DRAFT

AUTHORIZATION TO DISCHARGE UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND TO SUPPLY RECLAIMED WATER

PERMIT TO DISCHARGE NUMBER: OK0100901
PERMIT TO SUPPLY RECLAIMED WATER NUMBER: RW21-010
ID NUMBER: S11202

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),

Elgin Public Works Authority
P.O. Box 310
Elgin, OK 73538

is hereby authorized to discharge treated wastewater from the Elgin Wastewater Treatment Facility located at approximately

E½, SW¼, Section 32, Township 4 North, Range 10 West, Indian Meridian, Comanche County, Oklahoma
or at 22 Windsong Lane, Elgin, OK 73538

to receiving water: Ninemile Beaver Creek at the point located at approximately

Latitude: 34° 46' 05.59" N
Longitude: 98° 16' 24.09" W
Water Body ID No. OK311210000130_00

and to supply reclaimed water (treated wastewater from the lagoon system) for reuse/irrigation within the boundaries of the permitted irrigation sites located at approximately

E½, NE¼, SW¼ and W½, SE¼, of Section 32, Township 4 North, Range 10 West, Indian Meridian, Comanche County, Oklahoma

and

W½, SE¼, SW¼, of Section 32, Township 4 North, Range 10 West, Indian Meridian, Comanche County, Oklahoma

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

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 Permits Section
Water Quality Division

Shellie R. Chard, Director
Water Quality Division

A. Effluent Limitations/Monitoring and Reporting Requirements (Outfall 001)

Upon completion of the facility improvements, the permittee is authorized to discharge treated wastewater from its wastewater treatement facility. Such discharge shall comply with the following liitations:

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) [STORET: 50050]	Year round	Report Monthly Average and Daily Maximum				5/Week	Instantaneous
Biochemical Oxygen Demand-5 Day (BOD_5) [STORET: 00310]	Year round	68.8	30	45	---	2/Month	Grab
Total Suspended Solids (TSS) [STORET: 00530]	Year round	206.4	90	135	---	2/Month	Grab
E. coli [a] [STORET: 51040]	May – Sep	---	126 [b]	---	406	2/Week	
Total Residual Chlorine (TRC) [c] [STORET: 50060]	Year round	---	Instantaneous Maximum: No Measurable [d]			Daily	Grab
Dissolved Oxygen (DO) [STORET: 00300]	Apr – Oct	---	Minimum: 4.0			2/Week	
pH (standard unit) [STORET: 00400]	Year round	---	6.5 – 9.0			2/Week	Grab

[a] *E. coli* shall be reported in most probable number (MPN)/100 mL.

[b] Monthly data for *E. coli* shall be reported as geometric mean of all samples in that month.

[c] If no chlorine is used for an entire reporting period, the permittee shall report a value of "zero" for the daily maximum and enter "No chlorine used this reporting period" in the comments section on the DMR for that reporting period in lieu of the indicated testing. For any week in which chlorine is used, the indicated testing shall be done until the chlorine is no longer in use and at least one subsequent test verifies that the effluent meets the total residual chlorine limit.

[d] No measurable is defined as less than 0.1 mg/L.

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.

Sampling Point

Samples taken for compliance with the monitoring requirements specified above shall be taken at the end of the cascade aerator (see location for Outfall 001).

Facility Improvements and Notification of Completion

Once the construction plans and specification for the facility improvements are approved and the Permit to Construct is issued by DEQ, the permittee shall begin construction as planned and permitted. Upon completion of facility improvements, the permittee shall send written notification to the Municipal Discharge and Stormwater Permits Section of the Water Quality Division of DEQ, and request that DEQ make the limits effective to reflect the discharging status of the improved wastewater treatment system. For the period beginning the effective date of this permit until completion of facility improvements, the permittee is not authorized to discharge and is required to write "No discharge this period" in the comment section of the monbthly electronic Discharge Monitoring Reports (eDMRs) and submit the eDMRs to DEQ.

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, 2025.

