

**OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT OKG38
TO DISCHARGE WASTEWATER FROM FILTER BACKWASH OPERATIONS AT 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 potable water treatment plants will be authorized to discharge wastewater resulting from the back washing of filters within the boundaries of the State of Oklahoma in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof. Land application of residuals (sludge) must be done under an approved residuals permit (General Permits OKG65L and OKG65A or an individual residuals permit must be obtained).

Each potable water treatment facility is required to obtain an Authorization to Discharge and/or Dispose of Wastewater (Authorization) from the Executive Director of the DEQ to discharge filter backwash wastewater. Owners or operators of potable water treatment plant facilities located within the boundaries of the State of Oklahoma must make a written request to the DEQ that they be authorized to discharge and/or dispose of wastewater under this general permit and receive an Authorization prior to commencing such discharge and/or disposal. Owners or operators of potable water treatment facilities within the scope of this general permit who fail to make a written request to the DEQ are not authorized to discharge and/or dispose of wastewater under this general permit.

This general permit covers only conventional potable water treatment facilities (SIC Code 4941) constructed in accordance with OAC 252:626, and that use lime or sodium hydroxide to correct alkalinity and/or pH; use alum, ferric chloride, or polymer to coagulate; and use chlorine, chlorine dioxide or ozone for primary disinfection. The general permit also covers packaged drinking water plants that use these chemicals and processes. The filter media complying with OAC 252:626-9-9(d) may be a single media or a combination of sand, anthracite coal, and/or garnet pebbles. A manganese green sand filter in compliance with OAC 252:626-9-7(a)(3) may also be used to remove iron and manganese from the source water.

This general permit shall not cover those facilities that discharge more than one million gallons per day (1 mgd), or use ion exchange, brine, or Zeolite for softening, or use electrode ionization for coagulation, or use membrane filtration, or have waste load allocation more stringent than the limits in the general permit, or have less than two lagoons for the treatment of filter backwash wastewater. *New* facilities discharging to culturally significant waters or to sensitive waters as identified by U.S. Fish and Wildlife Service in http://www.fws.gov/southwest/es/oklahoma/Documents/TE_Species/Maps/Aquatic%20Dependent%20Species%20Water%20Sheds%20Aug2011.pdf are also not covered under the general permit. *New* discharges within five stream miles from a lake are not covered under general permit as the waste load allocation for a discharge to a lake is determined on a case by case basis. Existing facilities with increase in flow or a change in the location of the discharge to culturally significant waters or to sensitive waters as identified by U.S. Fish and Wildlife Service are also not covered.

The general permit shall not cover discharges within five miles of Outstanding Resource Waters (ORW); High Quality Waters; Sensitive Public and Private Water Supplies; Appendix 'B' Waters [OAC 785:45-5-25(c) (2)] also designated as ORW; and receiving streams included in Oklahoma's '303(d) List' of impaired water bodies caused by turbidity or pH for which a Total Maximum Daily Load (TMDL) has not been performed or the result of the TMDL indicates that discharge limits more stringent than 20 mg/l for TSS or pH more stringent than 6.5 – 9.0 standard units are required.

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

Potable water treatment facilities that are currently permitted by the Oklahoma Department of Environmental Quality (DEQ) through individual wastewater disposal permits may apply for coverage under this general permit no later than 180 days prior to the expiration of their current individual permits, or they may elect to continue coverage under their individual permits. Existing potable water treatment facilities that are not currently permitted by the DEQ through individual wastewater disposal permits shall apply for coverage under this general permit within 90 days of the effective date of this Permit. New potable water treatment facilities shall apply for coverage and obtain an Authorization prior to conducting any of the activities regulated by this general permit.

The written request 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 2MW.

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

Land application of filter backwash wastewater and/or residuals (sludge) is not authorized by this general permit unless the facility has an approved residuals (sludge) permit. A written authorization from the DEQ is required for the landfill of the residuals (sludge).

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 January 1, 2013.

This general permit and any Authorizations issued under it shall expire at midnight, on December 31, 2017.

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 10th day of July, 2012.

For Oklahoma Department of Environmental Quality

Edward Dhrberg, P.E., Manager
Permitting Group
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Shellie Chard-McClary, Director
Water Quality Division

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 are calculated using the facility's backwash discharge flow and the following equation: Mass loading limit (*in lb/day*) = Conc. limit (*in mg/l*) × Q_e (*in mgd*) × 8.34, where Q_e is the monthly average effluent flow stated in the application, not exceeding 10% of the potable water production.

For new facilities applying for this general permit, the Engineering Report will be used to estimate the Q_e flow.

Pollutants	Discharge Limitations			Monitoring Requirements	
	Mass (lbs/day)	Concentration (mg/l)		Measurement Frequency	Sample Type
	Monthly Avg.	Monthly Avg.	Daily Max.		
Flow [50050]	Report (mgd)	---	---	Daily ^a	Instantaneous
Total Suspended Solids (TSS) [00530]	To be specified	20	30	1/month ^{a, b}	Grab
Iron, Dissolved [01046]	To be specified	1.0	2.0	1/month ^{a, b}	Grab
Aluminum, Dissolved [01106] ^c	To be specified	1.0	2.0	1/month ^{a, b}	Grab
Manganese, Dissolved [01056]	To be specified	1.0	2.0	1/month ^{a, b}	Grab
pH [00400]	---	6.5 – 9.0 s.u.		1/week ^{a, b}	Grab
Total Residual Chlorine (TRC) [50060] ^d	---	Report	Report	Weekly	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 is used for an entire reporting period, the permittee shall report a value of "zero" for the monthly average and enter "No alum used this reporting period" in the comments section on the DMR for that reporting period.

^d If no chlorine is used for an entire reporting period, the permittee shall report a value of "zero" for the monthly average and 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.

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.

B. Reporting of Monitoring Results

Monitoring results shall be reported in accordance with the provisions of Part III.E.4 of the general permit. Monitoring results obtained during the previous month shall be summarized and reported on the discharge Monitoring Report (DMR) forms postmarked no later than the 10th day of the following month. If no discharge occurs during the reporting period, DMR forms stating “No Discharge” shall be submitted according to the above schedule.

Inactivity Status: During months in which there is no activity at the facility, DMR forms stating “No Discharge” shall be submitted for that month.

PART II
OTHER PERMIT REQUIREMENTS

A. Applicable Laws and Rules

The 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 of 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 CFR Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated 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 the DEQ for those parameters.

E. Residuals (sludge) Requirements

1. Residuals (sludge) generated at a potable water treatment plant may be land applied only if the facility has an approved residuals (sludge) permit in place that defines the location and operating conditions and other requirements to be met. Current permits available include General Permits OKG65L and OKG65A or an individual residuals permit. The constituents to be monitored for and the sampling frequency of each is also defined in the residuals (sludge) management plan. Analysis results shall be kept at the facility for a period of five (5) years and shall be made available to DEQ staff upon request.
2. A written authorization from the DEQ is required for the landfill of the residuals (sludge). A letter stating the treatment of the residuals to remove excess water and the locations of the landfill shall be submitted to the DEQ to receive this authorization.
3. The permittee shall notify the 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 CFR Part 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).