## DRAFT

# AUTHORIZATION TO DISCHARGE UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM

Permit Number: OK0100935 Permit to Supply Reclaimed Water Number: RW23-006 ID Number: S20620

#### **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),

> Blanchard Municipal Improvement Authority 122 N. Main St. Blanchard, OK 73010

is hereby authorized to discharge treated wastewater and supply reclaimed water for reuse from the Blanchard Wastewater Treatment Facility (WWTF) located at approximately

N½, NE¼

Section 32, Township 8 North, Range 4 West, IM

McClain County, Oklahoma

to receiving waters: Blanchard Creek at the point located at approximately

Latitude:

35° 07' 21.72" N

[GPS: NAD83]

Longitude:

97° 38' 38.04" W [GPS: NAD83]

Water Body ID No. OK520610030120 00

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

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 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 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 1 to October 31: No Discharge

2. November 1 to March 31: See table below

		D	ischarge	Limitation	ıs	Monitoring Requirements	
		Mass Loading (lb/day)	1		Frequency	Sample	
		Monthly Avg.	Monthly Avg.	Weekly Avg.	Daily Max.	-	Туре
Flow (mgd) [STORET: 50050]	Nov 1 – Mar 31		Report	***	Report	7 per week	Totalized
Carbonaceous Biochemical Oxygen Demand - 5-Day (CBOD <sub>5</sub> ) [STORET: 80082]	Nov 1 – Mar 31	118.85	25	37.5		3 per month	3-hour composite
Total Suspended Solids - (TSS) STORET: [00530]	Nov 1 – Mar 31	427.84	90	135		3 per month	3-hour composite
Ammonia as N (NH <sub>3</sub> -N) [STORET: 00610]	Nov 1 – Mar 31	73.21	15.4	23.1		3 per month	3-hour composite
Dissolved Oxygen (DO) [STORET: 00300]	Nov 1 – Mar 31	raaur.	Instantaneous Minimum: 4.0		2 per week	Grab	
E. coli [STORET: 51040]	Nov 1 – Mar 31	: <u>===</u> ;	630 a		2030	1 per week	Grab
Total Residual Chlorine (TRC) [STORET: 50060]	Nov 1 – Mar 31		Instantaneous Maximum:  No measurable b, c		Daily	Grab	
pH (standard unit) STORET: [00400]	Nov 1 – Mar 31	1337		6.5 - 9.0		2 per week	Grab

E. coli shall be reported as the most probable number (MPN)/100 mL; monthly average of E. coli is the geometric mean of all the samples taken during a month.

# **Sampling Point**

- Grab samples taken in compliance with permit limits and monitoring requirements shall be taken at Outfall 001.
- Composite samples taken in compliance with the permit limits and monitoring requirements shall be taken at the pump station after final treatment in the third storage lagoon located in the NE¼, NW¼, NE¼ of the Section 32, Township 8 North, Range 4 West, IM, McClain County, Oklahoma.

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.

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.

## **B.** Compliance Schedule

Not applicable.

## 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 15<sup>th</sup> 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 <a href="https://www.deq.ok.gov/water-quality-division/electronic-reporting/">https://www.deq.ok.gov/water-quality-division/electronic-reporting/</a>. Assistance is also available by contacting DEQ at (405) 702-8100 or email <a href="mailto:degreporting@deq.ok.gov">degreporting@deq.ok.gov</a>.

The first report is due on the 15<sup>th</sup> of MONTH 2025.

## 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 Blanchard Municipal Improvement Authority (BMIA) - "the supplier" of reclaimed water, is authorized to supply treated wastewater from the Blanchard WWTF as Category 5 reclaimed water (RW) for land application at the following sites, owned and operated by the BMIA – "the user", in accordance with OAC 252:656 and with the following limitations:

#### 1. Authorized Land Application Sites

The land application of Category 5 reclaimed water is permitted at two sites, R01 - R02. Both land application sites are owned, operated, and controlled by the supplier.

## **Authorized Land Application Sites**

Site ID	Legal Description	Method of Irrigation	Total Area <sup>a</sup> (Acres)	Irrigated Area (Acres)
R01	W½, SW¼, NE¼, and N½, NW¼, SE¼, Section 32, Township 8N, Range 4W, IM McClain County	Fixed	120	49.6
R02	S½, SW¼, Section 32, Township 8N, Range 4W, IM McClain County	Sprinkler	49	23.6

Per information provided by the facility in Section III of Form 2M2 submitted to DEQ on October 31, 2023.

## 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	Parameter	Monitoring Requirements	Measurement Frequency	Sample Type	Monitoring Location
R01	Flow (gpd)	Record a	Daily <sup>c</sup>	Totalized <sup>b</sup>	Pump Station
R02	Flow (gpd)	Record a	Daily <sup>c</sup>	Totalized <sup>b</sup>	Pump Station

When there is no supply of reclaimed water for the entire day, report "0" in the MOR, and write "No Supply" in the comment's column.

