

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 616. INDUSTRIAL WASTEWATER SYSTEMS**

SUBCHAPTER 1. INTRODUCTION

252:616-1-1. Purpose

This Chapter establishes requirements for industrial surface impoundments, industrial tank systems and land-application of industrial sludge and wastewater. This Chapter does not apply to regulated hazardous waste, any industrial wastewater system that is constructed or operated to store or treat waste pursuant to the federal Resource, Conservation and Recovery Act (RCRA) (42 U.S.C. § 6921), or wastewater that is under the jurisdiction of the Oklahoma Corporation Commission from oil or gas exploration and production or salt water disposal. Industrial wastewater treatment systems permitted pursuant to an OPDES permit, issued by the DEQ, will not be required to obtain an additional permit pursuant to this chapter. This Chapter applies to any person who constructs or operates an industrial surface impoundment system, industrial tank system, and industrial land-application sites. These rules are authorized by Title 27A O.S., §§ 2-6-101 through 2-6-106 and 2-6-501 through 2-6-501.5.

252:616-1-2. Definitions

The following words and terms, when used in this Chapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Beneficial use" means in the context of land application the use of sludge or wastewater through land application for the purpose of soil conditioning, crop vegetative fertilization, or erosion control, or the use of wastewater for dust suppression where fugitive dust control would otherwise be an air quality problem, in a manner which does not pollute or tend to pollute waters of the state of Oklahoma, the environment or pose a risk to human health.

"Berm" means a man-made barrier designed to control waste and/or stormwater within a surface impoundment or to retard or contain runoff in a given area.

"Bypass" means the intentional or unintentional diversion of waste streams from any portion of a facility.

"Cathodic protection" means protecting a metal from electrochemical corrosion or rusting by using it as the cathode of a cell with a sacrificial anode.

"Cell" means a part of a surface impoundment system that shares a wall and berm with another impoundment area.

"DEQ" means the Oklahoma Department of Environmental Quality.

"Engineer" means a professional engineer registered in the state of Oklahoma.

"Flexible membrane liner" means a manufactured liner material composed of plastics, resins or other flexible materials, which is designed and manufactured to be used to control the seepage or release of waste through the liner material.

"Flow-through surface impoundment" means a surface impoundment designed and constructed with an outfall structure which allows the controlled discharge of wastewater out of the impoundment.

"Freeboard" means the vertical distance from the surface water level to the overflow elevation (outfall structure or the lowest part of the surrounding berm) in a surface impoundment.

"Hydraulic conductivity" means the coefficient of proportionality that describes the rate at which a fluid can move through a permeable medium. It is a function of both the medium and of the fluid flowing through it; also defined as the quantity of water that will flow through a unit cross-sectional area of porous material per unit of time under a hydraulic gradient of 1.00 (measured at right angles to the direction of flow) at a specified temperature.

"Industrial wastewater treatment permit" shall include any permit for construction, operation, treatment, storage or disposal required under this Chapter.

"Land application" means the controlled application of treated industrial wastewater or sludge onto the land surface for beneficial use.

"Liner" means a barrier which is designed, constructed and installed in a surface impoundment and which has appropriate chemical and physical properties to ensure that such structures control the seepage or release of waste and wastewater from the impoundment.

"Monitoring well" means all borings, wells, piezometers, or other means of retrieving a soil, waste, wastewater or vapor sample from the subsurface.

"Oklahoma Water Quality Standards" means the rules promulgated by the Oklahoma Water Resources Board and contained in OAC 785:45 which classify waters of the state, designate beneficial uses for which the various waters of the State shall be maintained and protected, and prescribe the water quality standards required to sustain designated uses.

"OPDES" means the Oklahoma Pollution Discharge Elimination System Act at 27A O.S. § 2-6-201 et seq.

"Operator" means the person responsible for the maintenance and operation of a surface impoundment, or disposal or wastewater treatment system and responsible for keeping records and providing reports to the DEQ.

"Outfall" means the point where monitoring shall occur for the purpose of evaluating compliance with rules, permits or orders of the DEQ.

"Person" means any individual, company, corporation, government agency, municipality, or any other entity.

"Permeability" means the rate at which liquids pass through soil or other materials in a specified direction.

"Receiving water" means that portion of any waters of the State into which wastewater is or may be released, leached, or discharged.

"Sanitary wastewater" means and includes but is not limited to wastewater from drinking fountains, showers, toilets, lavatories, and kitchens.

"Surface impoundment" means a native soil or lined basin either below or above ground level which is designed, maintained and/or operated to store, recycle, treat and/or dispose of industrial wastewater or stormwater, and shall include but is not limited to lagoons, excavations, basins, diked areas, pits and ponds.

