

567—60.1(455B) Scope of title and definitions.

60.1(1) *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 (DS) 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.

60.1(2) *Definitions.* The following definitions apply to this title, unless otherwise specified in a chapter of this title:

“*7Q10*” or “*seven-day, ten-year low stream flow*” means the lowest average stream flow that would statistically occur for seven consecutive days once every ten years.

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

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

“*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, 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.

“*AWW flow*” or “*average wet weather 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.

“*BMP*” or “*best management practice*” 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.

“*BOD₅*” or “*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.

“*CBOD₅*” or “*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, 2024. The amendment of the date contained in this definition shall constitute the amendment of all CFR references contained in 567—Chapters 61 through 69, Title IV, unless a date of adoption is set forth in a specific rule.

“*Chronic toxicity*” means that level of pollutants that 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 DS 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.

“*CWA*” or “*Clean Water Act*” means the federal Water Pollution Control Act effective July 1, 2024, 33 U.S.C. §1251 et seq.

“*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—paragraphs 61.2(4) “*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 that is collected or channeled by human activity; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person that 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.

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

“*GP*” or “*general permit*” means an NPDES permit issued to a class of facilities that could be conditioned and described by a single permit.

“*Human health (HH) criteria*” means that level of pollution that, 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 nonstormwater 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 nonstormwater discharges as specifically noted in the permit.

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

“*Lake*” means a natural or man-made impoundment of water with more than one acre of water surface area at the high water level.

“*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 that 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 that 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.

“mg/L” or “milligrams per liter” means milligrams of solute per liter of solution (equivalent to parts per million—assuming unit density). A microgram (μg) is 1/1,000 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 that have wastewater discharge flows and that are not designated as major facilities.

“Minor permit amendment” means a permit amendment made with the consent of a 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. Revision of interim or final dates in a schedule to comply with the provisions 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.

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

“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 DS or part thereof or discharge source and, if applicable, the discharge of wastes from the DS 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 WOTUS and an NPDES permit is required by the CWA.

“Pass through” means a discharge that, alone or in conjunction with a discharge or discharges entering the treatment facility from other sources, exits a POTW or semipublic sewage DS in quantities or concentrations that 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.

“PE” or “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°C, BOD per day.

“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.

“Pond” means a natural or man-made impoundment of water with a water surface area of one acre or less at the high water level.

“*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 that 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.

“*Operation records*” means department report forms or other report forms, letters, or documents that 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.

“*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.

“*WET test*” or “*whole effluent toxicity test*” means a test to determine the toxicity of a chemical or chemicals contained in a wastewater discharge on living organisms.

“*WQS*” or “*water quality standards*” means the water quality standards as enumerated in 567—Chapter 61.

“*ZID*” or “*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.

60.1(3) *Definitions in Iowa Code and the 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): “PSDS” or “private sewage disposal system.”
- d. Iowa Code section 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.”

60.1(4) CFR definitions. The following terms applicable to this title are defined in the referenced locations:

- a. 40 CFR §121.1(j): “water quality requirements.”
- b. 40 CFR §122.2: “CSO” or “combined sewer overflow,” “CSS” or “combined sewer system,” “daily discharge,” “indirect discharger,” “maximum daily discharge limitation,” “new discharger,” “regional administrator,” “sewage from vessels,” and “waters of the U.S.” or “waters of the United States.”
- c. 40 CFR §122.26(b): “small MS4” or “small municipal separate storm sewer system,” “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: “7-day average” and “30-day average.”
- f. 40 CFR §401.11(l): “navigable waters.”
- g. 40 CFR §403.3: “approved POTW pretreatment program,” “interference,” “non-significant categorical industrial user,” “pretreatment,” “pretreatment requirements,” “pretreatment standard” or “national pretreatment standard,” and “significant industrial user.”

60.1(5) Abbreviations. In addition to the abbreviations listed in the definitions in 60.1(2), the following abbreviations are applicable to this title.

<u>Abbreviation</u>	<u>Meaning</u>
°C	degrees Celsius
AASHTO	American Association of State Highway and Transportation Officials
AICP	alternatives implementation compliance plan
ANSI	American National Standards Institute
BLM	Biotic Ligand Model
CCC	Criterion Continuous Concentration
CEU	continuing education units
CMC	Criterion Maximum Concentration
Corps	United States Corps of Engineers
DC	disadvantaged community
DCA	disadvantaged community analysis
DCM	disadvantaged community matrix
DS	disposal system
DUC	disadvantaged unsewered community
DUCA	disadvantaged unsewered community analysis
DUCM	disadvantaged unsewered community matrix
<i>E. coli</i>	<i>Escherichia coli</i>
ELS	early life stage
EPA	U.S. Environmental Protection Agency
EPS	expanded polystyrene
F & W	fish and water
FCP	future compliance plan
FO	regional Field Office of the department (1, 2, 3, 4, 5, or 6)
ft	foot
ft ²	square feet
gal	gallon
gal/ft ²	gallons per square foot
gal/ft ² /day	gallons per square foot per day
gpd	gallons per day
hr	hour
I/I	infiltration and inflow
IAC	Iowa Administrative Code
IAPMO	International Association of Plumbing and Mechanical Officials
Iowa DOT	Iowa Department of Transportation
IWFDS	Iowa Wastewater Facilities Design Standards

<u>Abbreviation</u>	<u>Meaning</u>
kg	kilogram
MCL	maximum contaminant level
mg	milligram
µg/L	micrograms per liter
mgd	million gallons per day
mL	milliliter
MHI	median household income
mm	millimeter
MPN	most probable number
mt	metric tons
NH ₃ -N	ammonia nitrogen
NOAA	National Oceanic and Atmospheric Administration
NOD	notice of discontinuation
NOI	notice of intent
NSF	National Sanitation Foundation
NSCIU	non-significant categorical industrial user
O&M	operation and maintenance
OIW	outstanding Iowa waters
ONRW	outstanding national resource waters
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PFRP	processes to further reduce pathogens
PGP	pesticides general permit
PN	public notice
POA	plan of action
psi	pound per square inch
PSRP	processes to significantly reduce pathogens
SD	separation distance
SDMP	sewage disposal management plan
SIU	significant industrial user
sp.	species
SS	suspended solids (the pollutant parameter total suspended solids)
SWESI	substantial and widespread economic and social impact
TA	treatment agreement
TAPC	total annual project costs
TKN	total kjeldahl nitrogen
Tm	terameter
TMDL	total maximum daily load
TOT	time of transfer
TRC	total residual chlorine
TRE	toxicity reduction evaluation
TSS	total suspended solids
U.S.	United States
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
VAR	vector attraction reduction
WER	water-effect ratio
WLA	wasteload allocation
WLAP	Iowa Wasteload Allocation Procedure
WOTUS	waters of the U.S.
WQBEL	water quality-based effluent limit

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