## 3. Record Keeping Requirements for Commercial Fertilizer

The permittee must 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.

Date	Acreage Fertilized	Composition of Fertilizer (Nitrogen, Phosphorus, Potassium)	Amount of Fertilizer Applied (lb)

# 4. Prevention of Unauthorized Access to Land Application Site

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

## 5. Signage Requirements

Site Name:

The permittee shall comply with the following signage requirements:

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.

- 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:
  - i. every 300 feet.
  - ii. at every change in direction.
  - iii. in the road easement on both sides of the road at every road crossing; and
  - iv. at every outlet.
- b. All signs which describe the nature of the facility and advice against trespassing shall be posted on the perimeter of each permitted water reuse site(s).

#### F. RESTRICTIONS FOR USING RECLAIMED WATER

- 1. The permittee shall not irrigate with Category 5 reclaimed water:
  - b. from a lagoon cell that receives raw sewage;
  - c. from any cell other than the one specified in the permit;
  - d. on any food crop that may be consumed raw;
  - e. on grain crops such as corn, wheat and oats, less than 30 days before harvest;
  - f. at rates that allow a discharge from the permitted water reuse site;
  - g. within 100 feet of the permitted boundary of the site;
  - h. at a rate that exceeds the nitrogen and phosphorus rates for the crop grown at the site;
  - i. at a rate that results in phytotoxicity;
  - j. when the reclaimed water has a dissolved oxygen concentration of less than 2.0 mg/L;
  - k. during periods of precipitation or while the soil is saturated or frozen;
  - 1. on land having a slope greater than 5 percent; and
  - m. 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. The systems should 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:
  - I. 300 feet from public wells;
  - II. 50 feet from private water wells;
  - III. 50 feet from creeks, lakes, ponds, and other water of the state; and
  - IV. 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 and must

Blanchard Municipal Improvement Authority - Blanchard Wastewater Treatment Facility

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.

#### G. SCHEDULE OF COMPLIANCE

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

	Task	Date Due
1.	The facility shall complete the construction/installation of a flow measuring device for each land application sites in accordance with OAC 252:656-27-2(c);	
2.	To comply with the requirement of OAC 252:627-3-4(a), the facility shall install signs on or near the fence <b>on each side</b> of the water reuse sites to discourage unauthorized access; and	6 months from the effective date of the permit
3.	To comply with the requirements of OAC 252:656-27-4(a), the facility shall post signs at appropriate places to discourage drinking of reclaimed water.	
4.	Send notice of completion of Task 1 2 & 3 to the local ECLS office with copy to the Municipal Wastewater Enforcement Section of the Water Quality Division at DEQ.	7 months from the effective date of the permit

#### H. RECORDKEEPING 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). Suppliers shall **retain MORs on site for three (3) 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).

#### I. 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.

#### J. GENERAL PROVISIONS FOR SUPPLY OF RECLAIMED WATER

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.
- 2. Flow measuring devices. The permittee shall provide flow measuring devices to measure the amount of treated water being distributed to each user. Flow measurement devices should have recording, totalizing and instantaneous indicating capabilities.

## K. OPERATION AND MAINTENANCE OF THE 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 3 feet 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 plans 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.
- 2. Maintenance. The permittee shall maintain the structural integrity of all parts of the treated wastewater distribution system and maintain it in good working order.
- **3. Pump station**. The permittee shall ensure that pump stations are properly maintained and operated by doing the following:
  - 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.

# 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

- 1. The sewage sludge from this facility is self-contained within the lagoon treatment system.
- 2. The permittee shall be required to 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, 258, 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 beneficial use and/or sewage sludge disposal for the life of the permit. These records shall be made available to DEQ upon request.
- 4. The permittee shall notify DEQ at least 120 days prior to implementing any changes in the beneficial use of biosolids and/or sewage sludge disposal practices.
- 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

# **FACT SHEET**

(Draft of March 29, 2024)

FOR THE DRAFT AUTHORIZATION TO DISCHARGE TO WATERS OF THE UNITED STATES UNDER THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM.

OPDES Permit Number:

OK0100935

Permit to Supply

RW23-006

Reclaimed Water Number:

Facility ID Number:

S20620

Applicant:

Blanchard Municipal Improvement Authority

122 North Main St. Blanchard, OK 73010

Issuing Office:

Oklahoma Department of Environmental Quality

Water Quality Division 707 North Robinson Ave.

P.O. Box 1677

Oklahoma City, OK 73101-1677

Prepared By:

Ismat Esrar, P.E.

