

DRAFT

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMIT TO SUPPLY RECLAIMED WATER

PERMIT NUMBER: RW21-011

ID NUMBER: S10404

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 Cheyenne
P.O. Box 10
Cheyenne, OK 73628

is hereby authorized to supply treated municipal wastewater, also known as reclaimed water, for land application, from a wastewater treatment facility located at approximately

Latitude: 35° 37' 12.043" N [GPS: NAD 1983 CONUS]
Longitude: 99° 39' 41.828" W [GPS: NAD 1983 CONUS]

for reuse within the boundaries of the permitted land application site located at approximately

Part of NE¼, Section 8,
Township 13 North, Range 23 West, Indian Meridian
Roger Mills County, Oklahoma

The reclaimed water shall be used solely for the purpose of irrigation at the permitted land application 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 reclaimed water shall expire at midnight Month Date, Year.

For the Oklahoma Department of Environmental Quality:

Michael B. Moe, P.E., Manager
Municipal Discharge and Stormwater Permit 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 for Category 5 Reclaimed Water

Site ID	Legal Description	Method of Irrigation	Approximate Total Area (Acres)	Approximate Irrigated Area (Acres)
R01	Part of Section 8, Township 13 North, Range 23 West, Indian Meridian, Roger Mills County, Oklahoma	Pivot	60	49

2. Limitations and Monitoring Requirements for Category 5 Reclaimed Water ^{a, b}

Beginning the effective date of the permit through the expiration date of the permit, the permittee is authorized to supply reclaimed for pasture land irrigation in accordance with OAC 252:656 and OAC 252:627 and the following limitations and monitoring requirements:

Site ID	Parameter	Daily Loading Rate (gallons)	Monitoring Requirements	Monitoring Frequency	Monitoring Location
R01	Flow (mgd)	74,200	Record	Daily ^c	Pump Station

^a Monthly Operating Reports (MORs), DEQ Form 627-001, must be completed and maintained by the supplier for the land application site. In accordance with OAC 252:627-5-1(d), the supplier of reclaimed water shall maintain MORs on-site for three years and make them available to the DEQ upon request.

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

^c In accordance with OAC 252:656-25-2(h), 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.

3. Record Keeping Requirements for Commercial Fertilizer

In compliance with OAC 252:627-3-4(b)(7), the permittee is 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 the DEQ on request.

Site Name: _____

Date	Acreage Fertilized	Composition of Fertilizer (Nitrogen, Phosphorous, Potassium)	Quantity of Fertilizer Applied
------	--------------------	--	--------------------------------

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 cell other than the final treatment (secondary/storage) cell;
 - c. on any food crop that may be consumed raw;
 - d. on grain crops such as corn, wheat and oats, less than 30 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 (5%); 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. Category 5 reclaimed water 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 Town of Cheyenne 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 Town of Cheyenne will 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. PREVENTION OF UNAUTHORIZED ACCESS TO LAND APPLICATION SITES

1. Fencing Requirements

The permittee shall ensure that the permitted land application site is completely fenced at all times in accordance with OAC 252:627-3-4(a).

2. Signage Requirements (See Compliance Schedule below)

a. Signage Requirement Around Land Application Site

The following signage requirement is specifically established in the permit:

Site	Signage Requirements
R01	At least four signs on the west side, and at least two signs on the south side

b. Signage Requirements For Land Application Equipment

In accordance with OAC 252:656-27-4(a), all valves, outlets and appurtenances in the distribution system of reclaimed water shall have a sign “CAUTION: CATEGORY 5 RECLAIMED WATER – DO NOT DRINK.”

D. SCHEDULE OF COMPLIANCE FOR SIGNAGE REQUIREMENTS

The permittee shall achieve compliance with the following schedule for signage requirements:

	Task	Due Date
1.	All valves, outlets, and appurtenances in the distribution system shall have a sign “CAUTION: RECLAIMED WATER - DO NOT DRINK.”	Six months from the effective date of the permit
2.	Signs which describe the nature of the land application site and advise against trespassing, required in Item C.2.a above, shall be posted on the west and south sides of the land application site.	Six months from the effective date of the permit
3.	Send notice of completion of Tasks 1 and 2 to the local DEQ office.	Seven months from the effective date of the permit

E. RECORDKEEPING OF MONITORING RESULTS

In accordance with OAC 252:627-5-1(b), (d), and (e), the supplier shall complete DEQ Form 627-001 – Water Reuse Monthly Operating Report for each land application site and maintain the MORs on-site for at least three years and make them available for review by DEQ upon request.

PART II. OTHER PERMIT REQUIREMENTS

A. The following general provisions for supply of 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. Flushing

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 system. 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 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 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.