

DRAFT

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMIT TO SUPPLY RECLAIMED WATER**

**PERMIT NUMBER: RW25-002
ID NUMBER: S10829**

In compliance with the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, Title 27A OS § 2-6-201 *et seq.*, as amended, and the rules of the Oklahoma Department of Environmental Quality (DEQ) promulgated thereunder (see the Oklahoma Administrative Code (OAC) 252:627 and 252:656)

Town of Rush Springs (owner)
and Rush Springs Municipal Improvement Authority (operator)
P.O. Box 708
Rush Springs, OK 73082

is hereby authorized to supply treated municipal wastewater, also known as reclaimed water, from the Rush Springs Wastewater Treatment Plant (TRL-5) located at approximately

Latitude: 34° 45' 23.820" N [GPS: NAD83]
Longitude: 97° 57' 06.087" W [GPS: NAD83]

for reuse within the boundaries of the permitted irrigation site located at approximately

NE¼ of Sections 5, Township 3 North, Range 7 West,
Indian Meridian, Grady County, Oklahoma

in accordance with the limitations, monitoring requirements, and other conditions set forth in Parts I and II hereof.

The reclaimed water shall be used solely for the purpose of irrigation of pastureland at the permitted site, in accordance with applicable DEQ regulations.

This is a new permit.

The issuance date of this permit is Month Date, Year.

This permit shall become effective Month Date, Year.

This permit and the authorization to supply treated wastewater shall expire at midnight Month Date, Year.

For the Oklahoma Department of Environmental Quality:

Michael B. Moe, P.E., Manager
Municipal Discharge and Stormwater Permits Section
Water Quality Division

Shellie R. Chard, Director
Water Quality Division

PART I. LIMITATIONS, MONITORING, AND REPORTING REQUIREMENTS

A. LIMITATIONS AND MONITORING REQUIREMENTS FOR CATEGORY 5 RECLAIMED WATER

1. Authorized Land Application Site

Site ID	Legal Description	Method of Irrigation	Approximate Total Area (Acres)	Approximate Irrigated Area (Acres)
R01	NE¼ of Sections 5, Township 3 North, Range 7 West, Indian Meridian, Grady County, Oklahoma	Center Pivot	99	60

2. Limitations and Monitoring Requirements

The permittees are authorized to supply Category 5 reclaimed water (municipal wastewater after primary treatment in a total retention lagoon system) (TRL-5) in accordance with OAC 252:627 and OAC 252:656. The Category 5 reclaimed water shall be supplied from storage cell #3 of the Rush Springs WWTP (TRL-5) for irrigation of pastureland in accordance with OAC 252:656, OAC 252:627, and the following limitations and monitoring requirements:

Site ID	Parameter	Monitoring Requirements	Monitoring Frequency	Sample Type	Monitoring Location
R01 ^a	Flow (gpd)	Record ^b	Daily	Totalized ^c	Pump Station/Point of Delivery ^d

^a Site owned by the Town of Rush Springs and operated by the Rush Springs Municipal Improvement Authority.

^b When there is no supply of reclaimed water for the entire day, report “0” in the Water Reuse Monthly Operating Report (MOR), and write “No Supply” in the comments column.

^c Flow measurement for each land application site shall be accomplished by flow meters, or the calibration of pumps and installation of run-time meters. When no pumps are used, as with gravity flow lines, flow shall be calculated using the on and off times.

^d Pump station/Point of Delivery located northwest of cell #3 of Rush Springs TRL, latitude: 34° 45' 23.820" N, longitude: 97° 57' 06.087" W (GPS: NAD 1983).

3. Prevention of Unauthorized Access to Irrigation Site

OAC 252:627-3-4(a) and OAC 252:656-25-2(k), for operation and maintenance of Category 5 reclaimed water systems, requires prevention of unauthorized access to the reuse site. This requirement can be met by completely fencing the reuse site(s). Fences and locked gates are currently installed at both the WWTP (TRL-5) and irrigation Site R01.

4. Signage Requirements

The permittees shall comply with the following requirements:

- a. In accordance with OAC 252:656-27-4(a)(3), all reclaimed water piping located outside the fenced land application area shall be identified with **above-ground signs** containing the language “CAUTION: RECLAIMED WATER - DO NOT DRINK” together with the international “Do Not Drink” symbol:

- (1) every 300 feet;
- (2) at every change in direction;
- (3) in the road easement on both sides of the road at every road crossing; and
- (4) at every outlet.

All appurtenance and piping are located inside the fenced/locked gate wastewater treatment plant and the land application site. Therefore, no additional permit action is needed.

- b. In accordance with OAC 252:627-3-4(a)(2), signs which describe the nature of the water reuse site and advise against trespassing shall be posted on the perimeter of each permitted water reuse site.

Signs which advise against trespassing are not currently posted/available on the perimeter of irrigation Site R01. Due to the remote location and limited public access, the permittees are required to post two signs, as described in Item b. above, on each of the west, the north, and the east sides of irrigation Site R01.