Municipal Discharge and Stormwater Permits Section

Water Quality Division

Date Prepared:

March 29, 2024

Reviewed By:

Michael B. Moe, P.E., Manager

Municipal Discharge and Stormwater Permits Section

Water Quality Division

Patrick Rosch, P.E., Manager Municipal Wastewater Group Water Quality Division

The Oklahoma Department of Environmental Quality (DEQ) has made a tentative determination to issue a permit for the discharge and the supply of treated wastewater, known as reclaimed water, described in the application. DEQ is the permitting authority, and this permit will be enforceable under both Federal and State laws, rules and regulations. Permit requirements are based on the National Pollutant Discharge Elimination System (NPDES) regulations at Title 40 of the Code of Federal Regulations (CFR) Parts 122, 124, and 403 and the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, Title 27A OS § 2-6-201, et seq., as amended, and the rules of DEQ adopted thereunder (see the Oklahoma Administrative Code (OAC) 252:606, 252:619, 252:627, and 252:656).

## I. PERMITTING BACKGROUND

#### A. CHRONOLOGY OF PERMITTING ACTIVITIES

The following is a chronology of permitting activities since issuance of the previous Oklahoma Pollutant Discharge Elimination System (OPDES) permit:

Month Date, Year: Public Notice of Draft published by Facility.

Month Date, Year: Public Notice of Draft published by DEQ.

May 9, 2025: Draft permit package sent to applicant for public notice. February 26, 2025: Draft permit package sent to applicant for courtesy review.

December 22, 2024: Additional information received from applicant.

August 29, 2024: Requested for additional information.

March 12, 2024: Additional information received from applicant.

February 21, 2024: Administrative review of permit application completed.

February 16, 2024: Additional information received from applicant. Additional information received from applicant.

January 22, 2024: Requested for additional information.

January 11, 2024: Site visit conducted.

December 28, 2023: 2<sup>nd</sup> Notice/reminder letter sent for additional information.

November 28, 2023: Notice of incomplete application sent to applicant. October 31, 2023: OPDES permit application (Form 2M2) received.

September 30, 2016: Previous LAR permit issued.

#### **B. PROPOSED PERMITTING ACTION**

It is proposed that Permit Nos. OK0100935 and RW23-006, for which an application for new issuance was received, be issued for a five-year term in accordance with regulations promulgated at 40 CFR § 122.46(a), OAC 252:606-1-3(b), and OAC 252:627-1-3(d). This permit will supersede the land application Permit Nos. LAR000044150961 effective on May 3, 2016, and LAR000044150960 effective on September 30, 2016.

#### II. APPLICANT ACTIVITY

## A. DESCRIPTION AND LOCATION OF FACILITY

The Blanchard Wastewater Treatment Facility (Blanchard WWTF), owned and operated by the Blanchard Municipal Improvement Authority (BMIA), is located in the N½, NE¾ of the Section 32, Township 8 North, Range 4 West, Indian Meridian (IM), McClain County, Oklahoma. Under the standard industrial classification (SIC) Code 4952 or North American Industrial Classification System (NAICS) Code 221320, the facility provides biological treatment of domestic sewage for the City of Blanchard. Based on the US Census Bureau's July 1, 2022, estimates, the population of the City of Blanchard is 9,481.

## B. WASTEWATER GENERATION AND TREATMENT

#### 1. Treatment Plant

The facility's design average daily flow is 0.57 million gallons per day (mgd), which is less than the design average daily flow of 1.30 mgd specified in Oklahoma's Water Quality Management Plan (WQMP). The wastewater received at this Publicly Owned Treatment Works (POTW) primarily consists of domestic sewage. This facility does not receive any industrial wastewater to the treatment

plant. Biological treatment of the wastestream takes place in two primary cells with aerators and three secondary/storage cells prior to discharge to waters of the state or land application at two sites.

#### 2. Industrial Contributions

The facility does not receive industrial wastewater.

#### 3. Reclaimed Water for Water Reuse

The BMIA supplies Category 5 reclaimed water from the Blanchard WWTF after primary treatment and storage in the lagoon system in accordance with OAC 252:627 for reuse at two land application sites. Detailed information of all the land application sites is available in Section VII.C.1.

### III. DISCHARGE LOCATION

## Sampling Point and Outfall 001

Sampling		Receiving			
Point and Outfall	Legal Description	Latitude	Longitude	Stream	
Outfall 001 (physical location and sampling point)	NW¼, NW¼, SE¼ Section 32, Township 8 N, Range 4 West, IM McClain County, Oklahoma At the discharge box from SW corner of the land application site R01	(CDS: NAD2) a	97° 38' 38.04" W (GPS: NAD83) <sup>a</sup>	Blanchard Creek	

<sup>&</sup>lt;sup>a</sup> The North American Datum of 1983 or NAD83.

