Authorization to Discharge Under the National Pollutant Discharge Elimination System and the Arkansas Water Pollution Control Act

In accordance with the provisions of the Arkansas Water Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.),

Wastewater Discharge from Water Treatment Plants Located within the State of Arkansas

are authorized to discharge treated wastewater from potable water treatment plants to all receiving waters except as stated in Part 1.3 in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit.

Operators within the State of Arkansas who fail to make a written request to the Director to be covered by this general permit are not authorized to discharge under the general permit.

After properly filing a Notice of Intent under Part 1.4, facilities that are eligible for coverage under this general permit, will receive a Notice of Coverage (NOC) letter, with a tracking number starting with ARG64, and a copy of the permit for the facility. The NOC letter includes the Department's determination that a facility is covered under this general permit and may specify alternate requirements outlined in the permit, such as modified sampling frequencies for certain parameters or the inclusion of monitoring for parameters in addition to those requiring regular monitoring.

Effective Date:		
Expiration Date:		
Steven L. Drown	Issue Date	
Chief, Water Division		
Arkansas Department of Environmental Quality		

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Part 1 Permit Requirements Coverage Under This Permit

1.1. <u>Permit Area</u>: The area covered by this permit includes all areas within the State of Arkansas.

1.2. Eligibility and Authorization

- 1.2.1 This general permit covers discharges of treated wastewater from backwash filters at water treatment plants. Prior to discharge to waters of the State, all waste streams shall be treated in a treatment system that has been constructed in accordance with the terms and conditions of an ADEQ state construction permit issued to the facility by the Arkansas Department of Environmental Quality.
- 1.2.2 Applicants for this permit must submit a complete Notice of Intent (NOI) to the Department to discharge under this general permit, as stated in Part 1.4.
- 1.2.3 Facilities within the State of Arkansas discharging from outfalls as described in this permit, must be authorized to discharge by either this general permit or an individual NPDES permit.

1.3 Exclusions

Although this general permit does not cover the following types of discharges, other permits such as an individual NPDES permit, an alternate general permit or other approval from the Department may be obtained. This permit does not authorize the following discharges from Water Treatment Plants:

- 1.3.1 direct discharges into Extraordinary Resource Waters (ERWs), Ecologically Sensitive Waters (ESWs), Natural and Scenic Waterways (NSWs), losing streams as defined in Reg. 6.301, or reservoirs.
- 1.3.2 discharges into a receiving waters listed pursuant to Section 303(d) of the Clean Water Act where the discharge contains pollutant of concern and the requirements of the permit are inadequate to provide sufficient reduction of the listed pollutant (e.g. a new source or new discharge if the discharges would cause of contribute to the water quality impairment).
- 1.3.3 discharges from a facility into receiving waters for which there is an established Total Maximum Daily Load (TMDL) and Waste Load Allocation (WLA) for a pollutant that is limited in this permit, and the limit is not restrictive enough for the facility to meet the TMDL and WLA requirements.
- 1.3.4 discharges of sanitary wastewater or other process wastewater (i. e. non-contact cooling water, cooling tower blowdown, etc.).
- 1.3.5 discharges that the Director determines are or may reasonably be expected to be contributing to a violation of a water quality standard as listed in APCEC Regulation No. 2, as amended;

1.4 Notification Requirements

- 1.4.1. In order to discharge under this general permit, operators of potable water treatment systems located within the State of Arkansas must submit the following items to the Department:
 - 1.4.1.1. a Notice of Intent (NOI);
 - 1.4.1.2. a state construction permit number and a statement that the facility was constructed in accordance with the plans and specifications approved by the Department;
 - 1.4.1.3. a site map indicating the location of the facility, treatment areas, and outfalls;