B. RESTRICTIONS

1. In accordance with OAC 252:627-3-4(b), irrigation with Category 5 reclaimed water is prohibited:
 - a. from a lagoon cell that receives raw sewage;
 - b. from any lagoon cell other than the one specified in the permit;
 - c. on any food crop that may be consumed raw;
 - d. on grain crops such as corn, wheat and oats, less than thirty days before harvest;
 - e. at rates that allow a discharge from the permitted water reuse site;
 - f. within 100 feet of the permitted boundary of the site;
 - g. at a rate that exceeds the nitrogen and phosphorus rates for the crop grown at the site;
 - h. at a rate that results in phytotoxicity;
 - i. when the reclaimed water has a dissolved oxygen concentration of less than 2.0 mg/L;
 - j. during periods of precipitation or while the soil is saturated or frozen;
 - k. on land having a slope greater than five percent (%); and
 - l. where there are berms or other barriers on a water reuse site that would cause the pooling or ponding of reclaimed water at the water reuse site, nor shall any berms or barriers impede the natural flow of stormwater from the site.
2. In accordance with OAC 252:656-27-2(b), systems shall be designed to ensure that direct and wind-blown spray from irrigation systems and other sources are confined to the designated irrigation areas. Irrigation systems shall also be designed to comply with the following minimum buffer zones and setback distances, with all distances being measured from the edge of the wetted perimeter of the irrigation area to the edge of the following features:
 - a. 300 feet from public wells;
 - b. 50 feet from private water wells;
 - c. 50 feet from creeks, lakes, ponds, and other water of the state;
 - d. 100 feet from adjacent property lines.
3. The permittees must obtain a permit to construct and a permit to supply reclaimed water from DEQ before supplying reclaimed water to any user(s) or sites not authorized in this permit. The permittees must provide information to DEQ on the intended use of the reclaimed water by the new user(s), and if applicable, information on specific land application site(s) demonstrating that the requirements of OAC 252:627-3-4 for Category 5 reclaimed water are met.

C. RECORDKEEPING OF MONITORING RESULTS, OPERATION, AND MAINTENANCE

1. Monthly Operating Reports

The permittees shall complete DEQ Form 627-001 – Water Reuse Monthly Operating Report (MOR), as well as all records, including all maintenance records, for the irrigation site and retain the MORs for at least three years and make them available for review by DEQ upon request.

The permittees shall complete DEQ Form 619-001 “Total Retention Lagoon Monthly Operation Report” (“MOR”). The permittees shall retain MORs for three years and make them available for review by DEQ upon request

2. Record Keeping Requirements for Commercial Fertilizer

In compliance with OAC 252:627-3-4(b)(7), the permittees are required to keep record of the commercial fertilizer applied at each site for the life of the permit in the following format. These records shall be made available to DEQ on request.

Site Name: _____

Date	Acreage Fertilized	Composition of Fertilizer (Nitrogen, Phosphorus, Potassium)	Quantity of Fertilizer Applied (lbs)

D. RE-OPENER CLAUSE

This permit may be reopened for modification and/or reissuance to require additional or more frequent monitoring, additional or more stringent limits, additional operational controls, or additional reporting and recordkeeping requirements where actual or potential threats to public health or the environment are determined to be the result of the permittee’s operation of the water reuse system or where the water reuse system is not being properly operated and maintained in accordance with OCA 252:627. Modification and/or reissuance of the permit shall follow regulations listed at OAC 252:004

E. SCHEDULE OF COMPLIANCE FOR SIGNAGE

The permittees shall achieve compliance with signage requirements in accordance with the following schedule:

	Task	Due Date
1.	Post two signs which describe the nature of and advise against trespassing on each of the west, the north, and the east side of irrigation Site R01.	Six months from the effective date of the permit.
2.	Send notice of completion of Tasks 1 to the Duncan DEQ office with a copy to the ECLS Total Retention Lagoon Section of DEQ.	Seven months from the effective date of the permit

PART II. OTHER PERMIT REQUIREMENTS

A. The following general provisions for supply of treated municipal wastewater (reclaimed water) must be met in accordance with OAC 252:656-27-2:

1. **Prohibition against cross connections.** Neither the supplier nor the user shall allow physical connections between the reclaimed water lines and the public water supply lines. The supplier and the user shall follow the requirements of OAC 252:626-5-15 and OAC 252:656-9-2.
2. **Flow measuring devices.** Supplier shall provide flow measuring devices to measure the amount of reclaimed water being distributed to each user. Flow measurement devices shall have recording, totalizing and instantaneous indicating capabilities.

B. DISTRIBUTION SYSTEMS

The distribution system for reclaimed water shall be operated and maintained in accordance with the following requirements:

1. **Piping.** All reclaimed water piping, valves, outlets and appurtenances in distribution systems shall be colored **purple** (Pantone 522) and shall be embossed or integrally stamped with a warning that includes the following:

“CAUTION: RECLAIMED WATER – DO NOT DRINK”

For all pipes, the warning shall be located on opposite sides of all pipes and repeated every three feet or less.

2. **Reclaimed water flushing system.** Reclaimed water distribution system shall be designed with all appurtenances necessary to adequately flush the distribution system to prevent slime growth and the regrowth of pathogens. Flushing plan shall be maintained and followed for all reclaimed water distribution systems. The flushing system shall include provisions for disposal of flushed reclaimed water that prevent bypasses and discharges to waters of the state or elsewhere.
3. **Maintenance.** The permittee(s) shall maintain the structural integrity of all parts of the reclaimed water distribution system and maintain it in good working order.
4. **Pump stations.** The permittee(s) shall ensure that pump stations are properly maintained and operated by doing the followings:
 - a. Securing pump station(s) to prevent unauthorized access.
 - b. Maintaining pump(s) in working condition.
 - c. Keeping screen(s) free of debris to prevent clogging.
 - d. Maintaining the required alarms in working order.
 - e. Maintaining the required back-up generators and/or portable engine driven pumps in working order.
 - f. Maintaining a complete set of operational instructions, emergency procedures and maintenance schedules.