## IV. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

POTWs treating domestic sewage are required by 40 CFR Part 133 to provide secondary or secondary-equivalent treatment. The Oklahoma definition of secondary treatment, which sets minimum requirements for developing wasteload allocations for municipalities in the State's Water Quality Management Plan (WQMP), is defined at OAC 252:606-5-2(2). The definitions are dependent on the type of treatment system and whether the receiving stream flow is perennial or intermittent. Since the facility is a lagoon system discharging to an intermittent stream, secondary treatment is defined according to OAC 252:606-5-2(2)(D) as indicated below:

## **Aerated Lagoon**

- 5-day Biochemical Oxygen Demand (BOD<sub>5</sub>)
  - A monthly average effluent concentration of 30 mg/L
  - A weekly average effluent concentration of 45 mg/L
- Total Suspended Solids (TSS)
  - A monthly average effluent concentration of 90 mg/L
  - A weekly average effluent concentration of 135 mg/L
- pH

A pH range between 6.5 and 9.0 standard units, inclusive.

## V. EFFLUENT LIMITATIONS AND CONDITIONS

## A. RECEIVING STREAM DESIGNATED USES AND ANTIDEGRADATION PROVISIONS

The facility discharges through Outfall 001 into Blanchard Creek, waterbody identification (WBID) # OK520610030120\_00 in Segment 520610 of the Canadian River Basin. Blanchard Creek is not listed in Appendix A of Oklahoma's Water Quality Standards (OWQS). Pursuant to OAC 252:730-5-3, the beneficial uses for the unlisted stream are designated as follows:

- Fish and Wildlife Propagation (OAC 252:730-5-12)/Warm Water Aquatic Community
- Agriculture (OAC 252:730-5-13)
- Primary Body Contact Recreation (OAC 252:730-5-16)
- Aesthetics (OAC 252:730-5-19)
- Fish Consumption (OAC 252:730-5-20)

Blanchard Creek flows into Walnut Creek (WBID# OK520610030010\_00), which is approximately 1.0 miles downstream from the facility's point of discharge (POD) and is listed in Appendix A of OWQS. The beneficial uses designated for Walnut Creek, are as follow:

- Fish and Wildlife Propagation (OAC 252:730-5-12)/Warm Water Aquatic Community
- Agriculture (OAC 252:730-5-13)
- Primary Body Contact Recreation (OAC 252:730-5-16)
- Aesthetics (OAC 252:730-5-19)
- Fish Consumption (OAC 252:730-5-20)

Neither Blanchard Creek nor Walnut Creek is designated as an Outstanding Resource Water (ORW), High Quality Water (HQW), or Sensitive Water Supply (SWS) in Appendix A of OWQS. The Segment 520610 of the Canadian River Basin is not designated in Table 1 of Appendix B of OWQS as an area of ecological and/or recreational significance. However, this segment is listed in Table 2 of Appendix B of OWQS as an area which contains federally listed threatened or endangered species pursuant to the Federal Endangered Species Act. DEQ has concluded that issuance of the permit is not likely to adversely affect a federally listed species, or a designated critical habitat. Since this is a new discharge permit, the draft permit package and background information will be sent to the U.S. Fish and Wildlife Service (USFWS) for review.

# B. WATER QUALITY STANDARDS IMPLEMENTATION

# 1. DO and DO-Demanding Substances – Fish and Wildlife Propagation Use (Outfall 001)

OAC 252:730-5-12(f)(1) requires that where dissolved oxygen (DO)-demanding substances are present in an effluent at significant levels, a WLA must be established according to certain seasonal criteria dependent on the receiving water's aquatic community subcategory. In determining the WLA for DO-demanding substances, the prescribed level of secondary treatment for the facility (see Section IV of this fact sheet) is modeled to determine if it meets the seasonal criteria. If the model indicates that a more stringent WLA than secondary is required to meet these criteria, the more stringent WLA (often referred to as a "tertiary" level of treatment) will be used once it is granted technical approval by EPA Region 6. It is then promulgated as an amendment to the WQMP. The approved WLA for DO-demanding substances for this facility at a design average flow of 0.57 mgd is shown in the following table:

## DO-Based WLA (Outfall 001)

S	WLA Parameters (in mg/L)				
Season	CBOD <sub>5</sub>	TSS	NH <sub>3</sub> -N	DO (Minimum)	
Spring (April 1 – June 15)	No discharge				
Summer (June 16 – October 15)	No discharge				
Winter (October 16 – March 31)	25.0		15.4	4.0	

In accordance with OAC 252:656-11-2(b), flow-through lagoons do not consistently provide ammonia removal through the nitrification process and the effluent may be toxic to the aquatic life. Therefore, the facility is not allowed to discharge during April 1 through October 16.

