
September 10, 2026

Waylie Pettit, Park Manager
c/o Alex Lukehart, Assistant Park Manager
Greenleaf State Park
12022 Greenleaf Rd.
Braggs, OK 74423

Re: DEQ Application for Renewal, OPDES Discharge Permit No. OK0044253
Facility ID No. W20405, Greenleaf State Park Water Treatment Plant, Muskogee County, Oklahoma

Dear Ms. Pettit:

The Oklahoma Department of Environmental Quality (DEQ) has been granted authority to issue permits for the disposal of pollutants in the State of Oklahoma subsequent to public notice. Pursuant to 27A O.S. § 2-14-302, we are enclosing a Public Notice of Draft Permit that the applicant must review for accuracy and publish in at least one daily or weekly newspaper local to the area affected by the proposed wastewater treatment/disposal facility. The public notice of draft permit must be published within **10 days** of receipt of this letter. After publishing the public notice, please collect a notarized proof of publication from the publisher and submit it to DEQ at kim.buichai@deq.ok.gov.

The public notice informs the public of where they can view supporting documents for the draft permit. For this reason, we are also enclosing two copies of the draft permit and fact sheet. One set is for your inspection, and the other set must be placed in the Greenleaf State Park Office, 12022 Greenleaf Rd., Braggs, OK 74423, for viewing by the public. A copy of the application, Form (2M2), which you submitted and was received by DEQ on April 8, 2026, must also be placed at the above location for viewing by the public. If you need to obtain a copy of your application, please contact the Central Records Section of DEQ at centralrecords@deq.ok.gov. Changes from the previous permit are listed on page 11 of the fact sheet.

The public comment period will end 30 days after the public notice has been published in a newspaper local to the area where the facility is located or 30 days after DEQ publishes its statewide notice of draft permit, whichever occurs later. All comments and/or requests for a public meeting must be received by this date, unless extended for good cause by DEQ. If a request for a public meeting has been granted, the applicant will be notified and provided a copy of the request.

If you have any questions concerning this matter, please contact Emily Greeno at (405) 702-8213.

Sincerely,



Michael B. Moe, P.E., Manager
Municipal Discharge and Stormwater Permits Section
Water Quality Division

MBM/EG/kb

Enclosures

Public Notice of Draft Permit
Publish this Page ONLY Once!

NOTE TO PUBLISHERS (not part of Notice to be published): Oklahoma Department of Environmental Quality has no responsibility and assumes no responsibility for the cost of publishing this Public Notice of Draft Permit.

PUBLIC NOTICE OF ISSUANCE OF DRAFT TIER II PERMIT

POLLUTANT DISCHARGE APPLICATION NO. OK0044253

Notice is hereby given that the Oklahoma Department of Environmental Quality (DEQ) has issued a draft permit to the **Oklahoma Tourism and Recreation Department (OTRD) (owner) and Greenleaf State Park (operator)**, 12022 Greenleaf Rd., Braggs, OK 74423, based on a Tier II application filed on April 8, 2026, for a renewal permit with DEQ. A final permit, if issued, would allow OTRD and Greenleaf State Park to discharge treated filter backwash water from their facility, the **Greenleaf State Park Water Treatment Plant (WTP)**, which is located in the NW¼, SW¼, SW¼ of Section 2, Township 13 North, Range 20 East, Indian Meridian (I.M.), **Muskogee County**, Oklahoma. The Greenleaf State Park WTP is a municipal facility that provides public water services. The proposed discharge consists of effluent from the Greenleaf State Park WTP. The discharge from Outfall 001, which is located at latitude 35° 37' 33.697" N, longitude 95° 09' 44.931" W (GPS: NAD83) in Muskogee County, Oklahoma, will be to Greenleaf Lake. The residuals generated by the facility are self-contained within the filter backwash lagoon system.

A copy of the draft permit, fact sheet, and application may be reviewed at the Greenleaf State Park Office, Greenleaf State Park, 12022 Greenleaf Rd., Braggs, OK 74423, from 9:00 a.m. to 5:30 p.m. A copy of the draft permit may also be reviewed on the DEQ website at <https://oklahoma.gov/deq/permits/permit-assistance/permits-for-public-review.html>.