"Tank system" means any above ground and/or subsurface disposal system which involves the storage and treatment of Class I, II, III or V industrial wastewater and/or industrial sludge.

"Total retention surface impoundment" means a surface impoundment designed and constructed without an outfall structure.

"U.S.C." means United States Code.

"Waste class" means the following classification of wastewater, including

stormwater:

(A) Class I: containing or suspected to contain pollutants for which the toxicity, concentration and volume pose a significant risk of harm to humans, aquatic life, wildlife or the environment, either through high potential to migrate in groundwater or the likelihood, if discharged, to significantly degrade the beneficial uses of the receiving water as designated in the Oklahoma Water Quality Standards. These wastewaters require the most restrictive environmental protection measures.

(B) Class II: containing or suspected to contain pollutants for which the toxicity, concentration and volume pose a moderate risk of harm to humans, aquatic life, wildlife, or the environment, either through the potential to migrate in groundwater or a reasonable possibility, if discharged, to degrade the beneficial uses of the receiving water as designated in the Oklahoma Water Quality Standards.

(C) Class III: containing or suspected to contain pollutants which do not pose a substantial risk of harm to humans, aquatic life, wildlife, or the environment because of a relative immobility in groundwater or a general lack of direct toxicity, and which are not likely, if discharged, to degrade the beneficial uses of the receiving water as designated in the Oklahoma Water Quality Standards.

(D) Class IV: containing only sanitary wastewater from industrial facilities. Class IV wastewaters are not subject to this Chapter, but are governed by OAC 252:641 (under 5,000 gpd) or by OAC 252:656 (5,000 gpd or more).

(E) Class V: industrial wastewater not otherwise classified.

"Waste containment system" means storage tanks, containers and other storage reservoirs, transfer lines, pumps, fittings, overflow prevention devices, and any associated anticorrosion measures and leak prevention or detection systems.

SUBCHAPTER 3. PERMIT PROCEDURES

252:616-3-4. Applications

(a) **Form.** Submit legible applications on the appropriate DEQ Form 1, Form 2SI and 2L, as needed (see Appendices) approved forms.

(b) **Signature Applications.** Signature applications shall be signed by the owner, and by the operator if different.

(c) **Construction plans are required.** Submit construction plans to the DEQ at least 120 days before starting on-site construction or modifying any new or existing surface impoundment or wastewater treatment system. Include the proposed wastewater characteristics, treatment processes and other pertinent information.

(d) **Construction certification.** An Engineer must certify that tank systems and surface impoundments have been designed and constructed according to this Chapter.

The certification must include:

- (1) a chronological description of major construction activities;
- (2) plans and specifications of record for each industrial wastewater unit;
- (3) a description of quality control tests, results and inspections;
- (4) a statement that the wastewater system will protect humans, aquatic life, wildlife and the environment; and
- (5) for surface impoundments, certification that the liner was constructed properly and not damaged by freezing, desiccation or other damage during construction.

An engineer certification is not required for a single cell total retention surface impoundment system that holds only Class III wastewater designed pursuant to the requirements of Appendix D of this Chapter.

(e) **Construction report.** For tank systems and surface impoundments that will contain Class III, Class IV or V wastewater, the owner/operator shall submit a written report that construction was completed in accordance with the requirements of the permit. It is not required that this report be prepared by an engineer.

(f) **Financial responsibility.** The applicant must demonstrate to the satisfaction of the DEQ the financial capability for operation, maintenance, replacement and closure for the facility.

(g) **Transfer.** Applications and unexpired permits may be transferred upon showing the transferee has legal authority and financial accountability, and that both parties agree to the transfer.

(h) **Permit.** Applicants must comply with the terms of the permits that are issued. Permits shall contain a description of all wastewater treatment units to be constructed at the facility. Permits may contain provisions more stringent than these rules in order to meet Oklahoma Water Quality Standards.

SUBCHAPTER 9. TANK SYSTEM STANDARDS

252:616-9-3. Tank system requirements

Tank system construction. The following minimum construction and maintenance requirements apply to all industrial tank systems regardless of wastewater classification:

(1) **Lateral lines.** Tanks with lateral lines must have at least two compartments operated in series, with the discharge to the lateral lines from the final compartment.

(2) **Integrity testing.** If the DEQ has reasonable grounds to believe that any pipes, fittings, or other parts of a tank system may be a source of contamination, the DEQ shall require the owner or operator to conduct tests demonstrating the integrity of the system and to provide the results of such tests to the DEQ. The integrity testing requirement shall be performed according to current techniques as set out in the National Fire Protection Association publication 329 (See "Recommended Practices for Handling Underground Leakage of Flammable and Combustible Liquids," NFPA 329, 1999, Batterymarch Park, Quincy, Mass.) or by other generally accepted procedures approved by the DEQ.

