

**TITLE 10—DEPARTMENT OF NATURAL RESOURCES**

**Division 20—Clean Water Commission**

**Chapter 6—Permits**

**10 CSR 20-6.015 No-Discharge [Permits] Operations and Land Application Requirements**

*PURPOSE: This rule sets forth the requirements for no discharge operations or operators seeking to perform land application of domestic, non-domestic, or industrial wastewater; or hold or commingle such liquids or solids. [and process of application for nondischarging facility permits and the terms and conditions of the authorizations.]*

**(1) Definitions.**

(A) Definitions as set forth in the Missouri Clean Water Law and 10 CSR 20-2.010 shall apply to those terms when used in this regulation.

(B) Other applicable definitions are as follows:

*[1. Biosolids. An organic fertilizer or soil amendment produced by the treatment of wastewater sludge;*

*2. Catastrophic storm. A precipitation event of twenty-four (24)-hour duration or less that exceeds the twenty-five (25)-year, twenty-four (24)-hour storm event;*

*3. Chronic storm event. A precipitation event with a duration of more than twenty-four (24) hours that exceeds the one-in-ten (1 in 10)-year return frequency;*

*4. De minimis source. A waste or wastewater source, or a facility for treatment or disposal of process wastes, that is determined by the department to pose a negligible potential impact on waters of the state even in the event of the malfunction of wastewater treatment controls;*

*5. Land application facility. A facility where process wastes are land applied or stored for subsequent land application, including land treatment basins;*

*6. Land treatment basin. An earthen impoundment that provides land treatment of wastewater by allowing wastewater percolation through the soil at controlled rates which exceed the allowable percolation rates under the pond sealing requirements in 10 CSR 20-8.020 and 10 CSR 20-8.200;]*

*[7]1. No-discharge facility. A facility designed, constructed and operated to meet each of the following conditions:*

*A. To hold or irrigate, or otherwise [dispose] manage without discharge to surface or subsurface waters of the state, all process wastes and associated storm water flows except for discharges that are caused by catastrophic and chronic storm events;*

*B. Process wastes are not land applied during frozen, snow covered or saturated soil conditions; and*

*C. Basins are sealed in accordance with 10 CSR 20-8 and there are no subsurface releases in violation of 10 CSR 20-7.015 or section 577.155, RSMo;*

*[8. One-in-ten (1-in-10)-year precipitation. The wettest precipitation expected once every ten (10) years for a three hundred sixty-five (365)-day period, based on at least thirty (30) years of records from the National Climatic Data Center;*

*9. Operating location. All contiguous lands owned, operated or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common or noncontiguous lands if they use a common area for the disposal of wastes. State and county roads are not considered property boundaries for the purposes of this rule;*

10. *Process wastes. The waste, waste-water, sludges, biosolids and residuals originating from sanitary conveniences, or generated during manufacturing or processing, or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product and includes discharges from land application fields that occur as a result of the land application process;*

11. *Septage. Septage is domestic wastewater sewage sludge that is removed from septic tanks or similar treatment works, including domestic wastewater treatment works serving up to one hundred fifty (150) persons;*

12. *Site-specific permit. An operating permit that is developed with limitations based on a case-by-case review of site-specific conditions;*

13. *Sludge. The solid, semisolid or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks; and*

14. *Twenty-five (25)-year, twenty-four (24)-hour rainfall. The wettest precipitation event for a twenty-four (24)-hour period with a probable recurrence interval of once in twenty-five (25) years based on at least thirty (30) years of records from the National Climatic Data Center.]*

**2. Land application of wastewater or treatment residual materials. A treatment methodology that uses soils, vegetation, or agricultural commodities to manage and remove pollutants, including nutrients, from wastewater or treatment residuals. This rule does not apply to the underground injection of wastewater or wastewater treatment residuals as regulated under the federal Clean Water Act, 40 CFR Part 144.**

**A. Land application is only an appropriate treatment option when the land application activity supports agricultural practices or approved beneficial purposes.**

**B. Land application irrigates, spreads, places, knives-in, or otherwise puts or distributes any described, designated, monitored, and fully analyzed material that appropriately, through best management practices, removes pollutants from wastewater and other process wastes.**

**C. Land application must provide a benefit to the soils, vegetation, or a specific agricultural commodity without harmful impacts to public health and the environment;**

(2) General.

