drainage area limits,
- (11) Bypasses and combined sewers,
- (12) Municipal sewer map.

c. *Site surveys.* For new or expanded wastewater treatment facilities, an application for a site survey must be submitted, by the applicant's engineer, generally in advance of a full application for construction permit. The applicant should allow 60 days from the date of application for preliminary approvals. The following minimum information must be submitted:

- (1) A preliminary engineering report or a cover letter which contains a brief description of the proposed treatment process and assurance that the project is in conformance with the long-range planning of the area.
- (2) Completed Schedule A — General Information
- (3) Completed Schedule F — Treatment Project Site Selection
- (4) Completed Schedule G — Treatment Project Design Data

If the application is incomplete it will be returned to the engineer for completion. When the application is complete it will be reviewed and if the data submitted indicates on its face that the site would be unsuitable for its intended purpose, a letter of rejection will be sent to the applicant and the engineer. Clarifications and additional data may be requested of the applicant and the engineer. When the application is complete and indicates on its face that the site may be suitable, a site survey will be conducted by department staff.

d. *Modification.* Persons seeking a modification to plans and specifications after having been issued a construction permit shall submit an addendum to plans and specifications, a change order, or revised plans and specifications, along with the reasons for the proposed changes, to the department. A supplemental written permit or approval will be issued when the changes submitted by the applicant meet department requirements. Construction shall not proceed until such changes have been approved.

e. *Fees.* Required fees shall be submitted with all applications for a construction permit as noted in 567—64.16(455B).

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).

(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. 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.

(2) *Incomplete applications.* Incomplete applications may be returned to the applicant for completion. Authorization to discharge will be suspended if a complete application is not submitted to the department before the expiration date of the current permit. In the case of new applications, no discharge will be allowed until an NPDES or operation permit is issued. In the case of existing discharges, if a permit application is incomplete or has not been submitted, the department shall notify the permittee of a violation of this rule and may proceed administratively on the violation or may request that the commission refer the matter to the attorney general for legal action.

(3) *Other information.* If a permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, the permittee shall promptly submit such facts or information.

b. *Amendments.* A permittee seeking an amendment to its operation permit shall make a written request in the form of a detailed letter 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 request for a variance shall include a letter and the Petition for Waiver or Variance form (542-1258). This form can be obtained from the NPDES section as noted in 60.3(455B). 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.

c. *Fees.* Required fees shall be submitted with all permit applications as noted in 567—64.16(455B).

[ARC 7625B, IAB 3/11/09, effective 4/15/09]

These rules are intended to implement Iowa Code section 17A.3(1) "b" and chapter 455B, division III, part 1.

[Filed emergency 6/3/83—published 6/22/83, effective 7/1/83]

[Filed emergency 12/2/83, Notice 6/22/83—published 12/21/83, effective 1/25/84]

[Filed 7/12/85, Notice 3/13/85—published 7/31/85, effective 9/4/85]

[Filed 4/30/86, Notice 9/11/85—published 5/21/86, effective 6/25/86]

[Filed emergency 11/14/86—published 12/3/86, effective 12/3/86]

[Filed 3/30/90, Notice 8/9/89—published 4/18/90, effective 5/23/90]

[Filed 10/26/90, Notice 7/11/90—published 11/14/90, effective 12/19/90]

[Filed 10/26/90, Notice 8/8/90—published 11/14/90, effective 12/19/90]

[Filed 4/26/91, Notice 10/17/90—published 5/15/91, effective 6/19/91]

[Filed 5/24/91, Notice 3/20/91—published 6/12/91, effective 7/17/91]

[Filed without Notice 6/21/91—published 7/10/91, effective 8/14/91]

[Filed 6/19/92, Notice 12/11/91—published 7/8/92, effective 8/12/92]

[Filed without Notice 8/28/92—published 9/16/92, effective 10/21/92]

[Filed without Notice 8/27/93—published 9/15/93, effective 10/20/93]

[Filed without Notice 8/26/94—published 9/14/94, effective 10/19/94]

[Filed without Notice 9/22/95—published 10/11/95, effective 11/15/95]

[Filed without Notice 9/20/96—published 10/9/96, effective 11/13/96]

[Filed without Notice 9/19/97—published 10/8/97, effective 11/12/97]

[Filed 3/19/98, Notice 11/19/97—published 4/8/98, effective 5/13/98]

[Filed without Notice 2/5/99—published 2/24/99, effective 3/31/99]
[Filed without Notice 10/28/99—published 11/17/99, effective 12/22/99]
[Filed without Notice 10/27/00—published 11/15/00, effective 12/20/00]
[Filed 5/25/01, Notice 3/21/01—published 6/13/01, effective 7/18/01]
[Filed without Notice 9/27/01—published 10/17/01, effective 11/21/01]
[Filed 3/27/02, Notice 11/14/01—published 4/17/02, effective 5/22/02]
[Filed 6/18/02, Notice 2/6/02—published 7/10/02, effective 8/14/02]
[Filed 9/25/02, Notice 7/10/02—published 10/16/02, effective 11/20/02]
[Filed without Notice 9/25/02—published 10/16/02, effective 11/20/02]
[Filed without Notice 9/25/03—published 10/15/03, effective 11/19/03]
[Filed without Notice 11/17/04—published 12/8/04, effective 1/12/05]
[Filed without Notice 10/21/05—published 11/9/05, effective 12/14/05]
[Filed without Notice 9/21/06—published 10/11/06, effective 11/15/06]
[Filed without Notice 11/14/07—published 12/5/07, effective 1/9/08]
[Filed ARC 7625B (Notice ARC 7152B, IAB 9/10/08), IAB 3/11/09, effective 4/15/09]¹
[Editorial change: IAC Supplement 4/22/09]
[Editorial change: IAC Supplement 5/20/09]
[Filed ARC 9365B (Notice ARC 9056B, IAB 9/8/10), IAB 2/9/11, effective 3/30/11]

¹ April 15, 2009, effective date of Item 2 of ARC 7625B delayed 70 days by the Administrative Rules Review Committee at its meeting held April 8, 2009; at its meeting held April 28, 2009, the Committee voted to lift the delay, effective April 29, 2009.