For purposes of establishing permit limitations for DO-demanding substances, the seasonal monthly average limit (MAL) in the draft permit for each effluent characteristic is set equal to the corresponding WLA concentration shown in the table above. The corresponding weekly average limit (WAL) is set equal to 1.5 times the seasonal WLA concentration in accordance with 40 CFR § 122.45(d)(2).

# 2. pH – Fish and Wildlife Propagation Use (Outfall 001)

OAC 252:730-5-12(f)(3) states, "pH values shall be between 6.5 and 9.0 in waters designated for fish and wildlife propagation; unless pH values outside that range are due to natural conditions." This pH range is established in the draft permit.

# 3. Oil and Grease – Fish and Wildlife Propagation Use (Outfall 001)

In accordance with OAC 252:730-5-12(f)(4), a narrative condition prohibiting the discharge of any visible sheen or globules of oil or grease or in quantities that adhere to stream banks and coat bottoms of water courses or which cause deleterious effects to the biota will be included in the draft permit.

#### 4. Bacterial Criteria

## a. Primary Body Contact Recreation Use (Outfall 001)

In accordance with OAC 252:606-6-86(e), bacterial criteria do not apply to discharging lagoons that are operating in compliance with OAC 252:656-11-2(b), unless water quality standards are violated. The lagoon system at the facility is constructed of two primary cells with aerators and three secondary/storage cells. The lagoon system provides a 7-day retention time in the primary cells and 74 days retention time in the storage cells at the design average flow of 0.57 mgd. The construction standards specified in OAC 252:656-11-2(b)(2) are not met. The facility is not allowed to discharge during April 1 through September 30 in accordance with the Oklahoma's WQMP that was approved February 24, 2023. Therefore, limits for bacteria during this period are not needed.

However, in accordance with OAC 252:606-6-86(b), from October 1 through March 31; Escherichia coli (E. coli) monthly average limit of 630/100 mL, expressed as a geometric mean, and the daily maximum limit of 2030/100 mL for streams stated in OAC 252:606-6-86(c)(2) apply to permittees that discharge to waterbodies that are impaired for bacteria. In accordance with OAC 252:606-6-89(a)(3)(c), monitoring frequency for E. coli is established at one per week to protect the SBCR beneficial use.

## b. Total Coliform - Public and Private Water Supply Use (Outfall 001)

Neither Blanchard Creek nor Walnut Creek is designated for Public and Private Water Supply beneficial use, nor is there a public water supply intake within five miles from the facility's point of discharge. Therefore, total coliform limits are not needed.

# 5. Toxicity from Halogenated Oxidants – Fish and Wildlife Propagation Use (Outfall 001)

OAC 252:740-3-1(c) states, "Toxicity from halogens (e.g., chlorine, bromine, and bromo-chloro compounds) will be controlled by dehalogenation rather than WET testing. However, use of dehalogenation shall not exempt an effluent from the WET testing requirements of this subchapter." The requirement of OAC 252:740-3-1(c) for dehalogenation is typically implemented as "no measurable amount" in the effluent in accordance with OAC 252:606-6-28. "No measurable amount" is defined by DEQ to be < 0.1 mg/L for halogenated oxidants.

# 6. Floatable Solids and Foam – Aesthetics Use (Outfall 001)

In accordance with OAC 252:730-5-9(b), a narrative condition prohibiting the discharge of floating solids or visible foam in other than trace amounts will be included in the draft permit.

## 7. Pretreatment Program

DEQ has tentatively determined that the permittee is not required to develop a full pretreatment program.

# 8. Biosolids/Sewage Sludge Requirements

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

The permittee shall be required to prepare and obtain DEQ 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, 258, 503, and the 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 beneficial use of biosolids and/or sewage sludge disposal practices.

#### C. 303(d) LIST ASSESSMENT

The facility discharges into Blanchard Creek (WBID # OK520610030120\_00) that is not listed in the Category 5 303(d) list in Appendix C of the 2022 Integrated Report. However, Walnut Creek (WBID # OK520610030010\_00), which is approximately 1.0 mile downstream from the facility's point of discharge, is listed in the Category 5 303(d) list in Appendix C of the 2022 Integrated Report as impaired for enterococcus and *E. coli*.

The *E. coli* limits described in Section V.B.4 are applied to this permit, and therefore, additional requirements regarding the impairment are not required in the permit.

However, a re-opener clause is included in the permit to allow for modification and/or reissuance to require additional monitoring and/or effluent limitations.

# D. ANTIDEGRADATION REQUIREMENTS

Because no antidegradation restrictions are listed in Appendix A of the OWQS for this waterbody, implementation of the State of Oklahoma antidegradation policy, as described at OAC 252:740, Subchapter 13, states that no special requirements beyond Tier 1 protection (maintenance and protection of designated uses, as herein described) are necessary.