Pursuant to 27A O.S. § 2-14-302, people wishing to make comments concerning the draft permit may do so by sending the comments in writing to the Contact Person for DEQ, at the address listed below, within 30 days after the date of publication or mailing. Comments should include: (1) name and address of the interested person, (2) the application name to which the request relates, (3) the nature and basis of the interest of the person affected, and (4) a statement of the objection or comment, the basis of the objection or comment, and any requested action by DEQ.

The contact person for the DEQ, to schedule a date and time to review the draft permit at the office of DEQ is:

Kim Bui-Chai, Administrative Assistant
Municipal Discharge and Stormwater Permits Section
Water Quality Division
Oklahoma Department of Environmental Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677
(405) 702-8238
Email: kim.buichai@deq.ok.gov

The contact person for Greenleaf State Park is:

Alex Lukehart, Assistant Park Manager
Greenleaf State Park
12022 Greenleaf Rd.
Braggs, OK 74423
(918) 487-5622

Pursuant to 27A O.S. § 2-14-302, people wishing to request a public meeting concerning the draft permit may do so by filing the request in writing to the Contact Person for DEQ, at the address listed above, within 30 days after the date of publication or mailing. Requests for the public meeting should include: (1) name and address of the interested person, (2) the application name to which the request relates, (3) the nature and basis of the interest of the person affected, and (4) a statement of objection or comment, the basis of the objection or comment, and any requested action by DEQ. A copy of the request must also be sent to the applicant, through the contact person listed above. A formal public meeting may be scheduled if there is a significant degree of public interest. Notice of the date, time and place of the public meeting will be given to all parties of record. A request for a public meeting may be combined with a submission of written comments.

If a public meeting is held, oral or written comments will be accepted at the meeting. DEQ shall, within 90 days of the date the public comment period closes (or longer if extended by the Executive Director of DEQ), issue responses to all public comments received.

Draft of September 2, 2026

**AUTHORIZATION TO DISCHARGE UNDER THE
OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**PERMIT NUMBER: OK0044253
ID NUMBER: W20405**

PART I

In compliance with the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, Title 27A Oklahoma Statutes (O.S.) § 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); the Federal Clean Water Act (CWA), Public Law 95-217 (33 U.S.C. 125 *et seq.*), Section 402; and the National Pollutant Discharge Elimination System (NPDES) regulations at Title 40 of the Code of Federal Regulations (C.F.R.) Parts 122 and 124),

Oklahoma Tourism and Recreation Department (owner)
Greenleaf State Park (operator)
12022 Greenleaf Rd.
Braggs, OK 74423

is hereby authorized to discharge treated wastewater from the Greenleaf State Park Water Treatment Plant, located at approximately

NW¼, SW¼, SW¼
Section 2, Township 13 North, Range 20 East, Indian Meridian (I.M.)
Muskogee County, Oklahoma

to receiving waters: Greenleaf Lake, at the point located at approximately

Latitude: 35° 37' 33.697" N [GPS: NAD83]
Longitude: 95° 09' 44.931" W [GPS: NAD83]

Waterbody ID # OK120400010130_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 August 27, 2021.

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

George Russell IV, Director
Water Quality Division

A. Effluent Limitations and Monitoring Requirements (Outfall 001)

1. Final Limitations

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

Effluent Characteristic	Discharge Limitations			Monitoring Requirements	
	Mass Loading (lb/day)	Concentrations (mg/L, unless otherwise specified)		Frequency ^a	Sample Type
	Monthly Avg.	Monthly Avg.	Daily Max.		
Flow (mgd) [STORET: 50050]	---	Report	Report	Daily	Instantaneous
Total Suspended Solids [STORET: 00530]	0.40	20.0	30.0	1 per month ^b	Grab
Iron, Dissolved [STORET: 01046]	0.02	1.0	2.0	1 per month ^b	Grab
Aluminum, Dissolved ^c [STORET: 01106]	0.02	1.0	2.0	1 per month ^b	Grab
Manganese, Dissolved [STORET: 01056]	0.02	1.0	2.0	1 per month ^b	Grab
pH (s.u.) [STORET: 00400]	---	6.5 – 9.0		2 per week	Grab
Total Residual Chlorine [STORET: 50060]	---	Instantaneous Maximum: No measurable ^d		1 per week	Grab

^a When discharging.

