

DRAFT

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

**PERMIT NUMBER: RW24-010
ID NUMBER: S20507**

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),

City of Hooker
P.O. Box 67
Hooker, OK 73945

is hereby authorized to supply and reuse treated municipal wastewater, also known as reclaimed water, for land application, from the Hooker Wastewater Treatment Plant located at approximately

SW¼, NW¼, Section 2
Township 4 North, Range 17 East, C.M.
Texas County, Oklahoma

and within the boundaries of the permitted land application site located at approximately

N½, NW¼, Section 2
Township 4 North, Range 17 East, C.M.
Texas 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 at the permitted land application sites, 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 Sites for Category 5 Reclaimed Water**

Beginning the effective date and lasting through the expiration date of the permit, the City of Hooker is authorized to supply treated wastewater as Category 5 reclaimed water for land application at the following site:

Site ID	Legal Description	Method of Irrigation	Total Area (Acres)	Irrigated Area (Acres)	Approximate Reuse Site's Point of Entry	
					Latitude ^a	Longitude ^a
R01	N½, NW¼, Section 2, T4N, R17E, C.M., Texas County, Oklahoma	Center Pivot	70.0	44.8	36° 50' 42.950" N	101° 12' 03.762" W

^a North American Datum of 1983.

2. Limitations and Monitoring Requirements for Category 5 Reclaimed Water Reuse

The permittee is authorized to supply Category 5 reclaimed water (municipal wastewater after primary treatment in a lagoon system) in accordance with OAC 252:627 and OAC 252:656. The Category 5 reclaimed water shall be supplied from cell #3 of Hooker Wastewater Treatment Plant and land applied 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 and operated by the City of Hooker.

^b When there is no supply of reclaimed water for the entire day, report "0" in the Water Reuse Monthly Operating Report, 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 the Hooker Wastewater Treatment Plant, latitude: 36° 50' 32.254" N, longitude: 101° 12' 15.954" W (GPS: NAD 1983).

3. Prevention of Unauthorized Access to Land Application 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 sites. This requirement can be met by completely fencing the reuse site(s). Fence and locked gate are not currently installed at the land application site. The permittee is in the process of installing fences on all sides of the land application site.

4. Signage Requirements

The permittee shall comply with the following requirements:

City of Hooker – Hooker Wastewater Treatment Plant (TRL-5)

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

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

The permittee shall complete DEQ Form 619-001 “Total Retention Lagoon Monthly Operation Report” (“MOR”). The permittee 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 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 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 permittee shall achieve compliance with the following schedule for signage:

	Task	Due Date
1.	In accordance with OAC 252:627-3-4(a)(2), the required fences to prevent public access shall be installed on all sides of the land application site.	24 months from the effective date of the permit
2.	In accordance with OAC 252:656-27-4(a), the required signs which describe the nature of the facility (“CAUTION: RECLAIMED WATER – DO NOT DRINK” with the universal “Do Not Drink” symbol) and advise against trespassing shall be posted as follows: two signs on each of the west and east side; and three signs on each of the north and south side of the land application site.	24 months from the effective date of the permit
3.	Send notice of completion of Tasks 1 and 2 to the Guymon DEQ office with copy to the ECLS Total Retention Lagoon Section of DEQ.	25 months from the effective date of the permit

PART II. OTHER PERMIT REQUIREMENTS

A. GENERAL PROVISIONS

The following general provisions for supply of reclaimed water (treated wastewater) 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 (treated wastewater) 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 treated 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 (treated wastewater) 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 (3') 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 treated wastewater distribution systems. The flushing system shall include provisions for disposal of flushed treated wastewater 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 treated wastewater 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.