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- 1.4.1.4. a process flow diagram
- 1.4.1.5. a Disclosure Form as required by Reg. 8.204, if applicable and;
- 1.4.1.6. a permit fee as required by Reg. 9.404.
- 1.4.2. The NOI shall include the following minimum information:
 - 1.4.2.1. the legal name and legal address of the operator;
 - 1.4.2.2. the facility location (street address or legal description);
 - 1.4.2.3. name, telephone number, and email address of the facility contact;
 - 1.4.2.4. number and location of outfalls, including a brief narrative description of each;
 - 1.4.2.5. name of receiving stream;
 - 1.4.2.6. actual or projected wastewater flow;
 - 1.4.2.7. source of the raw water, and;
 - 1.4.2.8. if the system is owned by a corporation, then a statement that the corporation is registered with the office of the Secretary of State of Arkansas must be included;
 - 1.4.2.9. all NOIs for coverage under this general permit must be signed and certified in accordance with the provisions of 40 CFR 122.22, as adopted by reference in Reg. 6.104(A)(3).
- 1.4.3. Requests for Coverage shall be submitted as follows:
 - 1.4.3.1. <u>For existing discharges</u> covered under the General Permit (ARG640000), an NOI and all necessary information must be submitted no later than the expiration date of the current general permit. (Please note that a permit fee is not required for renewal.)
 - 1.4.3.2. For new discharges, an NOI and all necessary information (including a state construction permit number and a statement that the facility was constructed in accordance with the state construction permit and the plans and specifications approved by the Department) must be completed and submitted to the Department no later than thirty (30) days prior to first discharge. Unpermitted facilities, and facilities that have allowed coverage under the general permit to expire, will be processed as new discharges.
- 1.4.4. Notices of Intent, permit fees (no permit coverage will be issued until all fees have been paid), and other required documents may be submitted to the following address:

ADEQ, Water Division Attn: General Permits 5301 Northshore Drive North Little Rock, AR 72118

Or by email: Water-permit-application@adeq.state.ar.us

1.4.5. NOI REVIEW and PUBLIC NOTIFICATION PROCESS

All NOIs for permit coverage under this general permit will be reviewed by ADEQ prior to undergoing a public notification process as follows:

Upon receipt of Notice of Intent (NOI), ADEQ will review the submitted documents to ensure that all permit requirements are fulfilled. ADEQ may request additional information from the applicant if additional information is necessary to complete the NOI. If ADEQ makes a preliminary determination that the NOI is complete, the NOI will be made available for a five (5) business days public review and comment period on the ADEQ website. ADEQ will review comments received

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during this period and, if necessary, require the applicant to revise the NOI. If determined appropriate by ADEQ, the operator will be granted coverage under this general permit upon written notification by ADEQ.

Comments will only be considered if they regard a specific facility's NOI. Comments on the contents of the General Permit ARG640000 will not be considered during the public comment period for a specific facility's coverage under this permit.

- 1.4.6. The operator of the treatment system shall be licensed as Basic Industrial by the State of Arkansas in accordance with Arkansas Pollution Control and Ecology Commission Regulation (Reg.) 3.
 - 1.4.6.1. Existing Permittees may obtain an Apprenticeship Operator license prior to submittal of the renewal Notice of Intent, which will allow 6 months to obtain a Basic Industrial Operator license or obtain the services of a wastewater operator that holds a Basic Industrial Operator license in accordance with Reg. 3 requirements.
 - 1.4.6.2. New Permittees shall have a Basic Industrial Operator license prior to commencing the operation of the treatment system.

1.5 Requiring an Individual NPDES Permit

- 1.5.1. At the discretion of the Director, the Department may require any operator covered under this general permit to apply for and obtain an individual NPDES permit for reasons that include but are not limited to the following:
 - 1.5.1.1. The discharger is a significant contributor of pollution;
 - 1.5.1.2. The discharger is not in compliance with the conditions of the general permit.
 - 1.5.1.3. Conditions or standards have changed so that the discharger no longer qualifies for a general permit.
- 1.5.2. The operator must be notified in writing that an application for an individual permit is required. When an individual NPDES permit is issued to an operator otherwise covered under this general permit, the applicability of the general permit to that operator automatically terminates upon the effective date of the individual NPDES permit.
- 1.5.3. Any operator covered by this General Permit may request to be excluded from the coverage by applying for an individual NPDES permit.

1.6 Notice of Termination

Operators shall notify the Director upon permanent termination of all discharge from permitted outfalls at their facilities by submitting the approved Notice of Termination Form.

1.7 Re-opener Clause

In accordance with 40 CFR Part 122.62(a)(2), this permit may be modified, or alternatively, revoked and reissued, if new information is received that was not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance.