^b Readings may be averaged for the month if an individual sample is in excess of the monthly average.

^c If no alum (or other aluminum salt) is used for an entire reporting period, the permittee shall report a value of “zero” for the monthly average and enter “no alum (or other aluminum salt) used this reporting period” in the comments section on the DMR for that reporting period.

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

2. Sampling Point

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

3. 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. 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://oklahoma.gov/deq/divisions/water-quality/wastewater-stormwater/electronic-reporting.html>. 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, 2026.

PART II. OTHER PERMIT REQUIREMENTS

- A. The permittee is hereby given notice that this permit is in all respects subject to compliance with and actions under any and all applicable and relevant terms, conditions, provisions and requirements and any and all amendments of the laws of the State of Oklahoma, DEQ rules, and Oklahoma's Water Quality Standards. The absence of any express reference within this permit of any particular statutory requirement, rule(s), regulation(s), or standard(s) shall in no respect be deemed or construed to exempt or preclude the application of such requirement, rule(s), regulation(s), or standard(s) to this permit or the permittee.
- B. All laboratory analyses for the parameters specified in this permit must be performed by a laboratory accredited by DEQ for those parameters.
- C. Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 C.F.R. Part 136 in effect on the effective date of this permit. Appendices A, B, and C to 40 C.F.R. Part 136 are specifically referenced as part of this requirement. Amendments to 40 C.F.R. Part 136 promulgated after the effective date of this permit shall supersede these requirements as applicable.

D. RESIDUALS/SLUDGE REQUIREMENTS

- 1. The residuals (sludge) shall not be removed from this facility, nor shall the facility be closed until a Residuals Management Plan, or Closure Plan if applicable, has received written approval by DEQ. At a minimum, the plan must demonstrate that those residuals (sludge) beneficial use and/or disposal practices comply with the DEQ rules governing Residuals Management (OAC 252:626-13). The facility is currently in the process of securing approval from DEQ for its Residuals Management Plan.
- 2. All residuals (sludge) must be handled, beneficially used, and/or disposed of in accordance with all applicable state (OAC 252:626-13-2 and OAC 252:515) and federal regulations (40 C.F.R. Parts 257 and 503) to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present.
- 3. Residuals (sludge) generated at a potable water treatment plant may be beneficially used by land application or as fill material only if the facility has an approved residuals (sludge) permit that defines the location and operating conditions and other requirements to be met. Current residuals (sludge) permits available include General Permits OKG65A (for alum) and OKG65L (for lime) or an individual residuals permit. The constituents to be monitored for and the sampling frequencies for each constituent are also defined in the Residuals Management Plan.
- 4. A written authorization from DEQ is required for disposal of the residuals (sludge) at a landfill. A letter stating the treatment of the residuals to remove excess water and the location of the landfill shall be submitted to DEQ to receive this authorization.
- 5. All records relevant to the residuals (sludge) beneficial use and/or disposal, including analytical results specified in the Residuals Management Plan approved by DEQ, shall be kept at the facility for a period of five (5) years and shall be made available to DEQ staff upon request.
- 6. The permittee shall notify DEQ at least 120 days prior to implementing any changes in the residuals beneficial use and/or sludge disposal practices.

E. 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 C.F.R. § 124.5.

FACT SHEET

(Draft of September 2, 2026)

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

OPDES Permit Number: OK0044253

Facility ID Number: W20405

Applicant: Oklahoma Tourism and Recreation Department (owner)
Greenleaf State Park (operator)
12022 Greenleaf Rd.
Braggs, OK 74423

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: Emily Greeno, Permit Writer
Municipal Discharge and Stormwater Permits Section
Water Quality Division

Date Prepared: September 2, 2026

Reviewed By: Michael B. Moe, P.E., Manager
Municipal Discharge and Stormwater Permits Section
Water Quality Division

and

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 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 (C.F.R.) Parts 122 and 124 and the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, Title 27A Oklahoma Statutes (O.S.) § 2-6-201 *et seq.*, as amended, and the rules of DEQ adopted thereunder (see the Oklahoma Administrative Code (OAC) 252:606, 730, and 740).

