DRAFT

AUTHORIZATION TO DISCHARGE UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM

Discharge Permit Number: OK0021504
Permit to Supply Reclaimed Water Number: RW20-032
Facility ID Number: S21607

PART I

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) adopted thereunder (see the Oklahoma Administrative Code (OAC) 252:606, OAC 252:627, and OAC 252:656)); the Federal Clean Water Act (CWA), Public Law 95-217 (33 USC 1251, *et seq.*), Section 402; and the National Pollutant Discharge Elimination System (NPDES) regulations at Title 40 of the Code of Federal Regulations (CFR) Parts 122, 124, and 403),

Town of Fairland/
Fairland Public Works Authority
P.O. Box 429
Fairland, OK 74343

is hereby authorized to discharge treated wastewater and supply reclaimed water for reuse from a facility located at approximately

S½, NE¼
Section 8, Township 26 North, Range 23 East, IM
Ottawa County, Oklahoma

to receiving waters: unnamed tributary to Hudson Creek at the point located at approximately

Latitude: 36° 45' 11.414" N [GPS: NAD83]
Longitude: 94° 51' 32.237" W [GPS: NAD83]

Water Body ID No. OK121600040043_00

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

This permit replaces and supersedes the previous permit issued on September 22, 2017.

The Oklahoma State Legislature passed legislation that was signed by the Governor that transfers authority for administrating Water Quality Standards (WQS) from the Oklahoma Water Resources Board (OWRB) to DEQ. The effective date of the legislation is November 1, 2022. DEQ is promulgating a new rule, OAC 252:730, titled "Oklahoma's Water Quality Standards," to replace OAC 785:45. DEQ is also promulgating a new rule, OAC 252:740, titled "Implementation of Oklahoma's Water Quality Standards," to replace OAC 785:46.

The issuance date of this permit is Month Date Year.

This permit shall become effective Month Date Year.

This permit and authorization to discharge 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

A. Effluent Limitations and Monitoring Requirements (Outfall 001)

Beginning the effective date of the permit through the expiration date of the permit, the permittee is authorized to discharge treated wastewater in accordance with the following limitations:

1. **April to October: No Discharge**
2. **November to March: See table below**

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		Mass Loading (lb/day)	Concentrations (mg/L, unless otherwise specified)			Frequency	Sample Type
		Monthly Avg.	Monthly Avg.	Weekly Avg.	Daily Max.		
Flow (mgd) [50050]	Nov - Mar	---	Report	---	Report	5 per week	Instanta-neous
Biochemical Oxygen Demand - 5-Day (BOD_5) [00310]	Nov - Mar	32.5	30	45	---	2 per month	Grab
Total Suspended Solids - (TSS) [00530]	Nov - Mar	97.6	90	135	---	2 per month	Grab
pH (standard unit) [00400]	Nov - Mar	---	6.5 – 9.0			2 per week	Grab

Sampling Point

Samples taken for compliance with the monitoring requirements specified above shall be taken at the end of the final treatment unit.

Year-round Requirements

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses or which cause deleterious effects to the biota.
- All monitoring and reporting requirements shall also be in compliance with Part III of this permit.

B. Compliance Schedule

Not applicable for discharging portion of facility.

C. Sanitary Sewer Overflows

Any bypass in the collection system [sanitary sewer overflow (SSO)] shall be reported in accordance with Part III.B.6 of this permit.

D. Reporting of Monitoring Results

Monitoring results shall be reported in accordance with the provisions of Part III.B.5 of the permit. Monitoring results obtained during the previous month shall be summarized and electronically reported on an electronic Discharge Monitoring Report (eDMR) form due to the Oklahoma Department of Environmental Quality, Water Quality Division, Wastewater Compliance Tracking Section no later than the 15th day of the month following the completed monthly test. If no discharge occurs during the reporting period, an eDMR form stating "No Discharge" shall be electronically submitted according to the above schedule. Instructions on how to register as a Preparer or Signatory for eDMRs, as well as how to prepare and submit eDMRs, can be found on DEQ's website at https://www.deq.ok.gov/water-quality-division/electronic-reporting/. Assistance is also available by contacting DEQ at (405) 702-8100 or email deqreporting@deq.ok.gov.