Part 2 Effluent Limitations and Monitoring Requirements

2.1 OUTFALL 101 – TIER 1: FACILITIES WITH A DAILY AVERAGE WASTE DISCHARGE FLOW $^1 \le 0.5 \text{ MGD}$

The permittee is authorized to discharge from Outfall 101 from activities associated with the production of potable water from water treatment plants. Such discharges shall be limited and monitored by the permittee as specified below:

	<u>Discharge Limitations</u>			Monitoring Requirements	
Effluent Characteristics	Concentration			T.	G 1 T
	(mg/l, unless				
	Monthly	erwise specified Daily	ĺ	Frequency	Sample Type
	Avg.	Max	Daily Avg. ¹		
Flow	Report, MGD	Report, MGD	N/A	five/week	instantaneous/ totalizing/ calculated ²
Total Suspended Solids (TSS)	20.0	30.0	N/A	once/quarter	grab
Iron (Dissolved) ³	1.0	2.0	N/A	once/quarter	grab
Manganese (Dissolved) ³	1.0	2.0	N/A	once/quarter	grab
Aluminum (Dissolved) ⁴	1.0	2.0	N/A	once/quarter	grab
Total Residual Chlorine (TRC) ⁵	<0.1 (Inst. Max.) N/A		once/quarter	grab	
рН	Minimum 6.0 s.u.	Maximum 9.0 s.u.	N/A	once/quarter	grab

¹ See Part 3.1 for the definition of Daily Average Waste Discharge Flow.

² See Part 6.2.

³ These limits apply only to facilities that use groundwater as source water.

⁴ These limits apply only to facilities that use aluminum-based coagulants in the treatment process.

There shall be no discharge of distinctly visible solids, scum, or foam other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at Outfall 101, following the final treatment unit.

If there is more than one discharge point, each point shall be designated as a separate outfall. Each outfall must be sampled, analyzed, and reported.

The permittee shall at all times properly operate and maintain the facilities to achieve compliance with the conditions of this permit, including additional sampling and testing as necessary to ensure that permit limitations are not exceeded at any time.

⁵ This limit does not apply to facilities that do not use chlorinated water for backwashing filters, nor to facilities with backwash water retention ponds with a retention time greater than 24 hours.

2.2 OUTFALL 102 – TIER 2: FACILITIES WITH A DAILY AVERAGE WASTE DISCHARGE FLOW $^1 > 0.5$ but ≤ 1.0 MGD.

The permittee is authorized to discharge from Outfall 102 from activities associated with the production of potable water from water treatment plants. Such discharges shall be limited and monitored by the permittee as specified below:

	<u>Discharge Limitations</u>			Monitoring Requirements	
Effluent Characteristics	Concentration			Frequency	Sample Type
	(mg/l, unless otherwise specified)				
	Monthly Avg.	Daily Max	Daily Avg. ¹	Trequency	Sumple Type
Flow	Report, MGD	Report, MGD	N/A	five/week	instantaneous/ totalizing/ calculated ²
Total Suspended Solids (TSS)	20.0	30.0	N/A	once/month	grab
Iron (Dissolved) ³	1.0	2.0	N/A	once/month	grab
Manganese (Dissolved) ³	1.0	2.0	N/A	once/month	grab
Aluminum (Dissolved) ⁴	1.0	2.0	N/A	once/month	grab
Total Residual Chlorine (TRC) ⁵	<0.1 (Inst. Max.) N/A		once/month	grab	
рН	Minimum 6.0 s.u.	Maximum 9.0 s.u.	N/A	once/month	grab

¹ See Part 3.1 for the definition of Daily Average Waste Discharge Flow.

There shall be no discharge of distinctly visible solids, scum, or foam other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at Outfall 102, following the final treatment unit.

If there is more than one discharge point, each point shall be designated as a separate outfall. Each outfall must be sampled, analyzed, and reported.

The permittee shall at all times properly operate and maintain the facilities to achieve compliance with the conditions of this permit, including additional sampling and testing as necessary to ensure that permit limitations are not exceeded at any time.

² See Part 6.2.

³ These limits apply only to facilities that use groundwater as source water.

⁴ These limits apply only to facilities that use aluminum-based coagulants in the treatment process.

⁵ This limit does not apply to facilities that do not use chlorinated water for backwashing filters, nor to facilities with backwash water retention ponds with a retention time greater than 24 hours.

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2.3 OUTFALL 103 – TIER 3: FACILITIES WITH A DAILY AVERAGE WASTE DISCHARGE FLOW¹ > 1.0 MGD.

