DRAFT FACT SHEET AND SUPPLEMENTARY INFORMATION FOR DRAFT GENERAL PERMIT ARG250000

For renewal of the General Permit for Non-Contact Cooling Water, Cooling Tower Blowdown, and Boiler Blowdown Facilities located within the State of Arkansas, Permit Number ARG250000.

Information in this part is organized as follows:

1	Background	1
2	Significant Changes	1
3	Permit Coverage	6
4	Monitoring Requirements	7
5	Other Conditions	7
6	Development and Basis for Permit Conditions	8
7	Wastewater Operator Requirements	11
8	Economic Impact	11
9	Contact Information	12
10	Sources	13

1 Background

Under 40 CFR § 122.28, general permits may be written to cover categories of point sources having common elements, such as facilities that involve the same or substantially similar types of operations, that discharge the same types of wastes, or that are more appropriately regulated by a general permit. Given the number of non-contact cooling water, cooling tower blowdown, and boiler blowdown dischargers requiring NPDES permit coverage, DEQ has elected to renew the ARG250000 General Permit for Non-Contact Cooling Water, Cooling Tower Blowdown, and Boiler Blowdown Facilities located within the State of Arkansas.

The previous permit became effective on December 1, 2017, and will expire on November 30, 2022.

2 Significant Changes

2.1 The language on the cover page was updated to be more consistent with other general permits, and to better clarify that the permittee must have an active notice of coverage (NOC) to be covered by this permit.

- 2.2 Construction of a treatment system can now be covered under this general permit instead of requiring a separate state construction permit. See Parts 1.2.1 and 1.4.4 of the draft permit and Sections 3.2 and 5.2.2 of this Fact Sheet for additional details regarding construction requirements.
- 2.3 The condition limiting coverage under this general permit to facilities discharging less than or equal 0.5 million gallons per day (MGD) was moved to the exclusions conditions (Part 1.3.14 of the draft permit). Additionally, a provision was made to allow for coverage of facilities discharging 0.5 MGD or greater under this general permit on a case-by-case basis. See Section 6.1.1 of this Fact Sheet for additional details.
- 2.4 The waterbody exclusion conditions (Parts 1.3.1 through 1.3.5 of the draft permit) are no longer limited to direct discharges only. Facilities with discharges upstream of these waterbodies may be excluded from coverage under this general permit on a case-by-case basis.
- 2.5 Facilities discharging to an Extraordinary Resource Water(ERW), Ecologically Sensitive Waterbody (ESW), or Natural and Scenic Waterway (NSW) can no longer be covered by the draft permit, as detailed in Part 1.3.2 of the draft permit. These facilities require coverage under an individual permit.
- 2.6 The exclusion condition regarding Total Maximum Daily Loads (TMDLs) in Part 1.3.5 of the draft permit was updated.
- 2.7 The exclusion condition regarding groundwater with toxic substances in Part 1.3.11 of the draft permit was updated to better clarify which toxic substances are excluded.
- 2.8 The explicit exclusion of steam electric generating plants was removed. Such facilities are already excluded under Part 1.3.8 of the draft permit because they are subject to effluent limitations guidelines (ELGs).
- 2.9 The exclusion condition regarding additives in Part 1.3.12 of the draft permit was updated to include tributyl tin oxide. This additive had been previously prohibited under Part 7 of the previous permit but it was not listed in Part 1 of the previous permit.
- 2.10 Recertification notices of intent (NOIs) must be submitted at least 30 days prior to the effective date of the draft permit, as specified in Part 1.4.1.1 of the permit.
- 2.11 Part 1.4.1.4 was added to the draft permit to specify that NOIs may be submitted online through the DEQ ePortal system. Applicants who are unable to use ePortal may request an electronic reporting waiver. See Section 3.1 of this Fact Sheet for additional details regarding electronic reporting.