(A) All persons who operate, use, or maintain water contaminant sources, point sources, **or operating locations** *[facilities]* for storage, treatment **or** *[,]* land application *[, or disposal]* of process wastes which are operated so as not to discharge to waters of the state or will have infrequent discharges shall apply for permits unless exempted under section (3) of this rule. **The requirements in this rule also apply to no-discharge activities or areas, including land application, at discharging facilities.**

(B) Nothing shall prevent the department from taking action to assure that *[facilities]* **operations** do not discharge into waters of the state, including requiring permits for *[facilities]* **operations** normally exempted under this rule. Permits may **be** required where necessary to protect the environment, including the following:

1. To correct noncompliance;

2. To ensure when the department has determined that construction or operating practices are not adequate, that the facility will be operated in a no-discharge manner;

3. To require, by departmental determination from an on-site visit, that construction and operating permits are necessary for special operating controls or monitoring and reporting of site-

specific conditions such as groundwater effects, surface runoff, waste or wastewater characteristics, topography, geology, watershed factors or land application loading rates;

4. When an unauthorized discharge has occurred or has the potential to occur;
5. When a discharge results in violation of water quality standards under 10 CSR 20-7.031; or
6. Other relevant factors.

(3) Exemptions.

(A) *De minimis* Exemption. **For the purposes of this rule, a de minimis source is a wastewater or process waste source, or a facility for treatment or disposal of process wastes, that is determined by the department to pose a negligible potential impact on waters of the state, soils, crops, public health, or the environment, even in the event of the malfunction of wastewater treatment controls.** Persons may apply to the department for an exemption as a *de minimis* source for operations that will not discharge or will have a negligible **impact on waters of the state, soils, crops, public health, or the environment such as short duration, limited pollutant events.** *[environmental impact.]* The department shall make a **written** determination on a case-by-case basis, **and the department's denial or approval must itemize the relevant conditions, activities, and materials.** This determination shall consider the potential for releases to surface water and groundwater of contaminants in concentrations exceeding background water quality levels or limitations in the water quality standards rule under 10 CSR 20 Chapter 7. *[Testing of total and leachable concentrations of pollutants as compared to background levels in soils and/or waters of the state shall be submitted as determined necessary by the department.]* **Prior to approval, the department may require sampling and test methods, as determined appropriate for the proposed activity.**

(B) The following are exempt from no-discharge **and land application** permit requirements unless required under *[sub]section (2)(B)*:

1. Nonpoint sources;
2. Land application of composts and mulches in normal farming operations or horticulture operations provided that the compost does not contain more than five percent (5%) sewage sludge or industrial sludge **which may only come from onsite processes**;
3. Land application sites for beneficial use of water treatment plant residues removed during the treatment of drinking water supplies provided that aluminum or other potentially phytotoxic compounds are not present in the *[residues]* **residuals** in concentrations which would result in *[chronic]* toxicity to plants or animals **or have harmful impacts on waters of the state, human health, or the environment. The land application of water treatment plant residuals removed during the treatment of drinking water supplies not permitted under the Missouri Clean Water Law must submit sampling data prior to the material(s) being initially land applied and thereafter as determined by the department.** This exemption does not apply to treatment or storage facilities;
4. *[Nondischarging facility]* **No-discharge facilities** for the handling, use or disposal of solid wastes that holds a valid permit issued under the Missouri Solid Waste Management Law and regulations in accordance with 10 CSR 80 or the Missouri Hazardous Waste Management Law and regulations in accordance with 10 CSR 25;
5. **Manure land application** *[Animal feeding operations]*. **Liquid manure from a concentrated animal feeding operation (CAFO) surface-applied on land application fields not under the operational control of the CAFO is exempt from permitting, but subject to the setback requirements in section 640.760 RSMo, where applicable.** Requirements for *[animal*

*feeding operations*] CAFOs are contained in 10 CSR 20-6.300; **land application of manure from AFOs not designated as CAFOs is exempt from permitting;**

6. *[Nondischarging facilities for domestic]* **No-discharge treatment works treating domestic sewage with** wastewater flows of three thousand gallons per day (3,000 gpd) or less;

7. Composting sites of less than two (2) acres when sludges are less than five percent (5%) of the compost mix and from which no storm water is discharged except during a chronic or catastrophic storm event. Other storm water discharges are regulated under 10 CSR 20-6.200;