The first report is due on the 15th of MONTH, 2022.

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

Beginning the effective date and lasting through the expiration date of the permit, the Town of Fairland - "the supplier" of reclaimed water, is authorized to supply treated wastewater as Category 5 reclaimed water (RW) for land application at the following site(s), operated by the Town of Fairland – "the user", in accordance with OAC 252:627 and OAC 252:656 and with the following limitations:

1. Authorized Land Application Site

The land application of Category 5 reclaimed water is permitted at four sites, R01 - R04 (identified as LA1 – LA4 in the previous permit). The land application site R01 site is owned by the facility and the other three sites, R02 – R04, are leased from a private landowner. All land application sites are controlled and operated by the supplier.

Authorized Land Application Sites for Category 5 Reclaimed Water

Land Application Site		Total Area (Acres) [a]	Irrigated Area (Acres)	Approx. Location of Irrigation Pivot	
Site	Legal Description			Latitude	Longitude
R01 (Pivot 1)	NW¼, SE¼ Section 8, Township 26N, Range 23E, IM Ottawa County	40	22.1	36° 44' 54.05" N	94° 51' 43.73" W
R02 (Pivot 2)	NW¼, SE¼ Section 6, Township 26 N, Range 23E, IM Ottawa County	40	22.1	36° 45' 46.58" N	94° 52' 48.74" W
R03 (Pivot 3)	NW¼, NE¼ Section 7, Township 26N, Range 23E, IM Ottawa County	20	17.1	36° 45' 20.94" N	94° 52' 49.21" W
R04 (Pivot 4)	NW¼ Section 7, Township 26N, Range 23E, IM Ottawa County	80	52.6	36° 45' 10.50" N	94° 53' 16.12" W

[a] Per information provided by the facility in Form 2MRW submitted to DEQ on April 4, 2022, and site plans received via email from the facility on 07/08/22.

2. Limitations and Monitoring Requirements

The following monitoring requirements are established in the permit to supply Category 5 reclaimed water by the supplier for land application at the sites listed above.

Limitations and Monitoring Requirements for Category 5 Reclaimed Water

Site [a, b]	Parameter	Monitoring Requirements	Measurement Frequency	Monitoring Location
R01	Flow	Record	Daily [c]	Pump Station
R02	Flow	Record	Daily [c]	Pump Station
R03	Flow	Record	Daily [c]	Pump Station
R04	Flow	Record	Daily [c]	Pump Station

[a] Separate Monthly Operating Reports (MORs) shall be maintained for each site.

[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] Flow measurement, in gallons per day (gpd) 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

The permittee must keep the 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)	Amount of Fertilizer Applied

4. Restrictions for Category 5 Reclaimed Water

a. Irrigation with Category 5 reclaimed water is prohibited:

(1) from a lagoon cell that receives raw sewage;

(2) from any cell other than the one specified in the permit;

(3) on any food crop that may be consumed raw;

(4) on grain crops such as corn, wheat and oats, less than 30 days before harvest;

(5) at rates that allow a discharge from the permitted water reuse site;

(6) within 100 feet of the permitted boundary of the site;

(7) at a rate that exceeds the nitrogen and phosphorus rates for the crop grown at the site;

(8) at a rate that results in phytotoxicity;

(9) when the reclaimed water has a dissolved oxygen concentration of less than 2.0 mg/L;

(10) during periods of precipitation or while the soil is saturated or frozen;

(11) on land having a slope greater than 5 percent; and

(12) 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.

b. The 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:

(1) 300 feet from public wells;

(2) 50 feet from private water wells;

(3) 50 feet from creeks, lakes, ponds, and other water of the state; and

(4) 100 feet from adjacent property lines.