- 2.12 A requirement for new applicants to submit a site map was added as Part 1.4.2.2 of the draft permit.
- 2.13 Part 1.4.2.5 of the draft permit now specifies the permit fee until a fee is assigned by APC&EC Rule 9. See Section 9 of this Fact Sheet for additional details. There was no change in the fee amount from the previous permit.
- 2.14 Part 1.4.3.4 of the draft permit now requires the type of wastewater discharged and latitude and longitude of each outfall.
- 2.15 Part 1.4.5 of the draft permit now requires a licensed operator if the facility uses a treatment system that meets the definition of a "wastewater treatment plant" as defined in APC&EC Rule 3. If a licensed operator is required, the license number must be included in the NOI for coverage, as specified in Part 1.4.3.8 of the draft permit. See Section 7 of this fact sheet for additional information regarding operator license requirements.
- 2.16 A new condition regarding electronic reporting waivers was added as Part 1.5 of the permit. See Section 3.1 of this Fact Sheet for additional details regarding electronic reporting.
- 2.17 A new condition regarding facilities with current individual permit coverage requesting coverage under this general permit was added as Part 1.6 of the draft permit.
- 2.18 The condition regarding requiring an individual permit in Part 1.7 of the draft permit was updated with additional reasons for requiring an individual permit and a timeliness requirement. Additionally, this condition requires that an NOT be submitted to terminate coverage under the general permit if alternate coverage is granted under an individual NPDES permit.
- 2.19 The condition regarding terminating coverage in Part 1.8 of the draft permit was updated. Notices of termination (NOTs) may now be submitted online through the DEQ ePortal system. Permittees who are unable to use ePortal may apply for an electronic reporting waiver. See Section 3.1 of this Fact Sheet for additional details regarding electronic reporting.
- 2.20 Total Suspended Solids (TSS) and Temperature limits in Part 2 of the draft permit are now expressed to three significant digits in accordance with updated OWQ rounding procedures. This results in a change in daily maximum TSS limits from 53 mg/l to 52.5 mg/l. See Section 6.1 of this Fact Sheet for additional details.
- 2.21 Discharges of boiler blowdown only are no longer exempt from temperature limits. See Section 6.1.5 of this Fact Sheet for additional details.

- 2.22 The outfall number is no longer associated with the temperature limit. See Section 6.1.5 of this Fact Sheet for additional details.
- 2.23 Part 2 of the draft permit now prohibits the discharge of distinctly visible solids, scum, or foam other than trace amounts in accordance with Rule 2.408.
- 2.24 Part 2 of the draft permit now includes the Oil and Grease narrative requirements in accordance with Rule 2.410.
- 2.25 Part 2 of the draft permit now specifies that samples must be taken after final treatment (if a treatment system is used) and prior to the receiving stream.
- 2.26 The condition titled "State Laws" in Part 3 of the previous permit was removed. This condition was redundant with Part 3.10 of the draft permit, Applicable Federal, State or Local Requirements.
- 2.27 The condition titled "Permit Applicability" in Part 3 of the previous permit was removed. Permit applicability is addressed in Part 1 of the draft permit.
- 2.28 A re-opener clause was added as Part 3.11 of the draft permit.
- 2.29 A condition regarding continuance of the expired general permit was added as Part 3.12 of the draft permit.
- 2.30 The removed substances condition in Part 4.6 of the draft permit was updated with an additional statement requiring compliance with State and federal regulations and rules regarding solids disposal.
- 2.31 The flow measurement condition in Part 5.2 of the draft permit no longer contains language related to filter backwash volumes.
- 2.32 The monitoring procedures condition in Part 5.3 of the draft permit was updated with a requirement to require spike and duplicate analysis on 10% of the samples.
- 2.33 The condition regarding reporting of monitoring results in Part 5.5 of the draft permit was updated to require electronic reporting through NetDMR.
- 2.34 The record contents condition in Part 5.8 of the draft permit was updated to include the equipment information and calibration records.
- 2.35 The planned changes condition in Part 6.1 of the draft permit was updated to better clarify what changes require notification.
- 2.36 The transfer condition in Part 6.2 of the draft permit was updated.

