

**TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 628. INDIRECT POTABLE REUSE FOR SURFACE WATER
AUGMENTATION**

**SUBCHAPTER 3. BENCHMARKS AND IMPLEMENTATION FOR IPR SOURCE
WATER DISCHARGES**

252:628-3-1. General provisions

(a) **IPR benchmarks.** IPR Source Water discharges shall, at a minimum, meet the IPR benchmarks contained in this Subchapter and in Appendix A of this Chapter. More stringent effluent limitations may be established on a case-by-case basis if determined necessary to protect human health. The IPR SWTP treatment processes shall be capable of producing an effluent that meets the limits specified in Appendix A of this Chapter in addition to effluent limitations developed in accordance with OAC 252:606 and OAC 252:690.

(b) **Quantitative data.** Data collected for the monitoring of IPR Source Water discharges shall use analytical methods listed at 40 CFR Part 136 or other EPA-approved methods. Where there is no approved analytical method, the permittee shall fully describe the method used for DEQ review and obtain written approval prior to utilizing these data. All data submitted shall be defensible analytical data. Reporting and recordkeeping shall be in accordance with Subchapter 7 of this Chapter.

(c) **Measurable levels.** Measurable levels for the monitoring of IPR Source Water discharges shall comply with the MQL requirements of OAC ~~252:690-3-2~~252:606-6-2 and Appendix ~~BH~~ of OAC ~~252:690~~252:606. Where a monitored parameter has an established MQL, DEQ will include a provision in the permit requiring measurable levels to be less than or equal to the MQL. Where there is no established MQL, the permittee shall fully describe the method and MQL used for DEQ review and obtain written approval prior to utilizing these data. Data will be characterized as outlined in OAC ~~252:690-3-2~~252:606-6-2.

252:628-3-2. Other rules apply

(a) The IPR benchmarks established by this Subchapter apply in addition to other rules for wastewater discharges, including OAC 252:730, OAC 252:740, OAC 252:301, and OAC 252:606 and OAC 252:690. For parameters which are subject to both the IPR benchmarks established by this Subchapter and effluent limitations developed in accordance with OAC 252:606 and OAC 252:690, the more stringent effluent limitations and monitoring requirements shall apply.

(b) IPR Source Water discharges shall maintain existing and designated beneficial uses; shall not cause or contribute to a violation of narrative and numeric criteria; and shall be consistent with anti-degradation policy established in the OWQS.

(c) IPR Source Water discharges to SWS-R waterbodies shall not consume more than the portion of the assimilative capacity determined and allocated to the discharger in accordance with OAC 252:730, OAC 252:740, and OAC 252:606 and OAC 252:690.

(d) IPR Source Water discharges to lakes shall be at least as protective as Oklahoma's Discharges to State Lakes policy as described in Oklahoma's Continuing Planning Process (CPP) document.

**SUBCHAPTER 7. OPERATION AND MAINTENANCE FOR IPR SOURCE WATER
TREATMENT PLANTS**

252:628-7-1. General provisions

- (a) This Subchapter sets the operation standards and maintenance criteria for IPR SWTPs. Other rules may govern indirect potable reuse operations, such as the Oklahoma Pollutant Discharge Elimination (OPDES) Standards (OAC 252:606), Water Pollution Control Facility Construction Standards (OAC 252:656), Laboratory Accreditation (OAC 252:301), ~~Water Quality Standards Implementation (OAC 252:690)~~, Public Water Supply Construction Standards (OAC 252:626) and Waterworks and Wastewater Works Operator Certification (OAC 252:710).
- (b) This Subchapter applies to any person or entity, including any federal facility that operates an IPR SWTP in Oklahoma.