I. PERMITTING BACKGROUND

A. CHRONOLOGY OF PERMITTING ACTIVITIES

The following is a chronology of permitting activities since issuance of the previous OPDES permit:

September 30, 2026:	Scheduled expiration of previous OPDES permit.
Month Date, Year:	Public Notice of Draft published by Facility.
Month Date, Year:	Public Notice of Draft published by DEQ.
Month Date, Year:	Draft permit package sent to applicant for public notice.
August 6, 2026:	Draft permit package sent to applicant for courtesy review.
June 25, 2026:	Administrative review of permit application completed.
June 24, 2026:	Additional information received from applicant.
June 18, 2026:	Certification of public notice of filing of application received.
May 15, 2026:	Notice of incomplete application sent to applicant.
May 14, 2026:	Site visit conducted.
April 8, 2026:	OPDES permit application (Form 2M2) received.
August 27, 2021:	Previous OPDES permit issued.

B. PROPOSED PERMITTING ACTION

It is proposed that Permit No. OK0044253, which was effective October 1, 2021, and expires September 30, 2026, for which application for renewal was not timely submitted (<180 days prior to permit expiration), be reissued for a five-year term in accordance with regulations promulgated at 40 C.F.R. § 122.46(a) and OAC 252:606-1-3(b).

II. APPLICANT ACTIVITY

A. DESCRIPTION AND LOCATION OF FACILITY

The Greenleaf State Park Water Treatment Plant (WTP), owned by the Oklahoma Tourism and Recreation Department (OTRD) and operated by Greenleaf State Park, is located in the NW¼, SW¼, SW¼ of Section 2, Township 13 North, Range 20 East, Indian Meridian (I.M.), Muskogee County, Oklahoma. Under the Standard Industrial Classification (SIC) Code 4941 or the North American Industry Classification System (NAICS) Code 221310, the facility provides public water supply services.

B. WASTEWATER GENERATION AND TREATMENT

The facility is a conventional water treatment plant with a production capacity of approximately 0.036 million gallons per day (mgd) of potable water. Greenleaf Lake is the source of raw water. The wastewater from the filter backwash operation undergoes settling in a two-cell lagoon system before being discharged. Per information provided in the permit application, the average discharge from the filter backwash operations through Outfall 001 is about 0.0024 mgd.

III. DISCHARGE LOCATION AND INFORMATION

A. DISCHARGE LOCATION

The facility discharges effluent through Outfall 001 to Greenleaf Lake. Sampling point and outfall locations and receiving stream information are summarized in the following table:

Sampling Point and Outfall Location

Sampling Point and Outfall	Location			Receiving Stream
	Legal Description	Latitude	Longitude	
Outfall 001 (physical location and sampling point)	NW¼, SW¼, SW¼ Section 2, Township 13 North, Range 20 East, I.M., Muskogee County, Oklahoma	35° 37' 33.697" N (GPS: NAD83 ^a)	95° 09' 44.931" W (GPS: NAD83 ^a)	Greenleaf Lake

^a The North American Datum 1983 or NAD83.

B. DISCHARGE INFORMATION

Per information provided in the permit application and the previous permit, the volume of filter backwash generated is approximately 0.0024 mgd. Flow data from Discharge Monitoring Reports (DMRs) was not used, as it did not appear to be representative of the actual discharge.

IV. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

A. General

Regulations promulgated at 40 C.F.R. § 122.44(a) and OAC 252:606-5-2 require technology-based effluent limitations to be placed in OPDES permits based on effluent limitation guidelines, where applicable, on Best Professional Judgment (BPJ) of the permit writer in the absence of guidelines, or on a combination of the two.

B. Applicable Effluent Limitations Guidelines

Technology-based effluent limitation guidelines (ELG) have not been promulgated for filter backwash operations. Therefore, the following proposed permit limitations have been developed and are based on EPA Region 6's recommendations for discharges from water treatment plants and previously issued State permits for water treatment plants that use lime, alum (or other aluminum salts) or ferric chloride to treat water; and use chlorine, chlorine dioxide or ozone to disinfect the treated water in order to provide potable water to the public; and discharge wastewater resulting from the backwashing of filters. The limits established for total suspended solids and pH are judged to represent the degree of effluent reduction attainable through the application of Best Conventional Pollutant Control Technology (BCT). The limits established for dissolved iron, aluminum, and manganese are judged to represent the level of treatment attainable through the application of the Best Available Technology economically achievable (BAT).