- 2.37 The monitoring reports condition in Part 6.3 of the draft permit was updated.
- 2.38 A new condition regarding compliance schedules was added as Part 6.4 of the draft permit.
- 2.39 The twenty-four hour reporting condition in Part 6.5 of the draft permit was updated, including the addition of an email and phone number for reporting.
- 2.40 The condition regarding changes in discharge of toxic substances in Part 6.7 of the permit was updated.
- 2.41 The [Reserved] condition in Part 6 of the previous permit was removed, and the subsequent conditions were renumbered accordingly.
- 2.42 The signatory requirements condition in Part 6.9 of the draft permit was updated to be consistent with 40 CFR § 122.22.
- 2.43 The condition in Part 7 of the previous permit regarding storage and disposal of solids was removed. This condition was redundant with Part 4.6 of the draft permit.
- 2.44 The information that must be submitted regarding cooling water and boiling water additives in Part 7.1 of the draft permit was updated, and Part 1.4.3.9 now requires submission of additive information with the NOI. See Section 5.5 of this Fact Sheet for additional details.
- 2.45 A new condition allowing for monitoring frequency reduction for COD, TSS, and O&G was added as Part 7.3 of the permit. See Section 4 of this Fact Sheet for additional details.
- 2.46 Several definitions in Part 8 were updated for clarity, or for consistency with Section 502 of the Clean Water Act, 40 CFR § 122.2, or APC&EC rules including:
 - 2.46.1 Act or CWA;
 - 2.46.2 ADEQ (removed);
 - 2.46.3 DEQ or Division (replaces ADEQ and Department);
 - 2.46.4 Department (removed);
 - 2.46.5 Director
 - 2.46.6 Industrial Facility (removed);
 - 2.46.7 Instantaneous Flow measurement:
 - 2.46.8 In-situ temperature measurement;
 - 2.46.9 Losing Stream Segment (removed);
 - 2.46.10 Monitoring and Reporting;
 - 2.46.11 Municipal Facility (removed);
 - 2.46.12 NOI;

- 2.46.13 Operator (removed);
- 2.46.14 Once/quarter (removed);
- 2.46.15 Permittee;
- 2.46.16 Total Maximum Daily Load or TMDL
- 2.46.17 Units of Measure (mg/l, MGD, and s.u. were moved into this definition); and
- 2.46.18 Visible Sheen (added)

3 Permit Coverage

This general permit authorizes facilities with design flows of up to 0.5 MGD to discharge non-contact cooling water, cooling tower blowdown, and boiler blowdown wastewater to Waters of the State, except facilities that are excluded in Part 1.3 of the permit. Facilities with design flows greater than 0.5 MGD may be approved for coverage on a case-by-case basis. If a treatment system is proposed, the treatment system shall be constructed in accordance with Part 1.4.4 of the permit.

3.1 Notice of Intent (NOI)

Dischargers seeking to be covered by the general permit must submit a written Notice of Intent that meets the criteria in 40 CFR § 122.21. All deadlines for submission have been established to provide staff with sufficient time to review and process all requests for coverage.

In accordance with the NPDES Electronic Reporting Rule, DEQ is now requiring electronic submission of permitting documents for this general permit. Permittees who are unable to submit documents electronically must apply for a waiver, as detailed in 40 CFR §127.15 and Part 1.5 of the permit.

3.2 Construction Requirements

The previous ARG250000 general permit required a separate state construction permit for any treatment facilities to be covered under the general permit. It is proposed that the construction requirements be incorporated into the general permit in order to streamline the application process. Any construction proposed under this general permit will require submission of DEQ Form 1, plans & specifications and design calculations signed and stamped by a Professional Engineer (P.E.) licensed in the State of Arkansas, and the construction permit fee specified by Rule 9.402(A).