8. Products containing or derived from sludges, biosolids or other process wastes when such products are licensed under the Missouri Fertilizer Law, sections 266.291 through 266.351, RSMo and regulations, **commercially sold, individually labelled** *[and the products]* do not exceed pollutant standards for protection of public health and/or the environment as established by the department, **and are applied at agronomic rates for agricultural purposes.** To receive **and maintain** this exemption, the manufacturer or distributor shall submit an initial report to the department on the pollutant content of the product, **practices for material sampling to ensure accuracy in labelling and packaging,** and shall file *[periodic monitoring]* **annual** reports as determined necessary by the department;

9. Single family residences;

10. Internal plumbing and piping or other water diversion or retention structures within a manufacturing or industrial plant or mine, which are an integral part of the industrial or manufacturing process or building or mining operation. This exemption does not include lagoon, ponds or earthen impoundments which receive any process wastes;

11. Small scale pilot projects or demonstration projects for beneficial use that do not exceed a period of one (1) year may be exempted by written project approval from the permitting authority. The department may extend the permit exemption for up to one (1) additional year after review of the first year's results. A permit application shall be submitted at least ninety (90) days prior to end of the demonstration period if the facility intends to continue operation, unless otherwise exempted under this rule or Chapter 6;

12. An operating permit is not required for **non-discharging process and non-process** *[waste]* **wastewater or residual** holding structure(s) from which *[the]* **all** contents are hauled to a *[permitted]* treatment or disposal facility **with a valid Missouri State Operating Permit issued under the authority of the Missouri Clean Water Law and regulations or Missouri Solid Waste Management Law and regulations. The holding structure(s) must be designed to 10 CSR 20-8 applicable design standards.***[, if the owner has]* **The originator must have a written contract with the hauler** *[and approval from the receiving facility];*

13. Contract haulers are not required to have a permit under this rule if all waste is hauled to a *[permitted]* facility **permitted under a Missouri State Operating Permit or Missouri Solid Waste Management Law and regulations;**

14. Other exemptions as may be prescribed in a general permit issued by the department in accordance with 10 CSR 20 Chapter 6, **as long as that general permit would be applicable to the activity specified in the permit;**

15. The placement of uncontaminated soil, rock, sand, gravel, concrete, cinder blocks, bricks, recycled asphaltic pavement, and minimal amounts of wood and metal which are removed by demolition or construction activities and used as fill for construction projects; provided that placement of such material does not violate water quality standards as stated in 10 CSR 20-7.031. Storm water discharges may be regulated under 10 CSR 20-6.200; *[and]*

16. The placement of material, other than those listed in paragraph (3)(B)15., which are exempt as clean fill or beneficial use under the Missouri Solid Waste Management Law and regulations, provided the material is not placed in contact with surface or subsurface waters of the state. Storm water discharges may be regulated under 10 CSR 20-6.200[.]; and

**17. Satellite collection systems that are properly operated and maintained so that all wastewater is entirely contained within the primary holding structures and emitted into a treatment works treating domestic sewage, without releases, leaks or spills into the environment or discharges into waters of the state. Satellite collection systems-**

**A. May include piping or conveyance systems that may be owned or maintained by a third party, and that collect wastewater prior to emission into the treatment works treating domestic sewage,**

**B. May include tanks, basins, pump stations, manholes or access ports that may be owned, operated or maintained by a third party, that collect, treat or hold wastewater prior to emission into the treatment works treating domestic sewage, and**

**C. Do not include collection systems, equipment, or conveyances under the operational control of the treatment works treating domestic sewage.**

*[(4) Permits.*

*(A) Permit Conditions.*

*1. The department shall develop permit conditions containing limitations, monitoring, reporting, and other requirements to protect soils, crops, surface waters, groundwater, public health, and the environment.*

*2. The department may establish standard permit conditions and best management practices for land application facilities by following the public participation procedures under 10 CSR 20-6.020.*

*3. The department may establish a general permit for a category of similar facilities in accordance with 10 CSR 20-6.010(13).*

*4. Noncontiguous land application sites may be included in the operating permit for a process waste generator or contract hauler as determined appropriate by the department.*

*5. Whenever feasible or appropriate, all operating permit requirements under 10 CSR 20 Chapter 6 rules shall be incorporated into a single operating permit for each operating location.*

*6. Applications for permits shall include an engineer's seal affixed to all engineering plans and engineering certifications.]*

**(4) Operating Permits. This rule does not apply to concentrated animal feeding operations (CAFOs) subject to 10 CSR 20-6.300 or stormwater discharges subject to 10 CSR 20-6.200. The requirements in this rule apply to no-discharge facilities and activities and to land application sites, including those at discharging facilities.**

**(A) Operating Permit Applications. This subsection describes the application process and minimum application requirements for no-discharge operations and land application sites. Additional application requirements may be applicable to a facility if additional operations are occurring.**

