## Environmental Protection[567]

## CHAPTER 60 EO10 DRAFT - V.2, 11/16/2023

# TITLE IV WASTEWATER TREATMENT AND DISPOSAL

## CHAPTER 60 SCOPE OF TITLE—DEFINITIONS

[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, including 567—Chapters 61 through 69.

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

#### 567—60.2(455B) Definitions.

**60.2(1)** The following definitions apply to this title, unless otherwise specified in the particular chapter of this title:

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

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

"ASTM" means the Annual Book of Standards, Section 11, Water and Environmental Technology, published by ASTM International, https://www.astm.org/.

"Average" means the sum of the total daily discharges by weight, volume or concentration during the reporting period divided by the number of days during the reporting period when the measurements were made.

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

"Average wet weather flow" or "AWW flow" 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" or "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)" or "BOD<sub>5</sub>" 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)" or "CBOD<sub>5</sub>" 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, 2024. 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.

"Compliance schedule" means "schedule of compliance" as defined in Iowa Code section 455B.171.

"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.

"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.

"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.

"FR" means the Federal Register, published daily by the National Archives and Records Administration's Office of the Federal Register and published by the Government Publishing Office.

"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.

"Individual non-stormwater permit" means a site-specific NPDES or operation permit that is not an individual stormwater permit and that authorizes discharges of sewage, industrial waste, or other waste and allowable discharges of stormwater associated with industrial activity, as specifically noted in the permit.

"Individual stormwater permit" means an individual site-specific NPDES permit that authorizes discharges composed entirely of stormwater associated with industrial activity or construction activity and other allowable non-stormwater discharges as specifically noted in the permit.

"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 <a href="Lowa Code chapter 388">Lowa Code chapter 388</a>, or a sanitary sewer district organized pursuant to <a href="Lowa Code chapter 358">Lowa Code chapter 358</a>.

"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 a major industry.

"Major permit amendment" means a permit amendment that is not a minor permit amendment as defined in this rule.

"Maximum wet weather flow" or "MWW flow" 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 facilities which have wastewater discharge flows and which are not designated

as major facilities.

- "Minor permit amendment" means a permit amendment 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 does not interfere with the attainment of the final compliance date;
- 4. Revision of interim or final dates in a schedule to meet the requirements of the Iowa Nutrient Reduction Strategy;
  - 5. Change in facility name or ownership;
  - 6. Deletion of a point source outfall that does not result in the discharge of pollutants from other outfalls; or
  - 7. 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 a WET test, death, immobilization, or serious incapacitation of the test organisms.

"Nephelometric" means the nephelometric method of determining turbidity as stated in 40 CFR Part 136.

"Nonpoint source" means a source of pollutants that is not a point source.

"NPDES permit" means an operation permit issued under an EPA approved National Pollutant Discharge Elimination System (NPDES) program.

"Operation permit" means a 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.

"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 NPDES permit.

"pH" means the hydrogen ion activity of a solution expressed as the logarithm of the reciprocal of the hydrogen ion concentration 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.

"Population equivalent" or "PE" 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.

"POTW" or "publicly owned treatment works" means any device or system used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature which is owned by a municipality or other public body created by or under Iowa law and having jurisdiction over disposal of sewage, industrial wastes or other wastes. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW.

"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.

"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 report forms or 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.

"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.

"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.

"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.

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

"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.

"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.

"Whole effluent toxicity test" or "WET test" means a test to determine the toxicity of a chemical or chemicals contained in a wastewater discharge on living organisms.

"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.

- **60.2(2)** *Definitions in Iowa Code and Iowa Administrative Code (IAC)*. The following terms applicable to this title are defined in the referenced locations:
  - a. Iowa Code section 455B.101: "department."
- b. Iowa Code section 455B.171: "disposal system "effluent standard," "industrial waste," "other waste," "point source," "pollutant," "schedule of compliance," "semipublic sewage disposal system," "septage," "sewage," "sewage sludge," "treatment works," and "water of the state."
  - c. Iowa Code section 455B.171 and rule 567—69.1(455B): "private sewage disposal system."
  - d. Iowa Code subsection 455B.171(16) and in 40 CFR § 403.3(m): "new source."
  - e. Iowa Code section 206.2: "pesticide."
  - f. Rule 567—40.2(455B): "deep well" and "shallow well".
- **60.2(3)** *Definitions in the Code of Federal Regulations (CFR)*. The following terms applicable to this title are defined in the referenced locations:
  - a. 40 CFR §121.1(n): "water quality requirement."
- b. 40 CFR § 122.2: "combined sewer overflow" or "CSO," "combined sewer system" or "CSS," "daily discharge," "indirect discharger," "maximum daily discharge limitation," "new discharger," "regional administrator," "sewage from vessels," and "waters of the United States" or "waters of the U.S."
- c. 40 CFR § 122.26(b): "small municipal storm sewer system" or "small MS4," "stormwater," "stormwater discharge associated with industrial activity," "stormwater discharge associated with small construction activity," and "uncontrolled sanitary landfill."
  - d. 40 CFR § 122.41(m): "severe property damage."
  - e. 40 CFR § 133.101: "seven day average" and "thirty day average."
  - f. 40 CFR § 401.11(1): "navigable waters."
- g. 40 CFR § 403.3: "Act," "approved pretreatment program," "interference," "non-significant categorical industrial user" or "NSICU," "pretreatment," "pretreatment requirements," "pretreatment standard" or "national pretreatment standard," and "significant industrial user" or "SIU." ARC 7625B, IAB 3/11/09, effective 4/15/09 (See Delay note at end of chapter); ARC 2482C, IAB 4/13/16, effective 5/18/16; ARC 5679C, IAB 6/16/21, effective 7/21/21; ARC 6191C, IAB 2/9/22, effective 3/16/22; ARC 6734C, IAB 12/14/22, effective 3/1/23]

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

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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.