(3) **Percolation or soil profile tests.** Before constructing an industrial tank system with lateral lines, conduct percolation tests or soil profile tests according to the procedure in OAC 252:641. The results of a soil profile test shall supercede the results of any percolation test completed in the same proposed absorption field area.

(4) **Secondary Containment.** Permanently constructed above-ground storage tank systems shall be constructed with secondary containment, approved by the DEQ, that completely surrounds each tank or tank system and has the capacity to capture and retain any spills and/or stormwater from the individual tank or the tank system.

SUBCHAPTER 13. CLOSURE STANDARDS

252:616-13-1. Termination of activities

(a) **Intent to close.** The owner or operator shall notify the DEQ, in writing, of intent to close a surface impoundment, tank system or land application site at least 90 days before closing operation of the treatment unit. Failure to comply with the operational and/or maintenance requirements contained in this chapter may be construed as “intent to close” and require closure of the surface impoundment, tank system or land application site. Closure activities cannot begin without written DEQ approval.

(b) **Contents of notice.** Notice of intent to close must include:

- (1) the name, address and title of person(s) who will remain in charge of or otherwise have continuing management responsibility of the facility or site and who will retain an ownership interest in personal or real property affected by the permitted operation;
- (2) a detailed schedule of proposed closure activities; and
- (3) the forwarding addresses and names of each present owner or operator under the current permit.

(c) **Waiver of closure requirements.** Closure requirements may be waived under the following conditions:

(1) **Facilities subject to federal closure regulations.** The DEQ may waive some or all closure requirements if the surface impoundment(s), tank system(s) or land application site(s) must be closed under federal regulations (e.g., RCRA regulations). When such a waiver is requested, the owner or operator must submit a copy of the closure plan to the Water Quality Division.

(2) **Other facilities.** The DEQ may waive some closure requirements on a case by case basis according to the characteristics of the industrial wastewater system and the wastewater or sludge contained within it or land applied. The owner or operator must, in the notice of intent to close, describe the intended closure activities and specify the closure requirements to be considered for waiver. Following review, the DEQ will notify the owner or operator in writing which closure requirements are waived. If a waiver of any closure requirements is granted, certification of closure must follow the requirements of 252:616-13-4(d).

Supplemental Information

STATUTORY TERMS AND CITATIONS

~~"Pollutant" includes but is not limited to dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agribusiness waste. Title 27A O.S., § 1-1-201 [similar to § 2-6-101 which includes discharge to waters of the state].~~

~~"Pollution" means the presence in the environment of any substance, contaminant or pollutant, or any other alteration of the physical, chemical or biological properties of the environment or the release of any liquid, gaseous, or solid substance into the environment in quantities which are or will likely create a nuisance or which render or will likely render the environment harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, or to property. Title 27A O.S., § 1-1-201 and § 2-1-102.~~

~~"Sludge" means nonhazardous solid, semi-solid, or liquid residue generated by the treatment of domestic sewage or wastewater by a treatment works, or water by a water supply system, or manure, or such residue, treated or untreated, which results from industrial, nonindustrial, commercial, or agribusiness activities or industrial or manufacturing processes and which is within the jurisdiction of the [DEQ]. Title 27A O.S., § 2-6-101.~~

~~"Solid waste" means all putrescible and nonputrescible refuse in solid or semisolid form including, but not limited to, garbage, rubbish, ashes or incinerator residue, street refuse, dead animals, demolition wastes, construction wastes, solid or semisolid commercial and industrial wastes including explosives, biomedical wastes, chemical wastes, herbicide and pesticide wastes. The term "solid waste" shall not include [source-separated scrap material and used motor oil for recycling]. Title 27A O.S., § 2-10-103.~~

~~"Waste" means any liquid, gaseous or solid or semi-solid substance, or thermal component, whether domestic, municipal, commercial, agricultural or industrial in origin, which may pollute or contaminate, or tend to pollute or contaminate, any air, land or waters of the state and which is within the jurisdiction of the [DEQ]. Title 27A O.S., § 2-6-101.~~

~~"Wastewater" includes any substance, including sewage, that contains any discharge from the bodies of human beings or animals, or contaminating chemicals or other waste or pollutants from domestic, municipal, commercial, agricultural, industrial or manufacturing activities or facilities and which is within the jurisdiction of the [DEQ]. Title 27A O.S., § 2-6-101.~~

~~"Wastewater treatment system" means treatment works and all related pipelines or~~

~~conduits, pumping stations and force mains, and all other appurtenances and devices used for collecting, treating, conducting or discharging wastewater. Title 27A O.S., § 2-6-101.~~