Effluent Limitations for Filter Backwash Wastewater

Parameter	Concentration ^a	
	Monthly Avg.	Daily Max.
Total Suspended Solids (TSS)	20.0	30.0
Iron, Dissolved	1.0	2.0
Aluminum, Dissolved ^b	1.0	2.0
Manganese, Dissolved	1.0	2.0
pH (standard unit)	6.5 – 9.0	

^a Concentration units are in mg/L, unless otherwise specified.

^b Limitation and monitoring requirements shall be required, if alum (or other aluminum salt) is used as part of the water treatment process.

V. WATER QUALITY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

A. GENERAL

Section 101 of the Clean Water Act (CWA) states that "... it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited...." A permit containing technology-based permit limitations alone may not adequately protect the quality of a specific receiving stream. Thus, additional water quality-based effluent limitations and/or conditions are considered in the draft permit using narrative and numerical standards contained in Oklahoma's Water Quality Standards (OWQS), OAC 252:730 and OWQS implementation criteria contained in OAC 252:606 and OAC 252:740, promulgated by DEQ. This is to ensure that no point-source discharge results in instream aquatic toxicity, a violation of applicable narrative or numerical State water quality standards, or aquatic bioaccumulation which threatens human health.

B. RECEIVING STREAM DESIGNATED USES AND ANTIDegradation PROVISIONS

Outfall 001

The facility discharges through Outfall 001 into Greenleaf Lake, waterbody identification (WBID) # OK120400010130_00, in Segment 120400 of the Middle Arkansas River Basin. As designated in Appendix A of OWQS, the designated beneficial uses in this segment are:

- Public and Private Water Supplies (OAC 252:730-5-10)
- 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)

At a distance of approximately 0.79 miles from the point of discharge (POD), Greenleaf Lake flows into Webbers Falls Lake (WBID # OK120400010070_00). As designated in Appendix A of OWQS, the designated beneficial uses of Webbers Falls Lake in this segment are:

- Emergency Public and Private Water Supplies (OAC 252:730-5-11)
- 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)
- Navigation (OAC 252:730-5-18)
- Aesthetics (OAC 252:730-5-19)
- Fish Consumption (OAC 252:730-5-20)

Since the designated beneficial uses of Greenleaf Lake are more protective/stringent than Webbers Falls Lake, the draft permit will be protective of the designated beneficial uses of Greenleaf Lake.

Greenleaf Lake is not designated as an Outstanding Resource Water (ORW) or High Quality Water (HQW) in Appendix A of the OWQS. However, Greenleaf Lake is designated as a Sensitive Water Supply (SWS) and requires tier 2.5 protection. See Section V.E below for additional discussion of SWS anti-degradation protections.

The stream segment 120400 in which the discharge lies is designated in Table 1 of Appendix B of OWQS as an area of ecological and/or recreational significance. Table 1 lists the protected areas/waters as the Cherokee Wildlife Management Area (WMA), Greenleaf State Park, (Camp) Gruber Training Center, Heyburn WMA, Sheppard Point Recreational Area, and Webbers Falls WMA. Heyburn WMA and the Sheppard Point Recreational Area are upstream of the discharge. The discharge lies within/a short distance away from the Cherokee WMA, Greenleaf State Park, (Camp) Gruber Training Center, and Webbers Falls WMA areas/waters. See Section V.E. for discussion of protections for Appendix B, Table 1 waters.

The segment is not listed in Table 2 of Appendix B as area which contains federally listed threatened or endangered species pursuant to the Federal Endangered Species Act.

C. WATER QUALITY STANDARDS IMPLEMENTATION

1. Public and Private Water Supply

Based on the characteristics of the filter backwash wastewater being discharged from potable water treatment facilities, the discharge is not expected to contain pollutants at levels that would require limits and/or monitoring requirements to protect the designated use.

