

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 619. OPERATION AND MAINTENANCE OF NON-INDUSTRIAL TOTAL
RETENTION LAGOON SYSTEMS ~~AND LAND APPLICATION~~**

RULEMAKING ACTION:

PERMANENT final adoption

RULES:

- Subchapter 1. General Provisions
252:619-1-4 [AMENDED]
- Subchapter 3. Operation and Maintenance
252:619-3-2 [AMENDED]
252:619-3-3 [REVOKED]
- Subchapter 5. Closure Requirements
252:619-5-2 [REVOKED]

AUTHORITY:

Environmental Quality Board, 27A O.S. § 2-2-101; Water Quality Management Advisory Council, 27A O.S. § 2-2-201; and 27A O.S. § 2-6-103, 2-6-402 and 2-6-501.

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SUPERSEDED EMERGENCY ACTIONS:

n/a

INCORPORATION BY REFERENCE:

n/a

ANALYSIS:

The DEQ proposes to amend OAC 252:619 to remove language from the title and text concerning the operation, maintenance and closure of land application sites related to total retention lagoon facilities. The DEQ also proposes to move rules pertaining to the operation and maintenance of land application sites to the new Chapter 627 (Operation and Maintenance of Water Reuse Systems). Additionally, the DEQ proposes to require the addition of name and contact number to the existing lagoon signage, which must be posted near or on the fence at each side of the lagoon. Finally, the DEQ proposes several non-substantive changes for clarification.

CONTACT PERSON:

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PURSUANT TO THE ACTIONS DESCRIBED HEREIN, THE FOLLOWING RULES ARE CONSIDERED FINALLY ADOPTED AS SET FORTH IN 75 O.S., SECTION 308.1(A), WITH AN EFFECTIVE DATE OF JULY 1, 2012:

SUBCHAPTER 1. GENERAL PROVISIONS

252:619-1-4. General requirements for total retention lagoon systems

- (a) **Operational requirements.** The permittee shall ensure that the total retention lagoon system is operated in compliance with the terms of the DEQ-issued construction permit and the requirements of this Chapter. When in conflict, the terms of the permit shall supersede the requirements of this Chapter.
- (b) **Unauthorized wastes.** The permittee shall take reasonable measures to prevent the introduction of unauthorized industrial wastewater, hazardous substances, chemicals or wastes into the total retention lagoon system.
- (c) **Protection of potable water supplies.** The permittee shall prevent cross-connections between wastewater and potable water supplies.
- (d) **Discharges prohibited.** The permittee shall operate and maintain the total retention lagoon system so that no part of the system bypasses or discharges wastes or wastewater. All such bypasses and/or discharges shall be considered a violation of this Chapter and be subject to enforcement as an unpermitted discharge to waters of the State in violation of the Oklahoma Pollutant Discharge Elimination System Act.
 - (1) **Reporting requirement.** The permittee shall ensure that any and all bypasses and/or discharges from a total retention lagoon system are reported to DEQ at (800) 522-0206 within 24-hours of the incident and that a completed and signed DEQ Form ~~605-011~~ 619-001 "Self Reporting Wastewater Bypass Form" is submitted to DEQ within five (5) days of the incident.
 - (2) **Required response.** Whenever a bypass or discharge occurs, the permittee shall ensure that immediate action is taken to stop, contain, clean up and prevent recurrence of the bypass or discharge.
- (e) **Certified operator required.** The permittee shall ensure that an operator, who is certified pursuant to OAC 252:710 to operate that size and type of total retention lagoon system, is employed to operate the total retention lagoon system.
- (f) **Monthly operating report.** The permittee shall complete a DEQ Form 619-001 "Total Retention Lagoon Monthly Operation Report" ("MOR") each month. The permittee shall ensure that the MOR is

kept current, is retained for three (3) years and is made available for review upon request by DEQ. Each MOR shall include:

- (1) the estimated monthly flow to the total retention lagoon;
- (2) the size of the population served by the total retention lagoon system;
- (3) the date of each site visit to the total retention lagoon system;
- (4) any maintenance performed on the total retention lagoon system; and
- (5) the results of any voluntary or DEQ-ordered sampling and analyses of the wastewater in the total retention lagoon system.