5. Prevention of Unauthorized Access to Land Application Site

The permittee/supplier must fence all the land application sites to control any unauthorized access by general public.

6. Signage Requirements

a. The permittee/supplier must post above-ground signs containing the international "Do Not Drink" symbol at every 300 feet and at the outlets.

b. The permittee/supplier of the reclaimed water must post sign, which describe the nature of the facility and advise against trespassing are required to be posted on or near the fence on each side of the water reuse site.

7. Record Retention of Monitoring Results

Suppliers shall complete DEQ **Form 627-001** "Water Reuse System Monthly Operation Report" (MOR) for each month for each reuse site in accordance with OAC 252:627-5-1(b). The permittee/supplier of reclaimed water shall maintain MORs on-site for 3 years and make them available to DEQ upon request.

8. Recordkeeping of All reports

The permittee/supplier of reclaimed water shall keep all records, including all maintenance records on-site for at least 3 years and make them available to DEQ upon request.

9. Operation and Maintenance of the Distribution Systems

a. The permittee/supplier shall maintain the structural integrity of all parts of the treated wastewater (reclaimed water) distribution and irrigation system and maintain it in good working condition.

b. The permittee/supplier shall ensure that pump stations are properly maintained and operated by doing the followings:

i. Securing pump station(s) to prevent unauthorized access.

ii. Maintaining pump(s) in working condition.

iii. Keeping screen(s) free of debris to prevent clogging.

iv. Maintaining the required alarms in working order.

v. Maintaining the required back-up generators and/or portable engine driven pumps in working order.

vi. Maintaining a complete set of operational instructions, emergency procedures and maintenance schedules.

c. The permittee/supplier shall provide flow measuring devices to measure the amount of treated wastewater being distributed to each user. Flow measurement devices shall have recording, totalizing and instantaneous indicating capabilities.

d. Cross connections between treated wastewater/RW distribution lines and the public water supply lines are prohibited. The supplier and the user shall follow the requirements of OAC 252:626-5-15 and OAC 252:656-9-2.

10. Compliance Schedule

The permittee/supplier must achieve compliance in accordance with the following schedule:

	Task	Date Due
1.	To comply with the requirement of OAC 252:627-3-4(a), install signs on or near the fence **on each side** of each water reuse site to discourage unauthorized access.	6 months from the effective date of the permit
2.	To comply with the requirements of OAC 252:656-27-4(a), post signs at appropriate places to discourage drinking of reclaimed water. For all reclaimed water piping installed prior to July 1, 2012, at a minimum, the facility must post above-ground signs containing the international "Do Not Drink" symbol every 300 feet, at every change of direction, in the road easement on both sides of the road at every road crossing, and at every outlet.	
3.	Send notice of completion of Task 1 & 2 to the Municipal Wastewater Enforcement Section at the Water Quality Division of DEQ and a copy to the Grove office of the Environmental Complaints and Local Services Division of DEQ.	9 months from the effective date of the permit

PART II. OTHER PERMIT REQUIREMENTS

A. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants shall not be introduced into a Publicly Owned Treatment Works (POTW) facility, defined in 40 CFR § 403.3(q) "as any devices and systems used in storage, treatment, recycling, and reclamation of municipal sewage and industrial wastes of a liquid nature. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in Section 502(4) of the CWA, which has jurisdiction over the Indirect Discharges to and from such treatment works."

    a. Pollutants which create a fire or explosion hazard in the POTW facility, including, but not limited to, wastestreams with a closed cup flashpoint of less than 60°C (140°F) using the test methods specified in 40 CFR § 261.21;

    b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

    c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in interference;

    d. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;

    e. Heat in amounts which will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40ºC (104ºF) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

    f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

    g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

    h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the CWA, including any requirements established under 40 CFR Part 403.