2. Fish and Wildlife Propagation

a. Dissolved Oxygen (DO)-Demanding Substances

Based on the characteristics of the filter backwash wastewater being discharged from potable water treatment facilities, DO demanding substances are not expected to be present in the discharge. Therefore, neither effluent limits nor monitoring requirements for DO demanding substances are not needed in this permit.

b. pH

OAC 252:730-5-12(f)(3) states, "The 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 this permit.

c. Oil and Grease

Based on the characteristics of the filter backwash wastewater being discharged from potable water treatment facilities, oil and grease is not expected to be present in the discharge. Therefore, neither effluent limits nor monitoring requirements for oil and grease are needed in this permit. However, 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.

d. Toxicity from Halogenated Oxidants

Water used for backwashing filters at potable water treatment facilities may contain some residual disinfectant resulting from the treatment and disinfection of water prior to distribution to the public. Filter backwash wastewater must be allowed enough detention time in the properly designed holding ponds in accordance with OAC 252:626-13-4 so that disinfectant residual is completely dissipated. However, a review of Discharge Monitoring Reports (DMRs) from similar facilities across the state indicated that TRC was detected at measurable amounts (values were equal or greater than 0.1 mg/L), possibly due to shorter detention time and infrequent pond maintenance. Therefore, a TRC limit of no measurable amount (defined as <0.1 mg/L) is now established for all the conventional potable water treatment facilities with filter backwashing discharge, to help ensure that the backwash ponds are properly operated and maintained and also ensure that the discharge does not cause or contribute to a violation of water quality standards due to toxicity from halogens.

e. Other Toxic Substances

Based on the characteristics of the filter backwash wastewater being discharged from conventional potable water treatment facilities, toxic substances are not expected to be present in the discharge at levels which might cause or contribute to violations of water quality standards for fish and wildlife propagation or for human health. Therefore, neither effluent limits nor monitoring requirements for toxic substances are needed in this permit except when the receiving stream does not meet water quality standards necessary to support beneficial uses or is identified as impaired on the latest 303(d) List. In such cases, additional monitoring or permit action may be required; see Section V.D. for additional discussion.

3. Primary/Secondary Body Contact Recreation Use

Based on the characteristics of the filter backwash wastewater being discharged from potable water treatment facilities, bacteria are not expected to be present in the discharge at levels that could affect the designated use. Therefore, neither effluent limits nor monitoring requirements for bacteria are needed in this permit.

4. Aesthetics Use

Aesthetics use is determined in accordance with OAC 252:730-5-19. A narrative condition prohibiting the discharge of floating solids or visible foam in other than trace amounts will be included in the draft permit.

5. Fish Consumption

In accordance with OAC 252:730-5-20(a), "surface waters of the state shall be maintained so that toxicity does not inhibit ingestion of fish and shellfish by humans." Based on the characteristics of the filter backwash wastewater being discharged from potable water treatment facilities, the discharge does not contain pollutants at levels which would require fish consumption water quality limits or monitoring.

6. Pretreatment Program

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

7. Sludge/Residuals Requirements

The residuals (sludge) from this facility are self-contained within the filter backwash lagoon and the residuals holding ponds.

All residuals (sludge) must be handled, beneficially used, and/or disposed of in accordance with all applicable state (OAC 252:626-13-2 and OAC 252:515) and federal regulations (40 C.F.R. Parts 257 and 503) to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants which may be present.

In accordance with OAC 252:626-3-6(c)(10), the permittee shall be required to prepare and obtain approval of a Residuals Management Plan from DEQ prior to removing residuals (sludge) from the facility. The facility is currently in the process of securing approval from DEQ for its Residuals Management Plan.

Residuals (sludge) generated at a potable water treatment plant may be beneficially used by land application or as fill material only if the facility has an approved residuals (sludge) permit that defines the location and operating conditions and other requirements to be met. Current residuals (sludge) permits available include General Permits OKG65A (for alum) and OKG65L (for lime) or an individual residuals permit. The constituents to be monitored for and the sampling frequencies for each constituent are also defined in the Residuals Management Plan.

A written authorization from DEQ is required for disposal of the residuals (sludge) at a landfill. A letter stating the treatment of the residuals to remove excess water and the location of the landfill shall be submitted to DEQ to receive this authorization.

All records relevant to the residuals (sludge) beneficial use and/or disposal, including analytical results specified in the Residuals Management Plan approved by DEQ, shall be kept at the facility for a period of five (5) years and shall be made available to DEQ staff upon request.