Authorization to construct a treatment facility does not provide coverage for stormwater discharges related to construction activities subject to the requirements in 40 CFR § 122.26. These activities must also meet the construction stormwater requirements referenced in Part 1.4.4.3 of the permit.

3.3 Individual Permits

The Director of DEQ may consider the issuance of individual permits according to the criteria in 40 CFR § 122.28(b)(3).

3.4 Water Quality Requirements

In accordance with 40 CFR § 122.44(d) the permit is required to include any requirements necessary to achieve State Water Quality Standards as established under Section 303 of the Clean Water Act.

4 Monitoring Requirements

The requirements for sample type and sampling frequency have been based on the current permit.

A new condition was added as Part 7.3 of the permit to allow for monitoring frequency reduction for COD, TSS, and O&G to once/month if the permittee demonstrates compliance with the limits for these parameters for three consecutive months with at least two discharges reported during each of these months. A return to the baseline monitoring frequency for a parameter is required if a monitoring result is in exceedance of the permit limit for the parameter. The permittee must then re-qualify for the reduced monitoring frequency.

5 Other Conditions

5.1 Geographic Area and Covered Facilities

The general permit, when issued, will authorize discharges from non-contact cooling water, cooling tower blowdown, and boiler blowdown facilities throughout the State of Arkansas. The permit will be applicable only to facilities which discharge to waters of the State and are, therefore, subject to the requirements of Section 301 and 402 of the Clean Water Act.

5.2 Timing of Requests

Requests for coverage shall be submitted as follows:

- 5.2.1 For new dischargers without construction expected, at least 30 days prior to the first proposed discharge;
- 5.2.2 For new dischargers with construction expected, at least 90 days prior to the first proposed discharge; or
- 5.2.3 For existing dischargers covered under ARG250000, no later than 30 days prior to the effective date of this permit.

5.3 Expiration Date

In accordance with 40 CFR § 46(a), the general permit will expire five (5) years from the effective date of the permit. An expired permit will continue in effect until such time that the permit is renewed or a new permit is issued.

5.4 Individual Permits

The Director of DEQ may require the issuance of individual permits according to the criteria in 40 CFR § 122.28(b)(3).

5.5 Cooling Water and Boiler Water Additives

The draft permit now requires applicants to submit information regarding cooling water and boiling water additives as part of the notice of intent for coverage under this general permit. There is no change in the requirement for facilities to submit information regarding such additives at least 60 days prior to use if they are not identified in the notice of intent.

Safety Data Sheets (SDS) were added to the list of required additive information.

The requirement for 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach was replaced with a more general requirement for available aquatic toxicity data. The 96-hour median tolerance limit data is appropriate for many species of fish, but other organisms may use different toxicity data.

6 Development and Basis for Permit Conditions

Conditions in Parts 2 through 6 are incorporated in the permit based on 40 CFR § 122.41, 40 CFR § 122.43, 40 CFR § 122.62, 40 CFR § 124.5, 40 CFR § 136, 40 CFR § 122.44(d), 40 CFR § 122.44(l), Appendix D of the Continuing Planning Process (CPP), APC&EC Rule 2, and APC&EC Rule 3 in order to provide and ensure compliance with all applicable requirements of the CWA, rules, and regulations.

The following is an explanation of the derivation of the conditions of the permit and the reasons for them, or in cases of notices of intent to deny or terminate, reasons suggesting the decisions as required under 40 CFR § 124.7.