(g) **Additional reporting and/or sampling.** DEQ may require additional reporting and/or sampling in any administrative order, closure plan, or other official document issued by DEQ.

(h) **Use of certified laboratories.** All laboratory analyses required to be conducted pursuant to this Chapter shall be performed by laboratories certified by DEQ.

SUBCHAPTER 3. OPERATION AND MAINTENANCE

252:619-3-2. Total retention lagoons

(a) **Erosion control.** The permittee shall prevent erosion of the lagoon by:

- (1) Maintaining a 1:3 slope on the inner and outer dikes of the lagoon, unless permitted otherwise;
- (2) Using soil, gravel, concrete pads, shallow-root vegetation or other methods of erosion control as needed;
- (3) Removing trees and deep-root vegetation from the dikes and bottom of the lagoon in a timely manner to maintain the integrity and stability of the lagoon;
- (4) Protecting the inner dikes from wave action;
- (5) Protecting the outer dikes from stormwater runoff and floodwaters;
- (6) Protecting the dikes from burrowing animals; and
- (7) Repairing any damage promptly.

(b) **Freeboard.** The permittee shall ensure that the lagoon has a minimum of three feet (3') of freeboard, unless otherwise specified in the permit.

(c) **Seepage.** The permittee shall, at all times, maintain the integrity of the liner or seal of the total retention lagoon to prevent seepage in excess of five hundred gallons per acre per day (500 gal/acre/day). No action shall take place during the use, maintenance, or operation of the lagoon that would destroy or diminish the effectiveness of any liner or seal, or increase the permeability of the liner or seal. Whenever seepage in excess of five hundred gallons per acre per day (500 gal/acre/day) from the lagoon is suspected or discovered, the permittee shall ensure that the discharge is reported to DEQ at (800) 522-0206 within 24-hours of the incident and that a completed and signed DEQ Form ~~605-011~~ 619-001 "Self Reporting Wastewater Bypass Form" is submitted to DEQ within five (5) days of the incident.

(d) **Influent lines.** The permittee shall maintain influent lines to minimize short-circuiting by terminating influent lines at the center of the cell or a point at least one hundred feet (100') from the inside toe of any dike.

(e) **Wastewater depth control structures.** The permittee shall maintain control structures so that they properly control the wastewater depth in cells and route wastewater through the system.

(f) **Piping.** The permittee shall take steps to prevent turtles from clogging lagoon piping.

(g) **Flow measurement.** The permittee shall maintain flow measurement devices in proper working order.

- (h) **Treatment.** The permittee shall operate and maintain the lagoon to produce optimum treatment results.
- (i) **Fencing.** The permittee shall prevent unauthorized access to the lagoon by maintaining a fence around the lagoon. The fence may not interfere with the wind action to the lagoon's surface or shade the lagoon. Fences must have a lockable gate and must not obstruct maintenance vehicles or equipment. When the lagoon is located within three hundred fifty feet (350') of existing or platted residential or recreational areas, the permittee shall ensure that the lagoon is surrounded by a 6-foot high woven wire fence or equivalent.
- (j) **Signs.** The permittee shall maintain a sign near or on the fence on each side of the lagoon site that designates the nature of the facility and advises against trespassing, the name of the owner and a contact phone number.
- (k) **Wind action.** The permittee shall prevent any obstructions to wind action of the lagoon by:
 - (1) removing trees, weeds, cattails, and all other obstructions whenever they appear on or around the dikes or in the lagoon itself; and
 - (2) mowing the grass around the lagoons and on the dikes frequently enough to prevent the development of any obstructions to wind action.
- (l) **Access road.** The permittee must maintain the access road to the lagoon so that it is passable during all weather conditions.
- (m) **Other maintenance requirements.** The permittee shall maintain all structures of the lagoon in proper working order.
- (n) **Septic conditions prohibited.** The permittee shall operate and maintain the total retention lagoon so that it does not become septic. If a lagoon becomes septic, the permittee shall take immediate steps to correct the condition without violating DEQ rules.
- (o) **Vector control.** The permittee shall control vectors. In particular, mosquitoes and flies shall be controlled by:
 - (1) Maintaining an adequate lagoon depth;
 - (2) Preventing obstructions to wind action; and
 - (3) Taking steps to correct septic conditions.
- (p) **Surfactants.** The use of surfactants or other chemicals or additives that would increase the seepage rate through a lagoon bottom is specifically prohibited.