252:628-7-9. Sampling, recordkeeping and reporting requirements

- (a) **Sampling.** Sampling shall be in accordance with DEQ-approved sampling plans required in this Chapter and OAC 252:606, ~~and OAC 252:690.~~
- (b) **Recordkeeping.** The following recordkeeping requirements apply:
- (1) **Operational records.** All IPR SWTPs shall meet the following requirements:
 - (A) Keep a daily record of the operations performed in the treatment process;
 - (B) Record observations, costs, and occurrences related to the operation of the plant;
 - (C) Record the process control tests and laboratory checks;
 - (D) For each required measurement or sample, record:
 - (i) The date, exact place and time of sample and indicate whether a grab sample or composite;
 - (ii) The dates the analyses were performed;
 - (iii) The laboratory and name of the operator who performed each analysis;
 - (iv) The results of all analyses;
 - (v) The instantaneous flow at the time of grab sample collection or a record of each flow taken while collecting a composite sample; and
 - (vi) The method of composite sample calculations and other calculations;
 - (E) If applicable, the results of direct integrity testing and indirect integrity monitoring for membrane filtration as required in OAC 252:626-9-9(f); and
 - (F) Record any other applicable data.
 - (2) **Maintain records.** The facility owner shall keep records of all control and compliance testing, copies of MORs, DMRs, LMRs, laboratory bench sheets, and other applicable records for at least three (3) years. These records shall be available for inspection by DEQ personnel.
- (c) **Reporting requirements.** The following reporting requirements apply:
- (1) **Immediate notification to DEQ.** Each IPR SWTP shall report to DEQ within 24 hours if there are any losses of treatment reliability, statistically significant process trends, or changes in the IPR SWTP influent water quality that may cause a negative effect to the IPR SWTP discharge water quality. Should effluent monitoring indicate a violation or serious violation as described in Subchapter 3 of this Chapter, the violation(s) shall be reported to the DEQ within 24 hours and reduction or cessation of discharge may be required. A written report describing the reason(s) for the violation(s) and the steps taken to correct the violation(s) shall be submitted to the DEQ within five (5) days.
 - (2) **Reports to be submitted to DEQ.** The following reports shall be submitted:
 - (A) **Discharge monitoring reports.** All DMRs shall be completed and submitted in accordance with the requirements in OAC 252:606, ~~OAC 252:690~~, and the OPDES discharge permit.

(B) **Monthly operational reports.** Keep a daily record of minimum control tests on forms prepared or approved by DEQ. Make entries for the date samples are collected and indicate where and by whom the observations were made. Include the results of all analyses on the monthly report and use them to calculate weekly or monthly averages. The IPR SWTP shall complete and submit the original of required MOR to DEQ no later than the fifteenth (15) day of the following month.

(C) **Lake and stream monitoring reports.** The LMR form required in Subchapter 11 of this Chapter shall be submitted with the OPDES waterbody monitoring sampling plan for DEQ approval. The report shall include results from samples taken to characterize the accumulation and concentration of conservative substances, trend monitoring, and results from statistical significance tests. The reporting frequency shall be determined by DEQ.

(d) **Additional reporting, records and/or sampling.** Additional sampling, reporting, and/or records requirements may be included by DEQ in any permit, authorization, order, consent decree, closure plan, remediation plan, or other official document issued by DEQ pursuant to applicable law and the provisions of this Chapter.

SUBCHAPTER 9. PERMITTING REQUIREMENTS FOR IPR SOURCE WATER

252:628-9-3. Applications

Applicants seeking permits to construct and operate an IPR SWTP shall submit documentation to DEQ as described in OAC 252:606-3; and OAC 252:656-3-2, ~~and OAC 252:690.~~

252:628-9-4. Feasibility study

(a) Applicants shall submit to DEQ three (~~3~~) copies and receive approval of the feasibility study for the proposed new IPR SWTP prior to the submittal of the IPR SWTP engineering report. Applicants shall also submit a letter in which the applicant endorses the content of each feasibility study submitted to DEQ.

(b) The feasibility study shall include, at a minimum:

- (1) An evaluation of the applicant's needs, preferably sourced from the applicant's local Strategic Water Supply Plan, or other similar document;
- (2) A description of water reuse and reclamation opportunities;
- (3) A description of potential alternatives (including reuse and non-reuse) with comparisons as appropriate of cost effectiveness, operational complexity, environmental impact, reliability, and flexibility;
- (4) A discussion of the potential of the project for water supply diversification, such as lowered demand on groundwater supplies in time of drought;
- (5) For waterbodies and watersheds designated as SWS-R, a discussion of the project's potential impact on water quality and the environment, including but not limited to a discussion regarding antidegradation requirements, criteria to protect beneficial uses, and assimilative capacity as described in OAC 252:730 and OAC 252:740; and
- (6) A discussion of any legal, regulatory, jurisdictional, and partnership concerns regarding the project.

