# OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT OKG38 TO DISCHARGE WASTEWATER FROM FILTER BACKWASH OPERATIONS AT CONVENTIONAL POTABLE WATER TREATMENT PLANTS

#### **GENERAL PROVISIONS**

As provided by Title 27A O.S. § 2-6-201 *et seq.* as amended, and the Rules of the Department of Environmental Quality (DEQ), operators of conventional potable water treatment plants within the boundaries of the State of Oklahoma will be authorized to discharge wastewater resulting from the backwashing of filters in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

Beneficial use of residuals (sludge) by land application or as fill material must be conducted under a separate DEQ residuals permit (General Permit OKG65A for alum or OKG65L for lime, or an individual residuals permit). Disposal of residuals (sludge) at a landfill must have written authorization from DEQ. Application forms for residuals permits or disposal plans may be obtained by contacting the Municipal Enforcement Section of the Water Quality Division of DEQ.

Each potable water treatment plant is required to obtain an authorization to discharge wastewater and/or dispose of residuals (sludge) from the Executive Director of DEQ. An Owner or operator of a conventional potable water treatment plant located within the boundaries of the State of Oklahoma must submit an electronic application, per 40 C.F.R. 127.11(b), using DEQ Form 606-G38, to DEQ to discharge wastewater under this general permit and receive an Authorization prior to commencing any such discharge. Owners or operators of potable water treatment plants within the scope of this general permit who fail to submit an electronic application, per 40 C.F.R. 127.11(b), using DEQ Form 606-G38, to DEQ are not authorized to discharge wastewater under this general permit.

This general permit covers only conventional potable water treatment plants (SIC Code 4941) constructed in accordance with OAC 252:626, and that use lime or sodium hydroxide to control alkalinity and/or pH; use alum, ferric chloride, or polymer to coagulate; and/or use chlorine, chlorine dioxide or ozone for primary disinfection. The general permit also covers packaged water treatment plants that utilize only the same processes.

This general permit shall not cover any potable water treatment plant that:

- discharges greater than or equal to one (1) million gallons per day (mgd);
- uses non-conventional treatment processes such as ion exchange (brine or zeolite) for softening, use electrode ionization for coagulation, or membrane filtration (microfiltration, ultrafiltration, nanofiltration or reverse osmosis) as defined in OAC 252:626-9-9(f);
- has fewer than two lagoon cells for the treatment of filter backwash water or has lagoons that are not constructed in accordance with OAC 252:626-13-4 and OAC 252:656-11; or
- has a wasteload allocation with effluent limits that are more stringent than the limits established in the general permit.

This general permit shall not cover supply of reclaimed water for land application or other water reuse. Such water reuse requires a Permit to Supply in accordance with OAC 252:627.

In addition, this general permit shall not cover:

- facilities that discharge within five (5) miles upstream of waterbodies defined in Oklahoma Water Quality Standards as Outstanding Resource Water [OAC 252:730-5-25(c)(1)], High Quality Water [OAC 252:730-5-25(c)(3)], Sensitive Public and Private Water Supplies [OAC 252:730-5-25(c)(4)], and Appendix B Waters [OAC 252:730-5-25(c)(2)];
- new discharges that are within five (5) miles upstream of a lake, as the mixing zone and wasteload allocation for a discharge to a lake are determined on a case-by-case basis. Additional or more stringent effluent

limitations may also apply in accordance with Oklahoma's policy for discharges to state lakes (2012 Continuing Planning Process document, pp. 42-44);

- new facilities, or existing facilities with proposed increases in the discharge volume or proposed changes in the location of the discharge point, that discharge into culturally significant waters as defined at OAC 252:730-5-25(c)(7) and designated in Appendix A of OAC 252:730;
- facilities that discharge within five (5) miles upstream of waterbodies with the Cool Water Aquatic Community subcategory of the Fish and Wildlife Propagation beneficial use (OAC 252:730-5-12(d)) that are listed on the 303(d) List in Appendix C of the most current approved Integrated Report as impaired caused by turbidity or pH for which a TMDL has not been performed, or the result of the TMDL indicates that discharge limits more stringent than 20 mg/L monthly average or 30 mg/L daily maximum for total suspended solids, or more stringent than 6.5 9.0 standard units for pH are required; or
- new facilities, or existing facilities with proposed increases in the discharge volume or proposed changes in the location of the discharge point, that discharge into waters designated by the U.S. Fish and Wildlife Service (USFWS) pursuant to the federal Endangered Species Act as sensitive for threatened or endangered species or critical habitat.