**1. The application shall include at a minimum the following documentation:**

**A. Narrative Operational Summary. This shall describe the no-discharge operations, types and sources of materials to be managed or land-applied, storage plans, design capacity, and operational capacity;**

**B. Adequate storage for management or land application of wastewater, sludge, wastewater treatment residuals, and process waste for the intended design flows and capacity;**

**C. A recent aerial or topographic map showing the location of any intended storage structure(s), composting area(s), and land application fields, including setbacks established in for:**

**(I). Treatment works treating domestic sewage, in 10 CSR 20-8.200; or**

**(II). Non-domestic wastewater and residuals, the Missouri Industrial Nutrient Management Technical Standard for Industrial Wastewater and Wastewater Treatment Residuals (INMTS). The INMTS required by this rule is incorporated by reference herein as published by the Department of Natural Resources, Division of Environmental Quality, Water Protection Program, P.O. Box 176, Jefferson City, MO 65102-0176 on DATE and does not include any later amendments or additions. The INMTS is available on the department's website,**

**D. Applications for land application from treatment works treating domestic sewage must ensure land application will meet the design and operational requirements in 10 CSR 20- 8.200; biosolids must be land applied in accordance with permit conditions;**

**E. Land Application Management Plan (LAMP) for all fields to be used for land application of industrial wastewater, industrial wastewater treatment residuals, or process waste, excluding manure, CAFO operations, and treatment works treating domestic sewage. The LAMP must comply with the requirements established in the INMTS, unless otherwise approved by the department, typically for facilities land applying wastewater that does not contain nutrients or significant concentrations of other pollutants (e.g. treated water for irrigation or non-metallic sediment from a quarry settling basin). This subparagraph does not apply to biosolids that are regulated under 40 CFR 503. Privately owned operating locations managing a combination of domestic wastewater or sludges and non-domestic wastewater or sludges may be subject to this requirement at the department's discretion. Unless otherwise determined by the department, the LAMP shall include at a minimum:**

**(I). Site-specific conservation practices or operational management practices to be implemented to prevent runoff into waters of the state;**

**(II). Identify field locations and field management plans used to establish land application rates for pollutant removal;**

**(III). Establish protocols to land apply wastewater, wastewater treatment residuals, and other wastes in accordance with site specific nutrient management practices to ensure appropriate management and removal of nutrients in the applied material; and**

**(IV). Identify specific records that will be maintained to document implementation and management of the minimum elements described within this subparagraph.**

**F. Applications must be submitted on forms established by the department and must include information on potential pollutants in the wastewater or wastewater treatment residuals to be land applied.**

**(B) Minimum Operating Permit Conditions**

**1. There shall be no discharge or direct runoff of wastewater, wastewater treatment residuals, or other domestic or industrial wastes from the field as a result of the land application of these materials, excluding agricultural stormwater discharges.**

**2. The permits shall include conditions containing limitations, monitoring, reporting, and other requirements to protect soils, crops, surface waters, groundwater, public health, and the environment. These conditions include, but are not limited to:**

**A. Sampling requirements, including parameters, frequency, and numeric limitations if warranted;**

**B. Land application minimum best management practices to appropriately conduct land application and prevent runoff;**

**C. Application must cease immediately if plant stress or phytotoxicity attributable to the application is observed;**

**D. Application is not allowed on frozen, snow-covered, or saturated soils;**

**E. Ponding of applied liquids is prohibited, except for agricultural purposes where hydrophytic vegetation or crops are being established (such as rice);**

**F. Land application is an approved wastewater treatment method for pollutants, like nutrients, that can be effectively removed through soils, plants, and agronomic practices;**

**G. Land application is not allowed for the purposes of disposal, for the application of hazardous wastes, or for hazardous substances in amounts known to or having the potential to cause phytotoxicity or negative health or environmental impacts, or any other material deemed unsuitable by the department;**

**H. Application must be monitored for impacts to hydrogeologically sensitive features, as determined by the Missouri Geological Survey, which could be negatively affected by the application; and**

**I. Incorporation of the INMTS.**

**3. A field permitted for the land application of industrial wastewater or wastewater treatment residuals shall only be incorporated into one (1) Missouri State Operating Permit.**

**(5) Land application of non-domestic wastewater, excluding concentrated animal feeding operations (CAFOs), must be conducted in accordance with the INMTS or an approved LAMP. Land application shall also be conducted in accordance with the following:**