The permittee is authorized to discharge from Outfall 103 from activities associated with the production of potable water from water treatment plants. Such discharges shall be limited and monitored by the permittee as specified below:

	<u>Discharge Limitations</u>			Monitoring Requirements		
Effluent Characteristics	Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type		
	Monthly Avg.	Daily Max	Daily Avg. ¹		1 71	
Flow	Report, MGD	Report, MGD	N/A	five/week	instantaneous/ totalizing/ calculated ²	
Total Suspended Solids (TSS)	20.0	30.0	N/A	once/week	grab	
Iron (Dissolved) ³	1.0	2.0	N/A	once/week	grab	
Manganese (Dissolved) ³	1.0	2.0	N/A	once/week	grab	
Aluminum (Dissolved) ⁴	1.0	2.0	N/A	once/week	grab	
Total Residual Chlorine (TRC) ⁵	<0.1 (Inst. Max.) N/A		once/week	grab		
рН	Minimum 6.0 s.u.	Maximum 9.0 s.u.	N/A	once/week	grab	

¹ See Part 3.1 for the definition of Daily Average Waste Discharge Flow.

There shall be no discharge of distinctly visible solids, scum, or foam other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at Outfall 103, following the final treatment unit.

If there is more than one discharge point, each point shall be designated as a separate outfall. Each outfall must be sampled, analyzed, and reported.

The permittee shall at all times properly operate and maintain the facilities to achieve compliance with the conditions of this permit, including additional sampling and testing as necessary to ensure that permit limitations are not exceeded at any time.

² See Part 6.2.

³ These limits apply only to facilities that use groundwater as source water.

⁴ These limits apply only to facilities that use aluminum-based coagulants in the treatment process.

⁵ This limit does not apply to facilities that do not use chlorinated water for backwashing filters, nor to facilities with backwash water retention ponds with a retention time greater than 24 hours.

Part 3 Other Requirements

3.1 <u>Daily Average Waste Discharge Flow</u>

The Daily Average Waste Discharge Flow is defined as the total flow discharged during the past two years from the effective date of the permit divided by the number of discharge days. Flow data submitted with the NOI is used by the Department to calculate this number for the facility.

3.2 TRC Requirements

Prior to final discharge, the effluent shall contain NO MEASURABLE TRC at any time. NO MEASURABLE TRC will be defined as less than 0.1 mg/l (no detectable concentration of TRC as determined by any approved method established in 40 CFR Part 136). The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes. TRC shall be measured with fifteen (15) minutes of sampling.

The monitoring and reporting requirements for TRC do not apply to facilities that do not use chlorinated water for backwashing filters, nor to facilities with backwash water retention ponds with a retention time greater than 24 hours.

3.3 Requirements for Separate Outfalls

If there is more than one discharge point, each point shall be designated as a separate outfall. Each outfall must be sampled, analyzed, and reported on a separate DMR.

3.4 Monitoring & Reporting Waiver

The permittee may apply for a waiver from the monitoring and reporting of Aluminum and/or TRC if the results of all analyses of the respective pollutants has been non-detect for 2 years.

Part 4 General Conditions

4.1 Duty To Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for enforcement action or for requiring a permittee to apply for an individual NPDES permit. Any values reported in the required monitoring reports which are in excess of the effluent limitation specified in Part 2 shall constitute evidence of violation of such effluent limitation and of this permit.

4.2 Penalties for Violations of Permit Conditions

The Arkansas Water and Air Pollution Control Act provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more twenty-five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

4.3 Permit Actions

This general permit may be modified, revoked and reissued, or terminated for cause in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit Program Regulations at 40 CFR Parts 122 and 124, as adopted by reference in Reg. 6. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4.4 Toxic Pollutants

Notwithstanding Part 4.3, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Reg. 2, as amended, (regulation establishing water quality standards for surface waters of the State of Arkansas) or Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitations on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified.

The permittee shall comply with effluent standards or prohibitions established under Reg. 2 (Arkansas Water Quality Standards), as amended, or Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

4.5 <u>Civil and Criminal Liability</u>

Except as provided in permit conditions on "Bypassing" (Part 5.4), and "Upsets" (Part 5.5), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

4.6 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

4.7 State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

4.8 Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

4.9 Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

4.10 Permit Fees

The permittee shall comply with all applicable permit fee requirements for wastewater discharge permits as described in Reg. 9 (Regulation for the Fee System for Environmental Permits). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR 122.64 and 124.5 (d), as adopted in Reg. 6 and the provisions of Reg. 8.

4.11 Permit Applicability

The permit is applicable only to facilities which are direct discharges into "Waters of the State" as defined in 40 CFR 122.2 and are subject to the requirements of section 301 and 402 of the Clean Water Act.