6.1 Justification for Limitations and Conditions of the Draft Permit

	<u>Discharge Limitations</u>		Monitoring Requirements	
Effluent Characteristics	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max		
Flow (MGD)	N/A	0.5	twice/week	instantaneous
Chemical Oxygen Demand (COD)	50	75	twice/month	grab
Total Suspended Solids (TSS)	35.0	52.5	twice/month	grab
Oil and Grease (O&G)	10	15	twice/month	grab
рН	Minimum 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	twice/month	grab
Temperature	See table below for Daily Maximum Limit		twice/month	in-situ

Ecoregion and Waterbody Specific Criteria	Temperature Limit, °F Daily Max.
Ozark Highlands	84.2
Boston Mountains and Arkansas River Valley	87.8
Ouachita Mountains, Spring water Influenced Gulf Coastal, Typical Gulf Coastal, and Least-Altered Delta	86.0
Channel-Altered Delta, White River (Dam #1 to mouth), St. Francis River, Mississippi River, Arkansas River, Ouachita River (Little Missouri River to state line), Red River, and Lakes and Reservoirs	89.6
Trout Waters	68.0

6.1.1 Flow

In order to be protective of all waters of the state, this permit contains a flow limit of 0.5 MGD. The draft permit allows for coverage of facilities with greater discharges on a case-by-case basis if the Division determines that the terms and conditions of the permit are sufficient to protect water quality standards. If a flow limit greater than 0.5 MGD is authorized, this authorization will be included on the facility's notice of coverage.

6.1.2 COD and TSS

The technology-based limits for COD and TSS have been based on the Best Engineering Judgment of the Permit Writer and Arkansas individual NPDES Permits for similar types of discharges. The technology-based limits are judged to represent the level of treatment attainable through the application of the best

conventional pollutant control technology (BCT) and best available technology economically achievable (BAT).

TSS limits are now expressed to the nearest tenth digit in accordance with updated Division rounding procedures. The daily maximum TSS limit was revised from 53 mg/l to 52.5 mg/l in accordance with the formula in Section 6.3 of this fact sheet.

6.1.3 Oil and Grease (O&G)

The water quality-based limits for O&G are based on Rule 2.510 and are judged to represent the level of treatment attainable through the application of the best conventional pollutant control technology (BCT).

6.1.4 pH

The water quality-based limits for pH have been based on Rule 2.504 and are judged to represent the level of treatment attainable through the application of the best conventional pollutant control technology (BCT).

6.1.5 Temperature

The water quality-based limits for temperature have been based on Rule 2.502 and are judged to represent the level of treatment attainable through the application of the available technology economically achievable (BAT).

The temperature limit is dependent on the receiving water and/or ecoregion. Ecoregions, designated trout waters, and some channel-altered Delta streams are shown in Appendix A of Rule 2. Determination of other channel-altered streams in the Delta ecoregion will be made on a case-by-case basis in accordance with Appendix A of Rule 2. The temperature limit was previously associated with the last digit of the outfall number; this association has been removed in the draft permit. The applicable temperature limit may be written on each facility's notice of coverage (NOC) for clarity.

The previous permit exempted discharges of only boiler blowdown from temperature limits while still requiring monitoring. That exemption was removed in the draft permit. All discharges must meet state water quality standards for temperature. Based on an analysis of DMR data from December of 2017 through March of 2021, one facility with a boiler blowdown-only discharge has reported 3 months with a temperature measurement exceeding the ecoregion standard out of 38 total months with a reported discharge. No other facilities with boiler blowdown-only reported any temperature measurements exceeding the ecoregion standard. It appears that the facilities currently covered under this permit are typically capable of meeting the ecoregion temperature standards. Therefore, the

removal of the exemption from temperature limits for facilities discharging boiler blowdown-only will be effective on the effective date of this permit.

The temperature limit table has been updated to clarify that the temperature limit is a daily maximum.

6.2 Anti-backsliding

This permit is consistent with the requirements to meet Anti-backsliding provisions of the Clean Water Act (CWA), Section 402 (o) [40 CFR § 122.44(l)]. The final effluent limitations for reissuance permits must be as stringent as those in the previous permit, unless the less stringent limitations can be justified using exceptions listed in CWA 402(o)(2), CWA 303(d)(4), or 40 CFR § 122.44(l)(2)(i).