252:619-3-3. Land application sites serving total retention lagoons [REVOKED]

- ~~(a) **Operation and maintenance.** The following operation and maintenance requirements shall apply to land application sites serving total retention lagoons:~~
 - ~~— (1) **Fencing.** The permittee shall prevent unauthorized access to the land application site by maintaining the required fencing around the site. Public use areas where wastewater is disinfected prior to land application are exempt from the fencing requirements.~~
 - ~~— (2) **Signs.** The permittee shall maintain a sign, which describes the nature of the facility and advises against trespassing, on or near the fence on each side of the land application site. Public use areas where wastewater is disinfected prior to land application are exempt from the signage requirements.~~
 - ~~— (3) **Legal access to site.** The permittee shall only land apply wastewater to sites for which the permittee has legal access to the property for that purpose.~~
 - ~~— (4) **Public use area.** The permittee shall ensure that wastewater is not applied to a public use area that has a *high potential* for skin to ground contact (e.g. football field). The permittee shall ensure that wastewater applied to a public use area that has a *low potential* for skin to ground contact (e.g. golf~~

course) is:

- ~~— (A) disinfected before application by maintaining a detectable chlorine residual; and~~
- ~~— (B) applied during times when the public is not present.~~
- ~~— (5) **Equipment maintenance.** The permittee shall maintain all land application equipment in working order.~~
- ~~(b) **Restrictions.** The permittee shall not land apply wastewater:~~
 - ~~— (1) from the cell that receives raw sewage;~~
 - ~~— (2) from any cell other than the one specified in the permit;~~
 - ~~— (3) to any food crop that may be consumed raw;~~
 - ~~— (4) to crops such as corn, wheat and oats, less than thirty (30) days before harvest;~~
 - ~~— (5) at rates that allow a discharge from the permitted land application site;~~
 - ~~— (6) within one hundred feet (100') of the permitted boundary of the site;~~
 - ~~— (7) at a rate that exceeds the nitrogen and phosphorus rates for the crop grown at the site or that results in phytotoxicity;~~
 - ~~— (8) that has a dissolved oxygen concentration of less than 2.0 mg/l;~~
 - ~~— (9) in areas in which it is likely to adversely affect a threatened or endangered species listed under Section 4 of the federal Endangered Species Act, 16 U.S.C. 1533(c), or the critical habitat of such species;~~
 - ~~— (10) during periods of precipitation or while the soil is saturated or frozen; and/or~~
 - ~~— (11) on land having a slope greater than five percent (5%) unless erosion or runoff controls are implemented, but in no case on land with greater than ten percent (10%) slope.~~
- ~~(c) **Records.** The permittee must record on the DEQ Form 619-001 "Total Retention Lagoon Monthly Operation Report" ("MOR") the following information:~~
 - ~~— (1) Location, day and hour land application began and ended;~~
 - ~~— (2) Method of application;~~
 - ~~— (3) Volume of wastewater applied;~~
 - ~~— (4) When the conditions of the site require that the wastewater be disinfected before application, the chlorine residual of the wastewater applied;~~
 - ~~— (5) Weather conditions during the application period;~~
 - ~~— (6) Type of crop, grass or vegetation grown at the land application site; and~~
 - ~~— (7) If special analytical testing is required as a condition of the permit or an Administrative Order, the results of the analytical testing, including the name of the individual who collected the samples, when the analysis began, and the name of the certified laboratory.~~

SUBCHAPTER 5. CLOSURE REQUIREMENTS

252:619-5-2. Closure of land application sites associated with total retention lagoons [REVOKED]

- ~~(a) **Closure.** A specific land application site may be closed at any time by the permittee or by requirement of DEQ.~~
- ~~(b) **Notice.** The permittee shall submit written notice of the proposed closure of the land application site to DEQ at least ninety (90) days prior to beginning closure activities.~~
- ~~(c) **Remediation plan.** When site-specific testing and monitoring indicates the presence of pollution or~~

deterioration of a site, DEQ will require the permittee to submit, receive approval of and perform a remediation plan.