4.12 <u>Continuance of the Expired General Permit.</u>

An expired general permit continues in force and effect until a new (renewal) general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 CFR 122.6 and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until the earliest of:

- 4.12.1 Re-issuance or replacement of this permit, at which time you must comply with the conditions of the new permit to maintain authorization to discharge; or
- 4.12.2 Your submittal of a Notice of Termination; or
- 4.12.3 Issuance of an individual permit for the project's discharges; or
- 4.12.4 A formal permit decision by the ADEQ to not re-issue this general permit, at which time you must seek coverage under an individual permit or other general permits, if available.

4.13 Applicable Federal, State or Local Requirements.

Permittees are responsible for compliance with all applicable terms and conditions of this permit. Receipt of this permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance policy, or regulation.

Part 5 Operation and Maintenance of Pollution Controls

5.1 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. The permittee shall provide an adequate operating staff which is duly qualified to carryout operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

5.2 Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power for the treatment facility is reduced, is lost, or alternate power supply fails.

5.3 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment or the water receiving the discharge.

5.4 Bypass of Treatment Facilities

5.4.1 Bypass not exceeding limitation.

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part 5.4.2 and 5.4.3.

5.4.2 Notice.

- 5.4.2.1 Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- 5.4.2.2 Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part 7.4 (24-hour notice).

5.4.3 Prohibition of bypass.

- 5.4.3.1 Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:
 - 5.4.3.1.1 Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

- 5.4.3.1.2 There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- 5.4.3.1.3 The permittee submitted notices as required by Part 5.4.2.
- 5.4.3.2 The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in 5.4.3.1.

5.5 <u>Upset Conditions</u>

- 5.5.1 Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Part 5.5.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- 5.5.2 Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - 5.5.2.1. An upset occurred and that the permittee can identify the specific cause(s) of the upset;
 - 5.5.2.2. The permitted facility was at the time being properly operated;
 - 5.5.2.3. The permittee submitted notice of the upset as required by Part 5.4.2; and
 - 5.5.2.4. The permittee complied with any remedial measures required by Part 5.3.
- 5.5.3 Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5.6 Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State. Written approval for such disposal must be obtained from the ADEQ.

5.7 Power Failure

The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failure either by means of alternate power sources, standby generators, or retention of inadequately treated effluent.

Part 6 Monitoring and Records

6.1 Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director. Intermittent discharges shall be monitored.

6.2 Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than +/- 10% from true discharge rates throughout the range of expected discharge volumes and shall be installed at the monitoring point of the discharge.

In lieu of using a flow measurement device, the volume of the monitored discharge may be calculated by utilizing the flow measurements of filter backwash volumes that are required by Arkansas Department of Health in conjunction with operational data on both regular sedimentation basin blowdown volume and total sedimentation basin volume during periodic cleaning operations.

6.3 <u>Monitoring Procedures</u>

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. The permittee shall calibrate and perform maintenance procedures on all monitoring analytical instrumentation at intervals frequent enough to insure accuracy of measurements and shall insure that both calibration and maintenance activities will be conducted. An adequate analytical quality control program, including the analysis of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.

6.4 <u>Penalties for Tampering</u>

The Arkansas Water and Air Pollution Control Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than ten thousand dollars (\$10,000) or by both such fine and imprisonment.

6.5 Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form. Permittees are required to use preprinted DMR forms provided by ADEQ, unless specific written authorization to use other reporting forms is obtained from ADEQ. Monitoring results obtained during the previous calendar month shall be summarized and reported on a DMR form postmarked no later than the 25th day of the month, following the completed reporting period to begin on the effective date of the permit. Duplicate copies of DMRs signed and certified as required by Part 7.9 and all other reports required by Part 7 (Reporting Requirements), shall be submitted to the Director at the following address:

NPDES Enforcement Section Water Division Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, AR 72118

If permittee uses outside laboratory facilities for sampling and/or analysis, the name and address of the contract laboratory shall be included on the DMR.

6.6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the summary report. Such increased frequency shall also be indicated in the summary report.

6.7. Retention of Records

The permittee shall retain records of all monitoring information, including daily logs, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit, and records of all data used to request coverage under this permit, for a period of at least 3 (three) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

6.8. Record Contents

Records and monitoring information shall include:

- 6.8.1 The date, exact place, time and methods of sampling or measurements;
- 6.8.2 The individuals(s) who performed the sampling or measurements;
- 6.8.3 The date(s) analyses were performed;
- 6.8.4 The individual(s) who performed the analyses;
- 6.8.5 The analytical techniques or methods used; and
- 6.8.6 The measurements and results of such analyses.

