

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.

“*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.

“*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.

“*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*” means the Code of Federal Regulations as published by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

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

“*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.

“*Dry weather design flow*” means the 30-day average flow which a facility is designed to discharge during dry weather conditions.

“*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.

“*High quality resource waters*” means waters designated as such in 567—Chapter 61, of exceptional recreational or ecological significance. These waters are important, unique or sensitive ecologically but whose chemical quality may not be particularly good as measured by traditional standards of Chapter 61, or whose resource potential is based on the existing physical or biological integrity rather than on existing chemical integrity.

“*High quality waters*” means those waters designated as such in 567—Chapter 61, which exceed the levels described in Chapter 61 as necessary to protect existing water uses. The chemical integrity of these waters is enhanced and distinguished as high quality by the exceptional water clarity necessary to protect and maintain the existing designated uses of those waters. Examples include the cold water streams designated by the Iowa conservation commission as Iowa’s catchable and special trout streams, and the Iowa Great Lakes chain.

“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.

“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” means for municipalities, a facility having a discharge flow or wet weather design flow of 1.0 mgd or greater. For industries it means a facility which is designated by EPA as being a major industry based on the EPA point rating system which uses pounds of wastes discharged for each facility.

“Major contributing industry” means an industrial user of a treatment works that:

- a. Has a flow of 50,000 gallons or more per average workday;
- b. Has a flow greater than 5 percent of the flow carried by the treatment works receiving the waste;
- c. Has in its waste a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Act and adopted by reference in 567—62.5(455B); or
- d. Is found by the department in connection with the issuance of an NPDES permit to have a significant impact, either singly or in combination with other contributing industries, on that treatment works or upon the quality of effluent from that treatment works.

“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.

“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.

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

“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.

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

“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.

“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.

“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 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, 726 Minnesota Avenue, 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.

“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.

“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.

“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.

“*Standard methods*” means “Standard Methods for the Examination of Water and Wastewater,” 15th Edition. This publication is available from the American Public Health Association, 1015 15th Street N.W., Washington, D.C. 20005.

“*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 runoff 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.

“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.