The permittee shall notify DEQ at least 120 days prior to implementing any changes to the approved residuals (sludge) beneficial use and/or disposal practices.

D. 303(d) LIST ASSESSMENT

The facility discharges into Greenleaf Lake (WBID # OK120400010130_00), in Segment 120400 of the Middle Arkansas River basin, which is on the Category 5 303(d) list, in Appendix C of the 2024 Integrated Report. The listed causes are chlorophyll-a and mercury.

1. Chlorophyll-a

The processes and/or chemicals used at a conventional water treatment plant are not likely to add nutrients to the waste stream. Therefore, the discharge from the filter backwash of the water treatment plant is not expected to contain any pollutants that contribute to chlorophyll-a impairment.

2. Mercury

Based on the characteristics of the filter backwash wastewater being discharged, mercury or compounds of mercury are not expected to be present in the discharge. Therefore, neither effluent limits nor monitoring requirements for mercury are needed in this permit.

Greenleaf Lake flows into Webbers Falls Lake (WBID # OK120400010070_00) downstream of the POD. Webbers Falls Lake is also on the Category 5 303(d) list, in Appendix C of the 2024 Integrated Report. The listed cause is turbidity.

3. Turbidity

Controls for turbidity are established in the draft permit through effluent limits for TSS.

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

E. ANTIDEGRADATION REQUIREMENTS

Greenleaf Lake is listed in Appendix A of OWQS as a waterbody with 'Sensitive Public and Private Water Supplies (SWS)' limitations. In addition, the stream Segment 120400 in which the discharge lies is listed in OWQS, Appendix B, Table 1 as an area/water of ecological and/or recreational significance. Because antidegradation restrictions are listed in OWQS for this waterbody, implementation of Oklahoma's antidegradation policy, as described at OAC 252:740-13, must occur.

Regarding SWS protections, OAC 252:740-13-5(b) states, "New point source discharges of any pollutant after June 11, 1989, and increased load of any specified pollutant from any point source discharge existing as of June 11, 1989, shall be prohibited in any waterbody or watershed designated in Appendix A of OAC 252:730 with the limitation "SWS". Any discharge of any pollutant to a waterbody designated 'SWS' which would, if it occurred, lower existing water quality shall be prohibited. Provided however, new point source discharge(s) or increased load of **specified pollutant** from a discharge existing as of June 11, 1989, may be approved by the permitting authority in circumstances where the discharger demonstrates to the satisfaction of the permitting authority that such new discharge or increased load will result in maintaining or improving the water quality in both the direct receiving water, if designated SWS, and any downstream waterbodies designated SWS."

Regarding Appendix B protections, Table 1 lists the relevant protected areas/waters as the Cherokee WMA, Greenleaf State Park, (Camp) Gruber Training Center, and Webbers Falls WMA areas/waters. The discharge lies within/a short distance away from these protected areas/waters. OAC 252:740-13-

7(b) states, "New discharges of pollutants after June 11, 1989, or increased loading from discharges existing as of June 11, 1989, to waters within the boundaries of areas listed in Table 1 of Appendix B of OAC 252:730 may be allowed under such conditions that ensure that the recreational and ecological significance of these waters will be maintained."

The facility commenced discharge prior to June 11, 1989, and thus is not subject to the prohibition against new point source discharges to SWS waters in OAC 252:740-13-5(b). Effluent limitations have been established in the draft permit to ensure that levels of TSS present in the discharge will not cause or contribute to violations of WQS for turbidity, or impairment of water quality or beneficial uses. In addition, as noted above, other pollutants are not anticipated to be present in the discharge at levels that could cause or contribute to violations of WQS, or impairment of water quality or beneficial uses. Thus, the reissuing of this permit is not likely to adversely affect any SWS waters or any Appendix B areas with waters of recreational and/or ecological significance. Also, since this is a permit renewal of an existing discharge with no proposed increase in flow, the permit also meets the anti-degradation requirements of OAC 252:740-13-4(b) for SWS waters that there be no increased loading of specified pollutants in the discharge.

