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OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT TO SUPPLY RECLAIMED WATER

PERMIT NUMBER: RW20-001 ID NUMBER: S30822

In compliance with the Oklahoma Pollutant Discharge Elimination System Act (OPDES Act), Title 27A O.S. Supp., §1-3-101 *et seq.*, Oklahoma Uniform Environmental Permitting Act, Title 27A O.S §2-14-101 *et seq.*, and the rules of the State of Oklahoma Department of Environmental Quality (DEQ) promulgated thereunder,

Goldsby Public Works Authority Goldsby Wastewater Treatment Facility 100 E Center Road Goldsby, OK 73093

is hereby authorized to supply and reuse treated municipal wastewater, also known as reclaimed water, for land application at the facility located at approximately

Latitude: 35° 09' 47.88" N [GPS: NAD 1983 CONUS] Longitude: 97° 27' 48.24" W [GPS: NAD 1983 CONUS]

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

Parts of Sections 13 and 24 Township 8 North, Range 3 West, Indian Meridian (I.M.) McClain County, Oklahoma

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 Permit Section

Shellie R. Chard, Director

Water Quality Division

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

| Site ID | Legal Description | Method of Irrigation | Approximate Irrigated Area (Acres) |
|--|--|-------------------------|------------------------------------|
| R01 ^a (Airport) | Part of Sections 24 Township 8 North, Range 3 West, I.M., McClain County, Oklahoma | Traveling Gun | 48 |
| R02 ^a (Tarver) Part of Sections 13 Township 8 North, Range 3 West, I.M McClain, Oklahoma | | Fixed Sprinkler | 59 |

Water reuse user ID RW20-001 is assigned to both Site R01 and R02 because the "user" of both sites is the Goldsby PWA.

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

Beginning the effective date of the permit through the expiration date of the permit, the permittee is authorized to supply Category 5 reclaimed water from the final cell of the lagoon treatment system for pasture and cultivated land in accordance with OAC 252:656 and OAC 252:627 and the following limitations and monitoring requirements:

| Site ID | Parameter | Monitoring Requirements | Monitoring Frequency | Sample Type | Monitoring Location |
|---------|------------|----------------------------|-------------------------|-------------|---------------------|
| R01 | Flow (gpd) | Record | Daily ^c | Totalized | Force Main |
| R02 | Flow (gpd) | Record | Daily ^c | Totalized | Force Main |

Separate Monthly Operating Reports (MORs) shall be maintained for each site. In accordance with OAC 252:627-5-1(d), the supplier of reclaimed water shall maintain MORs on-site for three (3) years and make them available to the DEQ upon request.

In accordance with OAC 252:619-1-4(f) and OAC 252:627-5-1(b), (d), and (e), the supplier shall complete DEQ Forms 619-001 Total Retention Lagoon Monthly Operating Report (MOR) and 627-001 Water Reuse Monthly Operating Report (MOR) for each land application site, maintain the MORs on-site for at least three (3) years, and make them available for review by DEQ upon request.

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 DEO on 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.

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.

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

B. RESTRICTIONS

Site Name:

- 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 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 (30) days before harvest;
 - e. at rates that allow a discharge from the permitted water reuse site;
 - f. within one hundred feet (100') 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
 - 1. 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. three hundred feet (300') from public wells;
 - b. fifty feet (50') from private water wells;
 - c. fifty feet (50') from creeks, lakes, ponds, and other water of the state;
 - d. one hundred feet (100') from adjacent property lines.
- 3. Goldsby Public Works Authority Wastewater Treatment Facility 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. Goldsby Public Works Authority Wastewater Treatment Facility 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 all permitted land application sites are completely fenced at all times in accordance with OAC 252:627-3-4(a).

2. Signage Requirements

- a. 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: RECLAIMED WATER DO NOT DRINK."
- 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.

Since the permitted sites do not have the required signage, the draft permit will contain a compliance schedule to post the signs listed above.

D. SCHEDULE OF COMPLIANCE FOR CONSTRUCTION AND SIGNAGE

The permittee shall achieve compliance with the following schedule:

| | Task | Due Date |
|----|---|---|
| 1. | The facility shall complete the construction of the reclaimed water supply and distribution system for Site R01 and R02 in accordance with the approved construction permit No. STR000044190960. | Estimated end of construction March 31, 2022. |
| 2. | In accordance with OAC 252:656-27-4(a), all valves, outlets, and appurtenances in the distribution system shall have a sign "CAUTION: RECLAIMED WATER - DO NOT DRINK." | Two (2) months from the completion of construction in Task 1. |
| 3. | 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. | Two (2) months from the completion of construction in Task 1. |
| 4. | Send notice of completion of Tasks 1, 2, and 3, and in accordance with OAC 252:656-3-10, submit an Operation and Maintenance (O&M) Manual to the local DEQ ECLS office with a copy to the ECLS Total Retention Lagoon Section at the DEQ. | Three (3) months from the completion of construction in Task 1. |

E. RECORDKEEPING OF MONITORING RESULTS

The Monthly Operating Reports (MORs) shall be maintained by the supplier, Goldsby PWA - Goldsby Wastewater Treatment Facility, retained for three (3) years, and made available to the DEQ upon request.

PART II. OTHER PERMIT REQUIREMENTS

- **A.** 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. Treated wastewater flushing system. Treated wastewater 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.