6.9 Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- 6.9.1 Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 6.9.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 6.9.3 Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 6.9.4 Sample, inspect or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and/or Arkansas Water and Air Pollution Control Act, any substances or parameters at any location.

Part 7 Reporting Requirements

7.1 Planned Changes

The permittee shall give notice and provide plans and specification to the Director for review and approval prior to any planned physical alterations or additions to the permitted facility.

Any change in the facility discharge (including the introduction of any new source or significant discharge or significant changes in the quantity or quality of existing discharges of pollutants) must be reported to the permitting authority. In no case are any new connections, increased flows, or significant changes in influent quality permitted that cause violation of the effluent limitations specified herein.

7.2 Transfers

Facilities that are authorized under this permit, which undergo a change in ownership, facility name, or signatory authorization (i.e., a new cognizant official, responsible person, etc.) must submit a Permit Transfer form to the Director. A Permit Transfer form can be obtained from the General Permits Section of the Water Division at the following website:

http://www.adeq.state.ar.us/water/branch_permits/general_permits/

For an ownership change, the permit transfer form must be submitted a minimum of 30 days prior to the date the transfer to the new operator will take place. The new owner must comply with the existing permit for the facility during the interim period. A Disclosure Form will be required. Until the disclosure statement and transfer request is submitted and accepted by ADEQ, the current permittee shall remain liable for permit compliance and all permit fees, even if the current permittee no longer owns the facility.

7.3 Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part 6.5. The permittee must submit a DMR every reporting period for each outfall while operating under the permit. A DMR must be submitted even if the facility was operated under the permit for only part of a reporting period. A DMR must also be submitted even when no discharge occurs during a reporting period.

7.4 Twenty-four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrences of the noncompliance. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

The following shall be included as information which must be reported within 24 hours:

- 7.4.1 Any unanticipated bypass which exceeds any effluent limitation in the permit; and
- 7.4.2 Any upset which exceeds any effluent limitation in the permit.

7.5 Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Parts 7.3 and 7.4 at the time monitoring reports are submitted. The reports shall contain the information listed at Part 7.4.

7.6 Changes in Discharge of Toxic Substances

The permittee shall notify the Director as soon as he/she knows or has reason to believe:

- 7.6.1 That any activity has occurred or will occur which would result in the discharge, in a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 CFR 122.42(a)(1).
- 7.6.2 That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the "notification levels" described in 40 CFR Part 122.42(a)(2).

7.7 <u>Duty to Reapply</u>

This permit will expire 5 years from the effective date. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If permit coverage was granted prior to the expiration date, permit coverage is automatically continued until the earliest of:

- 7.7.1. Reissuance or replacement of this permit, at which time the operator must comply with the conditions of the new permit to maintain authorization to discharge and, the operator is required to notify the Department of his/her intent to be covered under this permit within 120 days after the effective date of the renewal permit; or
- 7.7.2. Submittal of a Notice of Termination; or
- 7.7.3. Issuance of an individual permit for the facility's discharges; or
- 7.7.4. A formal permit decision by the ADEQ to not re-issue this general permit, at which time the facility must seek coverage under an individual permit or other alternate permits.

7.8 Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

7.9 Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified as follows:

- 7.9.1. All permit applications shall be signed as follows:
 - 7.9.1.1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- 7.9.1.1.1. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- 7.9.1.1.2. The manager of one or more manufacturing, production, or operation facilities, provided: the manager is authorized to make management decisions which govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- 7.9.1.2. For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
- 7.9.1.3. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - 7.9.1.1. The chief executive officer of the agency, or
 - 7.9.1.2. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 7.9.2. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 7.9.2.1. The authorization is made in writing by a person described above;
 - 7.9.2.2. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - 7.9.2.3. The written authorization is submitted to the Director.
- 7.9.3. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7.10 Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2 and Reg. 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Environmental Quality. As required by the Regulations, the name and address of any permit applicant or permittee, permit applications, permits and effluent data shall not be considered confidential.