#### E. PROTECTION OF ENDANGERED AND THREATENED SPECIES AND CRITICAL HABITAT

The discharge point is located in waters identified as sensitive by the United States Fish and Wildlife Service (USFWS) for endangered or candidate species or critical habitat. However, DEQ has concluded that issuance of the permit is not likely to adversely affect a federally listed species, or a designated critical habitat. Since this is a new discharge permit, notification to USFWS is necessary. DEQ will send the draft permit package and background information to the USFWS for review. A copy of the public notice will also be sent to USFWS for comments.

#### F. RE-OPENER CLAUSE

A re-opener clause is included in the permit to allow for modification and/or 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(s), or a revised Total Maximum Daily Load is established for the receiving water(s). Modification and/or reissuance of the permit shall follow regulations listed at 40 CFR § 124.5.

## VI. SUMMARY OF PROPOSED PERMIT EFFLUENT LIMITATIONS

#### A. GENERAL

In accordance with 40 CFR § 122.44(a), (d), and (l), pollutant limitations and monitoring requirements are established in the draft permit based on the WQMP (208 Plan) for this facility, technology-based, water quality-based, or previous permit requirements. Per information provided in the permit application, the facility's design average daily flow is 0.57 mgd. Mass loading limitations are calculated using the following equation:

Mass loading limit (in lb/day) = Concentration limit (in mg/L)  $\times$  Q<sub>e(D)</sub> (permitted flow in mgd)  $\times$  8.34

#### B. FINAL EFFLUENT LIMITATIONS FOR OUTFALL 001

# 1. Final Limitations and Reporting Requirements

The following final limits and reporting requirements are effective on the effective date of the permit:

Final Concentration Limitations and Reporting Requirements

Effluent Characteristic <sup>a</sup>		Water Quality Star		Previous Permit		Draft Permit	
Efficient	Efficient Characteristic		Weekly Average	Monthly Average	Weekly Average	Monthly Average	Weekly Average
CDOD	Apr 1 – Oct 31	No discha	arge		•	No disc	charge
CBOD₅	Nov 1 – Mar 31	25	37.5	.===		25	37.5
TSS b	Apr 1 – Oct 31	No discha	irge		•	No disc	charge
155 °	Nov 1 – Mar 31	90	135	200		90	135
Ammonia -	Apr 1 – Oct 31	No discharge		2000		No discharge	
as N	Nov 1 – Mar 31	15.4	23.1	***	124.2	15.4	23.1
	Apr 1 – Oct 31	No discharge				No discharge	
DO	Nov 1 – Mar 31	Instantaneous M 4.0	Iinimum:			Instantaneous Minimum: 4.0	
T!:	Apr 1 – Oct 31	No discha	ırge	: <b>***</b> (		No discharge	
E. coli	Nov 1 – Mar 31	630 °	2030 d		•6	630 °	2030 <sup>d</sup>
	Apr 1 – Oct 31	No discha	ırge	1977	7/1	No discharge	
TRC	Nov 1 – Mar 31	Instantaneous Maximum:  No measurable e, f		STATE .		Instantaneous Maximum: No measurable e, f	
pН	Apr 1 – Oct 31	No discha	rge	7-44	est.	No disc	harge
(standard units)	Nov 1 – Mar 31			(লচক)		6.5 to 9.0	

<sup>&</sup>lt;sup>a</sup> Units are mg/L, unless otherwise specified.

b Technology-based limits are applicable when discharging.

<sup>&</sup>lt;sup>c</sup> E. coli shall be reported as the most probable number (MPN)/100 mL; the monthly average of E. coli is the geometric mean of all samples taken during the month.

d Daily maximum number.

<sup>&</sup>lt;sup>c</sup> 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.

f No measurable is defined as less than 0.1 mg/L.

# Final Mass Loading Limitations and Reporting Requirements

Effluent Characteristic <sup>a</sup>		Water Quality Standards	Previous Permit	Draft Permit
		Monthly Average Monthly Average		Monthly Average
Flow (mgd)	Nov 1 – Mar 31		***	Report – monthly average and daily maximum
CBOD <sub>5</sub>	Nov 1 – Mar 31	118.85		118.85
TSS	Nov 1 – Mar 31	427.84		427.84
Ammonia as N	Nov 1 – Mar 31	73.21		73.21

<sup>&</sup>lt;sup>a</sup> Units are lb/day, unless otherwise specified.