For existing facilities applying for coverage under this general permit where the point of discharge is located in culturally significant waters or waters designated by the U.S. Fish and Wildlife Service as sensitive for threatened or endangered species or critical habitat, and there have been no changes in the discharge volume or the location of the point of discharge, DEQ has determined that issuance of an authorization to discharge under this general permit (Authorization) is not likely to adversely affect such culturally significant waters or any endangered or threatened species or critical habitat.

A conventional potable water treatment plant that is currently permitted by DEQ through an individual discharge permit may apply for coverage under this general permit no later than 180 days prior to the expiration date of its current individual permit, or may elect to continue coverage under its individual permit. Existing conventional potable water treatment plants that are not currently permitted by DEQ through an individual discharge permit shall apply for coverage under this general permit within 90 days of the effective date of this Permit. Any new potable water treatment plant shall apply for coverage and obtain an Authorization prior to conducting any of the activities regulated by this general permit. Application for coverage under this Permit must be submitted electronically, per 40 C.F.R. 127.11(b), using DEQ Form 606-G38.

DEQ **Form 606-G38** is available by clicking on the Online Application button on DEQ's Municipal Permitting web page at <a href="https://www.deq.ok.gov/municipal-permitting/">https://www.deq.ok.gov/municipal-permitting/</a> and then clicking on the Form Finder button to locate the application form.

The application for an Authorization shall include the name and legal address of the owner or operator, name of the facility, legal description of the facility location, general location, name of the receiving stream(s), listing of existing and/or proposed outfalls including designation numbers for each, legal description down to ten (10) acres of each existing and/or proposed outfall, latitude and longitude of each existing and/or proposed outfall, along with any other information specified in the application Form 606-G38.

Effluent limitations contained in Part I hereof shall apply to discharges of wastewater associated with backwashing filters at conventional potable water treatment plants. At no time shall the effluent cause a violation of Oklahoma's Water Quality Standards in the receiving stream.

Beneficial use of dewatered residuals (sludge) by land application or as fill material is not authorized by this general permit and must be conducted under a separate DEQ permit. A written approval from DEQ is required for disposal of dewatered residuals (sludge) at a landfill.

The permittee shall comply with all provisions of this general permit and any Authorization issued pursuant to it.

Issuance of this general permit in no way or in any respect affects the permittee's civil or criminal responsibility regarding disposal of wastewater and/or residuals (sludge), except with respect to the permittee's legal responsibility under 27A O.S. §2-6-201 *et seq.* and DEQ Rules to obtain an Authorization under this general permit.

This general permit shall become effective on <u>February 1, 2025</u>.

This general permit and any Authorizations issued under it shall expire at midnight, on <u>January 31 2030</u>.

This is to certify that the wastewater discharges set forth in this general permit comply with the requirements of Oklahoma's Water Quality Standards, as amended, provided the permittee does not exceed the effluent limitations set forth in this permit.

Issued this 6<sup>th</sup> day of <u>January</u>, 2025.

For Oklahoma Department of Environmental Quality

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Municipal Discharge and Stormwater Permits Section

Water Quality Division

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# PART I EFFLUENT LIMITATIONS, MONITORING AND OTHER REQUIREMENTS

# A. Effluent Limitations and Monitoring Requirements

During the period beginning the effective date and lasting through the expiration date of this general permit, the permittee is authorized to discharge from all outfalls as described in the Authorization. Wastewater discharges regulated by this general permit are wastewater resulting from the backwashing of filters at potable water treatment plants.

Such loading limitations shall be calculated by the permitting authority individually for each facility's authorization using the facility's highest monthly average backwash discharge flow and the following equation:

Mass loading limit (in lb/day) = Conc. limit (in mg/L) × Q<sub>e</sub> (in mgd) × 8.34, where Q<sub>e</sub> is the highest monthly average effluent flow stated in the application or determined from Discharge Monitoring Reports covering the previous permit cycle.