B. 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.

C. Limitations and Monitoring Requirements for Category 5 Reclaimed Water

Beginning the effective date and lasting through the expiration date of the permit, the Elgin PWA, "the supplier", is authorized to supply Category 5 reclaimed water for irrigation at the following water reuse sites, in accordance with OAC 252:627 and OAC 252:656 and the following limitations:

1. Authorized Irrigation Sites for Category 5 Reclaimed Water

Authorized Irrigation Sites for Category 5 Reclaimed Water

Land Application Sites		Method of Irrigation	Total Area (Acres)	Irrigated Area (Acres)
Site	Legal Description			
R01	E½, NE¼, SW¼ and W½, SE¼, of Section 32, Township 4 North, Range 10 West, IM, Comanche County, Oklahoma	Fixed Sprinkler	64	44
R02	W½, SE¼, SW¼, of Section 32, Township 4 North, Range 10 West, IM, Comanche County, Oklahoma	Fixed Sprinkler	28	21

[a] North American Datum of 1983 (NAD83)

2. Limits and Monitoring Requirements for Category 5 Reclaimed Water

In accordance with Appendix A of OAC 252:627, the following limitations and monitoring requirements are established for supplying and reusing Category 5 reclaimed water at land application sites R01 and R02.

Site ID	Parameter [a]	Measurement Requirement	Measurement Frequency [a]	Type of Measurement [b]	Measurement Location
R01	Flow (gpd)	Record	Daily	Totalized	Pump Station/ Point of Delivery
R02	Flow (gpd)	Record	Daily	Totalized	Pump Station/ Point of Delivery

[a] 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.

[b] Flow measurements of reclaimed water for reuse/irrigation at Sites R01 and R02 are currently achieved by calibration of pumps and run-time meters.

3. Reporting Requirements and Record Keeping

a. Monthly Operation Reports (MORs)

The permittee 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 shall **Retain MORs on-site for three years**, as well as all records, including all maintenance records, and make them available for review by DEQ upon request in accordance with OAC 252:627-5-1(d) and (e).

b. Record Keeping Requirements for Commercial Fertilizer

In compliance with OAC 252:627-3, 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, Phosphorous, Potassium)	Quantity of Fertilizer Applied (lb)

4. Restrictions for Category 5 Reclaimed Water

a. In accordance with OAC 252:627-3-4(b), 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 thirty (30) days before harvest;
(5) at rates that allow a discharge from the permitted water reuse site;
(6) within one hundred feet (100') 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 five percent (5%); 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. In accordance with OAC 252:656-27-2(b), irrigation 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;
(4) 100 feet from adjacent property lines.

c. 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, and if applicable, information on specific reuse site(s) demonstrating that the requirements of OAC 252:627-3-4 for the proposed category of reclaimed water are met.

5. Prevention of Unauthorized Access and Signage Requirements

a. Public Access and Fencing Requirements

(1) In accordance with OAC 252:627-3-4(a)(4), Category 5 reclaimed water shall not be applied to any public use areas.

(2) In accordance with 252:627-3-4(a)(1) and OAC 252:656-25-2(k), suppliers (permittees) shall ensure all Category 5 reclaimed water reuse/irrigation sites be fenced to prevent unauthorized entry. In accordance with OAC 252:627-3-4(a)(3), suppliers (permittees) shall have legal access and control pursuant to the provisions of OAC 252:656-25-2(d) for all areas that are being irrigated with Category 5 reclaimed water and shall ensure that all distribution and irrigation equipment is maintained in working order.

Fences and locked gates are currently installed/available at the lagoon system and irrigation Sites R01 and R02.

b. Signage Requirements

(1) In accordance with OAC 252:656-27-4(a), all valves, outlets and appurtenances in the distribution system of reclaimed water shall have signs with the following language: "CAUTION: RECLAIMED WATER - DO NOT DRINK."

(2) 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.

Adequate signs which describe the nature of the Category 5 reclaimed water system and advise against trespassing are currently posted/available.

6. Re-opener Clause

A re-opener clause is included in the permit to allow 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 OAC 252:627. Modification and/or reissuance of the permit shall follow regulations listed at OAC 252:004.

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 40°C (104°F) 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

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

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

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

The permittee shall notify DEQ at least 120 days prior to implementing any changes in the biosolids beneficial use and/or sewage sludge disposal practices.

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