3. The permittee shall provide adequate notice of the following:

    a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the CWA and/or 40 CFR Parts 405-499 if it were directly discharging those pollutants;

    b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit; and

c. Any notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

B. RE-OPENER CLAUSE

This permit may be re-opened for modification or revocation and reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of State water quality criteria are determined to be the result of the permittee's discharge to the receiving water, or a revised Total Maximum Daily Load (TMDL) is established for the receiving water, or when required as technology advances. Modification or revocation and reissuance of the permit shall follow regulations listed at 40 CFR § 124.5.

C. BIOSOLIDS/SEWAGE SLUDGE REQUIREMENTS

1. The biosolids/sewage sludge from this facility is self-contained within the lagoon treatment system.

2. The permittee will be required to prepare and obtain approval of a biosolids/sewage sludge management plan prior to removing biosolids/sewage sludge from the facility. Biosolids/sewage sludge disposal practices shall comply with the Federal regulations for landfills, biosolids/sewage sludge, and solid waste disposal established at 40 CFR Parts 257, 503, and the DEQ rules governing Sludge Management (OAC 252:515 and OAC 252:606) as applicable.

3. The permittee is required to maintain all records relevant to biosolids/sewage sludge disposal for the life of the permit. These records shall be made available to DEQ upon request.

4. The permittee shall give 120 days prior notice to DEQ of any change planned in the biosolids/ sewage sludge disposal practice.

5. The permittee shall also comply with all applicable biosolids/sewage sludge requirements in Part IV of this permit.

D. POLLUTION PREVENTION REQUIREMENTS

1. The permittee shall institute a program within 12 months of the effective date of the permit (or continue an existing program) directed towards optimizing the efficiency and extending the useful life of the facility. The permittee shall consider the following items in the program:

   a. The influent loadings, flow and design capacity;

   b. The effluent quality and plant performance;

   c. The age and expected life of the wastewater treatment facility's equipment;

   d. Bypasses and overflows of the tributary sewerage system and treatment works;

   e. New developments at the facility;

   f. Operator certification and training plans and status;

   g. The financial status of the facility;

   h. Preventative maintenance programs and equipment conditions; and

i. An overall evaluation of conditions at the facility.

2. The permittee shall prepare the following information on the biosolids/sewage sludge generated by the facility:

   a. An annual quantitative tabulation of the ultimate disposition of all biosolids/sewage sludge (including, but not limited to, the amount beneficially reused, landfilled, and incinerated).

   b. An assessment of technological processes and an economic analysis evaluating the potential for beneficial reuse of all biosolids/sewage sludge not currently beneficially reused including a listing of any steps which would be required to achieve the biosolids/sewage sludge quality necessary to beneficially reuse the biosolids/sewage sludge.

   c. A description of, including the expected results and the anticipated timing for, all projects in process, in planning and/or being considered which are directed towards additional beneficial reuse of biosolids/sewage sludge.

   d. An analysis of one composite sample of the biosolids/sewage sludge collected prior to ultimate re-use or disposal shall be performed for the pollutants listed in Part IV, Element 1, Section III, Table 3 of the permit.

   e. A listing of the specific steps (controls/changes) which would be necessary to achieve and sustain the quality of the biosolids/sewage sludge so that the pollutant concentrations in the biosolids/sewage sludge fall below the pollutant concentration criteria listed in Part IV, Element 1, Section III, Table 3 of the permit.

   f. A listing of, and the anticipated timing for, all projects in process, in planning, and/or being considered which are directed towards meeting the biosolids/sewage sludge quality referenced in (e) above.

The permittee shall certify in writing, within three years of the effective date of the permit, that all pertinent information is available. This certification shall be submitted to:

Oklahoma Department of Environmental Quality
Water Quality Division
Municipal Discharge and Stormwater Permits Section
P. O. Box 1677
707 North Robinson Ave
Oklahoma City, Oklahoma 73101-1677