### 1. Final Concentration Limitations and Reporting Requirements

Final limitations and reporting requirements are effective on (12 months from the effective date of the permit):

Pollutants	Discharge Limitations			Monitoring Requirements <sup>a</sup>	
	Mass (lbs/day)	Concentration (mg/L)		Measurement	Sample
	Monthly Avg.	Monthly Avg.	Daily Max.	Frequency	Туре
Flow (mgd) [50050]	Report Monthly Average and Daily Maximum			To be specified based on highest monthly average flow	To be specified based on highest monthly average flow
Total Suspended Solids (TSS) [00530]	To be specified based on highest monthly average flow	20 <sup>b</sup>	30	To be specified based on highest monthly average flow	Grab
Iron, Dissolved [01046]	To be specified based on highest monthly average flow	1.0 b	2.0	1/Month	Grab
Aluminum, Dissolved ° [01106]	To be specified based on highest monthly average flow	1.0 <sup>b</sup>	2.0	1/Month	Grab
Manganese, Dissolved [01056]	To be specified based on highest monthly average flow	1.0 <sup>b</sup>	2.0	1/Month	Grab
pH (standard unit) [00400]		6.5 – 9.0		2/Week	Grab
Total Residual Chlorine (TRC) [50060]		Instantaneous Maximum: No measureable <sup>d</sup>		1/Week	Grab

When discharging.

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

- If no alum (or other aluminum salts) 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 salts) 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.

## **Other 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 any visible sheen of oil or globules of oil or grease.
- Samples taken in compliance with the monitoring requirements specified above shall be taken at the discharge from the final treatment unit.

# NOTE: See Parts II and III for Additional Requirements.

#### C. 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/wastewater-stormwater/compliance-enforcement/wastewater-reporting/">https://www.deq.ok.gov/water-quality-division/wastewater-stormwater/compliance-enforcement/wastewater-reporting/</a>. Assistance is also available by contacting DEQ at (405) 702-8100 or <a href="mailto:deqreporting@deq.ok.gov">deqreporting@deq.ok.gov</a>.

# PART II OTHER PERMIT REQUIREMENTS

### A. Applicable Laws and Rules

DEQ Rules, as amended, are applicable to and are incorporated by reference into this general permit and any Authorizations under it. The permittee is hereby given notice that this general permit is in all respects subject to compliance with and actions under any and all applicable and relevant terms, conditions, provisions and requirements and all amendments of the laws of the State of Oklahoma, the Department of Environmental Quality Rules, and Oklahoma's Water Quality Standards. The absence of any express reference within this general permit to 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 general permit or the permittee. By DEQ approval, grant and issuance of this general permit, permittee acknowledges responsibility to obtain correct and current copies of applicable DEQ Rules (as amended), provided, however, that permittee further acknowledges that any and all amendments thereto shall become a part of this general permit.

- **B.** This general permit does not convey any exclusive privileges or authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations nor does it obviate the requirement to obtain permission from any landowners whose property will be affected by this general permit.
- C. Unless otherwise specified in this general 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. Amendments to 40 C.F.R. Part 136 promulgated and incorporated by reference into OAC 252:606 after the effective date of this general permit shall supersede these requirements as applicable.
- **D.** All laboratory analyses for the parameters specified in this general permit must be performed by a laboratory certified by DEQ for those parameters, or by an individual certified by DEQ as a laboratory operator and the certified laboratory operator approves and signs the analytical report.

#### E. Residuals (Sludge) Requirements

- 1. All residuals must be handled, beneficially used, and disposed of in accordance with all applicable state (OAC 252:626-13-2, OAC 252:631-3-19(b), and OAC 252:515) and federal regulations (40 CFR 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.
- 2. 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 from the facility.
- 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 a DEQ 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. Application forms for residuals permits or disposal plans may be obtained by contacting the Municipal Enforcement Section of the Water Quality Division of DEQ.
- 4. A written authorization from DEQ is required for disposal of dewatered residuals (sludge) at a landfill. A letter stating the treatment of the residuals (sludge) 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 120 days prior to implementing any changes to the approved residuals (sludge) disposal method.

#### F. RE-OPENER CLAUSE

The 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. Modification or revocation and reissuance of the permit shall follow regulations listed at 40 C.F.R. §124.5. If an applicable "acceptable management practice" or numerical limitation for pollutants in residuals (sludge) promulgated at Section 405(d)(2) of the Clean Water Act is more stringent than the residuals (sludge) pollutant limit or acceptable management practice in this general permit, or controls a pollutant not listed in this general permit, this general permit may be modified or revoked and reissued to conform to the requirements promulgated at Section 405(d)(2).