F. PROTECTION OF ENDANGERED AND THREATENED SPECIES AND CRITICAL HABITAT

The discharge point is not located in waters identified as sensitive by the United States Fish and Wildlife Service (USFWS) for endangered or threatened species or critical habitat; therefore, notification to the USFWS is not required, other than through the standard public notice process.

G. 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 C.F.R. § 124.5.

VI. SUMMARY OF PROPOSED PERMIT EFFLUENT LIMITATIONS

A. GENERAL

In accordance with 40 C.F.R. § 122.44(a), (d) and (l), pollutant limitations and monitoring requirements are established in the draft permit based on the more stringent of technology-based, water quality-based or previous permit requirements. Both concentration and mass loading limits are established unless it is impractical to specify loading limits because of the units in which concentration limits are expressed (e.g., standard units for pH or degrees for temperature). Such loading limitations are calculated for each affected outfall using the previous permit's design average daily flow, $Q_{e(D)} = 0.0024$ mgd, and the following equation:

Mass loading limit (*in lb/day*) = Concentration limit (*in mg/L*) $\times$ $Q_{e(D)}$ (*in mgd*) $\times$ 8.34

B. OUTFALL 001

1. Final Limitations

Final limits and reporting requirements are effective on the effective date of the permit:

a. Final Concentration Limitations and Reporting Requirements

Effluent Characteristic ^a	Previous Permit		Draft Permit	
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.
Total Suspended Solids	20.0	30.0	20.0 ^b	30.0
Iron, Dissolved	1.0	2.0	1.0 ^b	2.0
Aluminum, Dissolved ^c	1.0	2.0	1.0 ^b	2.0
Manganese, Dissolved	1.0	2.0	1.0 ^b	2.0
Total Residual Chlorine	Report		Instantaneous Maximum: No measurable ^d	
pH (standard units)	6.5 to 9.0		6.5 to 9.0	

^a Concentration units are in mg/L, unless otherwise specified.

^b Readings may be averaged for the month if an individual sample is in excess of the monthly average.

^c If no alum (or other aluminum salt) is used for an entire reporting period, the permittee shall report a value of "zero" for the monthly average and enter "no alum (or other aluminum salt) used this reporting period" in the comments section on the DMR for that reporting period.

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

b. Final Mass Loading Limitations and Reporting Requirements

Effluent Characteristic ^a	Previous Permit	Draft Permit
Flow (mgd)	Report (Daily Max. & Monthly Avg.)	Report (Daily Max. & Monthly Avg.)
Total Suspended Solids	0.40	0.40
Iron, Dissolved	0.02	0.02
Aluminum, Dissolved	0.02	0.02
Manganese, Dissolved	0.02	0.02

^a Mass loading units are in lb/day, unless otherwise specified.

c. Final Monitoring Requirements and Sample Types (Outfall 001)

Effluent Characteristic	Previous OPDES Permit		Draft Permit	
	Measurement Frequency	Sample Type	Measurement Frequency ^{a, b}	Sample Type ^b
Flow	Daily	Instantaneous	Daily	Instantaneous
Total Suspended Solids	1 per month	Grab	1 per month	Grab
Iron, Dissolved	1 per month	Grab	1 per month	Grab
Aluminum, Dissolved	1 per month	Grab	1 per month	Grab
Manganese, Dissolved	1 per month	Grab	1 per month	Grab
Total Residual Chlorine	1 per week	Grab	1 per week	Grab
pH	2 per week	Grab	2 per week	Grab

^a When discharging.

^b Monitoring Frequencies are in accordance with OAC 252:606 Appendix G, with the exception of Flow, which is being maintained at the existing "Daily" measurement frequency due to the discharge being to a SWS.

VII. SUMMARY OF CHANGES FROM PREVIOUS PERMIT

The changes that have been made to the draft permit compared to the previous permit are as follows:

- The legal description of the facility location and the latitude/longitude of the outfall location have been corrected in the draft permit.
- A limit of "Instantaneous Maximum: No measurable" was added for total residual chlorine (TRC).

VIII. REVIEW BY OTHER AGENCIES AND FINAL DETERMINATION

A public notice which includes a link to DEQ's webpage where the draft permit may be viewed will be sent to various Federal and State agencies upon posting the draft permit in DEQ's webpage. If comments are reviewed 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 C.F.R. § 124.59.

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