**(A) Land application rates based on hydraulic, pollutant, and nutrient loading rates;**

**(B) Specific numeric pollutant limits for select parameters;**

**(C) A minimum of annual soil sampling for nutrients and appropriate parameters, as determined by the department, frequency may be increased based on material variability in accordance with the INMTS;**

**(D) Appropriate publications from the University of Missouri Agricultural Extension center or other pre-approved related publications, to determine crop uptake and land application rates,**

**(E) Setbacks, minimum distances from identified features; and**

**(F) Established permit conditions protective of crops, soil, waters of the state, human health and the environment.**

**(6) Specific requirements for commingled, offsite industrial wastewater or wastewater treatment residuals stored in open storage basins or open storage vessels. Volume is calculated by adding all of the open structure(s) occurring on one (1) operating location. In addition to section (4) above, these storage systems must, at a minimum:**

**(A) Meet the following buffer (setback) distances between the open structure(s) and any public building or occupied residence, other than a residence owned by the permittee, or from which a written waiver agreement is provided:**

**1. For structure(s) totaling a capacity of more than two and one half million gallons but less than or equal to five million gallons, one thousand feet;**

**2. For structure(s) totaling a capacity of more than five million gallons but less than or equal to ten million gallons, two thousand feet; or**

**3. For structure(s) totaling a capacity of more than ten million gallons, three thousand five hundred feet; or**

**4. Written waiver agreements shall be recorded with the county recorder and filed in the chain of title for the property of the landowner agreeing to the shorter buffer distance.**

**(B) Sampling must be conducted at least annually, with increased frequency based on material variability in accordance with the INMTS for:**

**1. Metals, including arsenic, aluminum, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and thallium,**

**2. Pathogens, including *E. coli*, fecal coliform, and salmonella,**

**3. PFOA, PFOS, Perfluorononanoic acid (PFNA), Perfluorohexane sulfonic acid (PFHxS), and other pollutants as determined by the department.**

**(C) For systems equal to or greater than two and one-half million gallons storage capacity, groundwater monitoring wells shall be required when, in the determination of the division of Missouri Geological Survey, the storage structures are located in hydrologically sensitive areas or where the groundwater may be compromised.**

**(7) Groundwater Monitoring and Reporting Requirements for operations subject to Subsection (6)(C) and any other operation necessitating groundwater monitoring requirements as part of an assessment of a discharge to groundwater:**

**(A) Definitions for this section are found in 10 CSR 20-2 and 10 CSR 80-2. If conflicting definitions occur, the more stringent definition shall prevail.**

**(B) The permittee shall submit, unless exempted by the department, two reports, approved by the department, which may be furnished concurrently, along with any additional reports the department deems necessary:**

**1. A site characterization report (SCR) signed and sealed by a geologist registered in Missouri; and**

**2. A groundwater monitoring sampling and analysis plan (GMSAP).**

**3. If the monitoring well network has already been installed, the department will coordinate with the permittee to determine if any additional wells are needed or may require additional reports to determine effectiveness of the monitoring well network.**

**(C) At a minimum, the following characteristics will be described in the SCR:**

**1. Geologic materials;**

**2. Description of soil and bedrock to a depth adequate to allow evaluation of water quality protection provided by the soil and bedrock;**

**3. Groundwater elevation;**

**4. Proposed separation between the lowest point of the lowest structure and the maximum water table elevation;**

**5. Proximity of the structure(s) to water supply wells or surface water;**

**6. Rate and direction of groundwater flow; and**



**7. Current and projected use of water resources in the potential zone of influence of the structure(s).**

**(D) Groundwater monitoring wells shall be installed so that the number, spacing, and depths of the wells, determined based upon site-specific technical information, shall include a thorough characterization of:**

**1. Aquifer thickness, groundwater flow rate, groundwater flow direction, including seasonal and temporal fluctuations in groundwater flow; and**

**2. Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to: thicknesses, stratigraphy, lithology, hydraulic conductivities, and porosities. If the lower confining unit is one hundred feet (100') or more below the top of the uppermost aquifer, borings verifying the lower confining layer will not be required. The upper fifty feet (50') of the uppermost aquifer will be characterized.**

**(E) Groundwater monitoring wells shall be capable of yielding groundwater samples for analysis, effectively monitoring of the site, and consist of at least: one (1) well installed hydraulically upgradient, that is, in the direction of increasing static head from the structure(s); and at least three (3) wells installed hydraulically downgradient, that is, in the direction of decreasing hydraulic head from the structure(s). The quantity of wells, locations, and depths shall be sufficient to yield groundwater samples that are:**