# **Final Monitoring Requirements and Sample Types**

Effluent Characteristic		Previou	is Permit	Draft Permit	
		Measurement Frequency	Sample Type	Measurement Frequency <sup>a</sup>	Sample Type
Flow	Nov 1 – Mar 31	222	202	7 per week	Totalized
CBOD₅	Nov 1 – Mar 31	***		3 per month	3-hour composite
TSS	Nov 1 – Mar 31		****	3 per month	3-hour composite
Ammonia as N	Nov 1 – Mar 31		### E	3 per month	3-hour composite
DO	Nov 1 – Mar 31		222	2 per week	
E. coli	Nov 1 – Mar 31	(200)		1 per week	G 1
TRC	Nov 1 – Mar 31	(492)	***	Daily	Grab
рН	Nov 1 – Mar 31	. <del></del> ):	***	2 per week	

Monitoring frequency is in accordance with OAC 252:606, Appendix A, Table 1-3.

# 2. Consent Order for Facility Changes

Not applicable.

## 3. Schedule of Compliance

Not applicable.

## VII. RECLAIMED WATER FOR WATER REUSE

## A. GENERAL

The BMIA is both the "supplier" and the "user" of reclaimed water. As the "supplier" of reclaimed water, the BMIA is considered as the "permittee" and is issued the Permit to Supply Reclaimed Water Number RW23-006. The permit to supply reclaimed water for reuse is based on Category 5 reclaimed water drawn

from the final/third storage lagoon after treatment through the lagoon system in accordance with OAC 252:627 and OAC 252:656. The BMIA supplies and reuses Category 5 reclaimed water for land application onto pasture land at two sites (R01 - R02). Both land application sites are owned and operated by the permittee.

The permitted uses of the different categories of reclaimed water are described in OAC 252:627-1-6. Monitoring requirements for each category of reclaimed water are specified in Appendix A of OAC 252:627.

The generation and supply of the reclaimed water for reuse by the facility is described in Section II.B.3 of the fact sheet.

## B. LOCATION OF DELIVERY AND SAMPLING POINT

## Point of Delivery for Reclaimed Water and Sampling Point

	General Location	Legal Description	Latitude	Longitude
Point of Delivery and Sampling Point	Pump Station at immediate north of the third storage lagoon	NE¼, NW¼, NE¼ Section 32, Township 8 North, Range 4 West, IM McClain County, Oklahoma	35° 7' 52.503" N (GPS: NAD83 <sup>a</sup> )	97° 38' 27.744" W (GPS: NAD83 <sup>a</sup> )

<sup>&</sup>lt;sup>a</sup> The North American Datum of 1983 or NAD83.

# C. LIMITATIONS AND MONITORING REQUIREMENTS OF WATER REUSE

## 1. Authorized Land Application Sites

The land application of Category 5 reclaimed water supplied by the BMIA is permitted at two sites, R01 and R02.

The location, total area, and related information of all the authorized land application sites are described below:

## **Authorized Land Application Sites**

Site ID	Legal Description	Method of Irrigation	Total Area <sup>a</sup> (Acres)	Irrigated Area (Acres)
R01	W½, SW¼, NE¼, and N½, NW¼, SE¼, Section 32, Township 8N, Range 4W, IM McClain County	Fixed	120	49.6
R02	S½, SW¼, Section 32, Township 8N, Range 4W, IM McClain County	Sprinkler	49	23.6

Per information provided by the facility in Section III of Form 2M2 submitted to DEQ on October 31, 2023.

# 2. Soil Property and Water Balance

Per information provided in the USDA's <u>Natural Resources Conservation Services (NRCS) Soil Map</u>, the upper layer of the land application site primarily consists of fine sandy loam with 3 to 5 percent slope. These soils are expected to have a moderate to high rate of water transmission property. Based on

the NRCS soil map, the saturated hydraulic conductivity ( $K_{sat}$ ) at the site is estimated to vary from 1.27 inches per hour to 2.49 inches per hour and the weighted average  $K_{sat}$  of the land application site is estimated to be 1.94 inches per hour. Four percent of the  $K_{sat}$  is estimated to be 0.0776 inches per hour. Pursuant to Appendix D of OAC 252:656, the maximum percolation rate shall not exceed 39 inches per year (or 0.00445 inch per hour) for any land application site located to the West of I-35.

Given the primary treatment area, secondary treatment area, the City's population, the estimated per capita hydraulic loading of 100 gallons per day, and the estimated per capita organic loading of 0.17 pounds of BOD<sub>5</sub> per day, the facility meets the primary retention time and the storage time requirements in accordance with OAC 252:656-11-2.

# 3. Limitations and Monitoring Requirements

The following limitations and monitoring requirements are established for the authorized water reuse sites R01 and R02 in accordance with Appendix A of OAC 252:627:

Site ID	Limitations	Monitoring Requirements	Monitoring Frequency	Sample Type	Monitoring Location
R01	Flow (gpd)	Record a	Daily	Totalized	Pump Station
R02	Flow (gpd)	Record a	Daily	Totalized	Pump Station

When there is no supply of reclaimed water for the entire day, report "0" in the MOR, and write "No Supply" in the comment's column.