The draft permit meets or exceeds the requirements of the previous permit.

6.3 Limits Calculations

The daily maximum limits for COD and TSS are based on Section 5.4.2 of the Technical Support Document for Water Quality-based Toxics Control:

daily maximum limits = monthly average limits \times 1.5

The daily maximum limit for O&G is based on Rule 2.510.

The daily maximum limit for temperature is based on Rule 2.502.

The daily maximum limit for flow is based on the coverage exclusion of facilities discharging greater than 0.5 MGD in Part 1.3.14 of the draft permit.

7 Wastewater Operator Requirements

Wastewater operator requirements were added for any facilities using a treatment system, if that treatment system meets the definition of a "wastewater treatment plant" in APC&EC Rule 3. Such facilities require an operator with a Basic Industrial license at minimum. Facilities that discharge untreated water and facilities with treatment systems that do not meet the definition of a "wastewater treatment plant" in Rule 3 do not require a licensed operator.

8 Public Notice

The public notice describes the procedures for the formulation of final determinations and shall provide for a public comment period of 30 days. During this period, any interested persons may submit written comments on the permit and may request a public hearing to

clarify issues involved in the permitting decision. A request for a public hearing shall be in writing and shall state the nature of the issue(s) proposed to be raised in the hearing.

A copy of the draft permit and public notice will be sent via email to the Corps of Engineers, the Regional Director of the U.S. Fish and Wildlife Service, the Arkansas Department of Parks, Heritage, and Tourism, the EPA, and the Arkansas Department of Health.

9 Economic Impact

This permit does not place any additional undue burden on any private business entity, large or small. It does not restrict any opportunities that are available to any small businesses. The inspection and control requirements are set at a level to protect water quality while minimizing the resources required for compliance.

This permit does not have a specific fee value assigned under APC&EC Rule 9.404(A). Therefore, a permit fee of \$200 has been set until a specific fee value is assigned to this permit in Rule 9, as allowed by Rule 9.404(C). This is the same initial and annual fee that has been charged under the previous permit. If a construction authorization is also required under this permit, then an additional \$500 fee will be required based on APC&EC Rule 9.402(A). This permit incorporates construction requirements into the ARG250000. The construction requirements listed in Part 1.4.4 are consistent with the minimum requirements for a state construction permit and will not have any additional economic impact.

There may be minimal additional cost for commercial facilities to obtain a Certificate of Good Standing from the Secretary of State of any State other than Arkansas.

No significant changes were made to this permit that would cause additional economic impact to the facility.

10 Contact Information

For additional information regarding this permit, please contact the NPDES Permits Branch of the Office of Water Quality:

via mail at:

NPDES Permits Branch Office of Water Quality 5301 Northshore Drive North Little Rock, AR 72218-5317

via phone at: (501) 682-0623; or

via email at water-draft-permit-comment@adeq.state.ar.us

11 Sources

- 11.1 40 CFR § 122
- 11.2 40 CFR § 124
- 11.3 40 CFR § 136
- 11.4 APC&EC Rule 2
- 11.5 APC&EC Rule 3
- 11.6 APC&EC Rule 6, which incorporates by reference certain federal regulations included in Title 40 of the Code of Federal Regulations at Rule 6.104.
- 11.7 APC&EC Rule 8
- 11.8 APC&EC Rule 9
- 11.9 ARG250000 existing permit
- 11.10 Discharge Monitoring Reports (DMRs) submitted by the facilities covered by the existing ARG250000 Permit.
- 11.11 Ark. Code Ann. § 8-4-203(m)
- 11.12 Clean Water Act
- 11.13 Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).
- 11.14 Continuing Planning Process (CPP)
- 11.15 2014 Edition of Recommended Standards for Wastewater Facilities (10 States Standards).
- 11.16 Technical Support Document for Water Quality-based Toxic Control.
- 11.17 NPDES Electronic Reporting Rule (80 FR 64063).