**1. Representative of background water quality in the groundwater near the structure(s); and**

**2. Capable of detecting any significant amounts of fluids generated by the structure(s) that migrate from the structure(s) to the groundwater; and**

**3. Monitoring wells, or clusters of monitoring wells, shall be capable at a minimum, of monitoring all saturated zones down to and including the uppermost aquifer; and**

**4. The maximum distance a monitoring well may be located from the structure(s) is one hundred fifty meters (150 m) or four hundred ninety-two feet (492').**

**(F) The design and installation of groundwater monitoring well systems shall be observed, supervised, and certified by a qualified groundwater scientist; and the monitoring well system shall be approved by the department prior to installation. Additional wells may be required by the department at any time if the existing network is insufficient.**

**(G) The permittee shall determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells shall be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow direction.**

**(H) Sampling and Reporting.**

**1. Each groundwater monitoring event must include consistent sampling and analysis procedures that are designed to ensure monitoring results provide an accurate representation of groundwater quality at the monitoring wells. The monitoring frequency will be determined by the department based on the site-specific factors; in no case less than annually.**

**2. The permittee shall submit the GMSAP to the department for approval. The GMSAP shall include procedures and techniques for each monitoring event, including:**

**A. Monitoring well maintenance, if performed;**

**B. Monitoring well redevelopment, if performed;**

**C. Monitoring well depth measurement and hydraulic levels;**

**D. Monitoring well purging and sampling utilizing dedicated equipment, or the appropriate decontamination procedures;**

**E. Equipment calibration;**

**F. Decontamination and field blanks;**

**G. Sample and duplicate sample collection;**

**H. Sample preservation;**

**I. Sample labeling;**

**J. Sample handling;**

**K. Field measurements;**

**L. Field documentation;**

**M. Chain of custody control;**

**N. Sample shipment;**

**O. Analytical procedures;**

**P. QA/QC control—field, samples, and laboratory.**

**3. The GMSAP shall include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure monitored constituents in groundwater samples, as required by the department. The plan shall include the anticipated parameters of concern for the specific facility. Analysis shall be performed on unfiltered samples (except for those occurring in the dissolved fraction, e.g. hexavalent chromium) for all constituents listed in the GMSAP.**

**4. Once approved, the GMSAP shall be followed by the permittee and any deviation from the GMSAP requirements shall be noted and submitted to the department with the monitoring results.**

**5. Reports shall be furnished to the department at intervals necessary to determine compliance with Missouri's Groundwater Water Quality Standards; in no case less than annually.**

*[(5)]* **(8) Closure of Waste Storage Structures.**

(A) No-discharge facilities that cease operation, or plan to close lagoons and other waste storage structures, shall comply with 10 CSR 20-6.010(12) as well as the following requirements:

1. Facilities that are exempted from permits under this rule and that cease operation shall either close the waste storage structures in accordance with subsection (5)(B) of this rule or continue to maintain all storage structures so that there is not a discharge to waters of the state.

(B) Closure Requirements. Lagoons and waste storage structures shall be closed by removal and land application of all wastewater and sludges, or in accordance with an alternate closure plan approved by the department. The removed wastewater and sludges shall be land applied **in accordance with the INMTS, department approved LAMP, or department approved closure plan** *[at normal agricultural rates for nitrogen fertilizer not to exceed the maximum nitrogen utilization of the vegetation grown and shall be applied at controlled rates so that there will be no discharge to waters of the state]*. After removal and proper land application of wastewater and sludge, the earthen basins may be—

1. Demolished by removing the berms, grading, and revegetation of the site so as to provide erosion control; or

2. Left in place for future use as a farm pond or similar uses or reserved for future use as a waste storage structure. To prevent damage to the bottom seal due to drying and weed growth,

earthen basins shall be refilled with fresh water as soon as possible, and water depths of three feet (3') or more should be maintained.

*AUTHORITY: section 644.026, RSMo 2016. \* Original rule filed July 15, 1991, effective Jan. 13, 1992. Amended: Filed June 1, 1995, effective Jan. 30, 1996. Amended: Filed Nov. 3, 1997, effective July 30, 1998. Amended: Filed June 13, 2018, effective Feb. 28, 2019. Section 644.040 Amended: **DATE** section 644.051*

*\*Original authority: 644.026, RSMo 1972, amended 1973, 1987, 1993, 1995, 2000, 2012, 2014.*