Pursuant to OAC 252:656-27-2(c), the facility shall provide flow measuring devices to measure the amount of reclaimed water being generated and distributed. Flow measurement devices shall have recording, totalizing, and instantaneous indicating capabilities. OAC 252:627-3-1(f) states that suppliers shall maintain flow measuring devices in proper working order. In accordance with OAC 252:656-25-2(h), flow measurement, in gallon 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.

The permittee will use a magnetic flow meter to measure the flow, an application for construction permit is currently under DEQ's review.

## 4. Reporting Requirements and Record Keeping

## a. Monthly Operation Reports (MORs)

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). Suppliers 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 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 upon request.

Site Name:	
------------	--

Date	Acreage Fertilized	Composition of Fertilizer (Nitrogen, Phosphorus, Potassium)	Quantity of Fertilizer Applied (lb)

## D. RESTRICTIONS FOR CATEGORY 5 RECLAIMED WATER

- 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 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 5 percent; 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 should 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; and
  - d. 100 feet from adjacent property lines.
- 3. The BMIA 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 and 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.

# E. PREVENTION OF UNAUTHORIZED ACCESS AND SIGNAGE REQUIREMENTS FOR WATER REUSE SITES

# 1. Public Access and Fencing Requirements

OAC 252:627-3-4(a)(1) and OAC 252:656-25-2(k) require that the permittee ensure all land application sites shall be fenced to prevent unauthorized entry.

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

As provided by information in Section III of the Application Form 2M2 submitted by the facility, both sites (R01 and R02) are fenced with locked gates and the permittee has operational control and access to all land application sites.

# 2. Signage Requirements Around Land Application Sites

- 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:
  - i. every three hundred (300) feet;
  - ii. at every change in direction;
  - iii. in the road easement on both sides of the road at every road crossing; and
  - iv. at every outlet.
- b. OAC 252:627-3-4(a)(2) states that 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.

All land application sites have warning signs for trespassing at the gate but not on **each side** as required by OAC 252:627-3-4(a)(2). In addition, the facility does not have any "Do Not Drink" signs. Since the permitted sites do not have the required signage, the draft permit will include a six-month compliance schedule to post the required signage.

# F. OPERATION AND MAINTENANCE OF THE DISTRIBUTION SYSTEMS

- 1. The permittee shall maintain the structural integrity of all parts of the treated wastewater (reclaimed water) distribution and irrigation system and maintain it in good working conditions.
- 2. The permittee shall ensure that pump stations are properly maintained and operated by doing the following:
  - 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.
- 3. The permittee shall provide flow measuring devices to measure the amount of treated wastewater being distributed to each user. Flow measurement devices should have recording, totalizing and instantaneous indicating capabilities.
- 4. Cross connections between treated wastewater/RW distribution lines and the public water supply lines are prohibited. The supplier and the user shall meet the requirements of OAC 252:626-5-15 and OAC 252:656-9-2.

## G. 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 OCA 252:627. Modification and/or reissuance of the permit shall follow regulations listed at OAC 252:004.

#### H. COMPLIANCE SCHEDULE

The facility shall achieve compliance in accordance with the following schedule:

	Task	Date Due		
1	The facility shall complete the construction/installation of a flow measuring device for each land application site in accordance with OAC 252:656-27-2(c);			
2.	To comply with the requirement of OAC 252:627-3-4(a), the facility shall install signs on or near the fence <b>on each side</b> of the water reuse sites to discourage unauthorized access; and	6 months from the effective date of the permit		
3.	To comply with the requirements of OAC 252:656-27-4(a), the facility shall post signs at appropriate places to discourage drinking of reclaimed water.			
4.	Send notice of completion of Task 1 2 & 3 to the local ECLS office with copy to the Municipal Wastewater Enforcement Section of the Water Quality Division at DEQ.			

#### VIII. SUMMARY OF CHANGES FROM PREVIOUS PERMIT

Not applicable. This is a first-time discharge permit and permit to supply reclaimed water.

## IX. REVIEW BY OTHER AGENCIES AND FINAL DETERMINATION

A public notice which includes a link to the DEQ webpage where the draft permit may be viewed will be sent to various Federal and State agencies upon posting the draft permit in the DEQ webpage. If comments are received from these agencies or other State or Federal agencies with jurisdiction over fish, wildlife, or public health, the permit may be denied, or additional conditions may be included in accordance with regulations promulgated at 40 CFR § 124.59.

The public notice describes the procedures for the formulation of final determinations.