SUBCHAPTER 11. IPR RECEIVING WATERBODY MONITORING

252:628-11-1. General provisions

(a) **Purpose.** The rules of this Subchapter provide protocols which shall be used to monitor ambient water quality in sources for Public Water Supply (PWS) systems being augmented with IPR Source Water. The goals of the waterbody monitoring are as follows:

- (1) To protect public health and the environment by monitoring for changes in the receiving waterbody;
- (2) To protect the beneficial uses of the receiving waterbody by performing trend monitoring on parameters that are evaluated in use attainment assessments; and
- (3) To evaluate modeling outcomes for all waterbodies and to monitor the assimilative capacity for SWS-R waterbodies.

(b) **Testing Procedures.** Testing procedures for the monitoring of IPR receiving waterbodies shall be in accordance with OAC 252:740-1-4.

(c) **Quantitative data.** Data collected for the monitoring of IPR receiving waterbodies shall use analytical methods listed at 40 CFR Part 136 or other EPA-approved methods. Where there is no approved analytical method listed, the applicant shall fully describe the method used for DEQ review and obtain written approval prior to utilizing these data. All data submitted shall be defensible analytical data. Reporting and recordkeeping shall be in accordance with Subchapter 7 of this Chapter.

(d) **Measurable levels and data characterization.** Measurable levels for the monitoring of IPR receiving waterbodies shall be less than or equal to the MQLs established in Appendix ~~BH~~ of OAC ~~252:690~~252:606. Where there is no established MQL, the applicant shall fully describe the method and MQL used for DEQ review and obtain approval prior to utilizing these data. Where a monitored parameter has an established MQL, DEQ shall include a provision in the permit requiring measurable levels be less than or equal to the MQL. Data shall be characterized as outlined in OAC ~~252:690-3-2~~252:606-6-2.

(e) **Agency discretion to consider additional data.** An agency with jurisdiction may consider other relevant data meeting the requirements of this Subchapter in addition to that required by the rules in this Subchapter for any particular parameter.

(f) **Parameter Groups.** There are ten parameter groups, as described in this Subsection. The permittee shall monitor the waterbody for specific parameters subject to DEQ approval.

(1) **In-Situ.** In-situ parameters include dissolved oxygen (DO), temperature, pH, electro-conductivity (EC), and oxidation/reduction potential (ORP);

(2) **Nutrients.** Nutrient parameters include total nitrogen (TN), nitrite (as N), nitrate (as N), total Kjeldahl nitrogen (TKN), ammonia, total phosphorus (TP), and dissolved reactive phosphorus, also known as ortho-phosphorus (OP);

(3) **Algal biomass and related products.** Algal biomass and product parameters include chlorophyll-a, pheophyton, phytoplankton, phycocyanin, and cyanotoxins. Taxonomy and phytoplankton density are also included;

(4) **Minerals.** Minerals include TDS, chloride, and sulfate. Alkalinity is included in this parameter group for monitoring purposes;

(5) **Metals.** Metals include inorganic toxics listed in Appendix G of OAC 252:730, inorganic chemicals included in the National Primary Drinking Water Regulations, and metals included in the National Secondary Drinking Water Regulations. Hardness is included in this parameter group for monitoring purposes;

(6) **Microorganisms.** Microorganism parameters include E. coli, total coliform, viruses, giardia, cryptosporidium, and legionella;

(7) **Toxics.** Toxics include the organic toxics listed in Appendix G of OAC 252:730 and

organic chemicals included in the National Primary Drinking Water Regulations;

(8) **Constituents of Emerging Concern.** CECs are defined in Subchapter 1 of this Chapter. For monitoring purposes, CECs are sorted into functional groups represented by at least one surrogate;

(9) **Other drinking water parameters.** National primary drinking water regulations list maximum contaminant levels (MCLs) or action levels for disinfection byproducts, inorganic chemicals, organic chemicals, microorganisms, and radionuclides. Maximum residual disinfection levels (MRDLs) are listed for disinfectants. For monitoring purposes, the drinking water parameters are those parameters listed in the National Primary Drinking Water Regulations that are not addressed in one of the other nine parameter groups; and

(10) **Total Organic Carbon.** TOC is the amount of carbon found in an organic compound.