7.11 Penalties for Falsification of Reports

The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil and/or criminal penalties specified in Part 4.2. under the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

Part 8 Definitions

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

- 8.1 "Act": the Clean Water Act, Public Law 95-217 (33.U.S.C.1251et seq.) as amended.
- 8.2 "ADEQ" the Arkansas Department of Environmental Quality.
- 8.3 "Administrator": the Administrator of the U.S. Environmental Protection Agency.
- 8.4 "APCEC": the Arkansas Pollution Control and Ecology Commission.
- 8.5 "Applicable effluent standards and limitations": all State and Federal effluent standards and limitations to which a discharge is subject under the Act, including, but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, and pretreatment standards.
- 8.6 "Applicable water quality standards": all water quality standards to which a discharge is subject under the federal Clean Water Act and which have been (a) approved or permitted to remain in effect by the Administrator following submission to the Administrator pursuant to Section 303(a) of the Act, or (b) promulgated by the Director pursuant to Section 303(b) or 303(c) of the Act, and standards promulgated under Reg. 2, as amended, (regulation establishing water quality standards for surface waters of the State of Arkansas).
- 8.7 "Bypass": the intentional diversion of waste streams from any portion of a treatment facility.
- 8.8 "Daily Discharge": means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.
 - 8.8.1 **Mass Calculations**: For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total mass of pollutant discharged over the sampling day.
 - 8.8.2 **Concentration Calculations**: For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 8.9 "Daily Maximum": discharge limitation means the highest allowable "daily discharge" during the calendar month.
- 8.10 "Department": the Arkansas Department of Environmental Quality (ADEQ).
- 8.11 "Director": the Administrator of the U.S. Environmental Protection Agency and/or the Director of the Arkansas Department of Environmental Quality.
- 8.12 "Grab sample": an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
- 8.13 "MGD": shall mean million gallons per day.
- 8.14 "mg/l": milligrams per liter; it is essentially equivalent to parts per million in dilute aqueous solutions.
- 8.15 "Monitoring and Reporting": When a permit becomes effective, monitoring requirements are of the immediate period of the permit effective date. Where the monitoring requirement for an effluent characteristic is Once/Month, the Discharge Monitoring Report shall be submitted by the 25th of the month following the sampling. Where the monitoring

- requirement for an effluent characteristic is Once/Quarter or Once/Year, the Discharge Monitoring report shall be submitted by the 25th of the month following the monitoring period end date.
- 8.16 "Monthly Average": means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 8.17 "National Pollutant Discharge Elimination System (NPDES)": the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under section 307, 402, 318 and 405 of the Clean Water Act.
- 8.18 "Operator": for the purpose of this permit, means any person (an individual, association, partnership, corporation, municipality, state or federal agency) who has the primary management and ultimate decision-making responsibility over the operation of a facility or activity. The operator is responsible for ensuring compliance with all applicable environmental regulations and conditions.
- 8.19 "Once/Quarter": is defined as a measurement frequency where the sampling is made during a fixed calendar quarter or any part of the fixed calendar quarter. Fixed calendar quarters are: January through March, April through June, July through September, and October through December.
- 8.20 "Severe property damage": substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in productions.
- 8.21 "s.u." shall mean standard units.
- 8.22 "Total Suspended Solids (TSS)": the amount of solid material suspended in water, commonly expressed as a concentration, in terms of mg/l.
- 8.23 "Treatment works" means any devices and systems used in storage, treatment, recycling, and reclamation of municipal sewage and industrial wastes, of a liquid nature to implement section 201 of the Act, or necessary to recycle reuse water at the most economic cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities, and any works, including site acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment.
- 8.24 "Upset": an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventive maintenance, or careless or improper operations.

FACT SHEET FOR DRAFT RENEWAL GENERAL PERMIT FOR WASTEWATER DISCHARGE FROM WATER TREATMENT PLANTS

1. Background

The previous permit became effective on April 1, 2006 and expired on March 31, 2011.

The State of Arkansas has been authorized by the U. S. Environmental Protection Agency to administer the National Pollutant Discharge Elimination System (NPDES) Program in Arkansas, including the issuance of general permits to categories of dischargers under the provisions of 40 CFR 122.28, as adopted by reference in Arkansas Pollution Control and Ecology Commission Regulation (Reg.) 6.104. Under this authority, ADEQ may issue a single general permit to a category of point sources located within the same geographic area whose discharges warrant similar pollution control measures. Specifically, in accordance with 40 CFR 122.28, the ADEQ is authorized to issue a general NPDES permit if there are a number of point sources operating in a geographic area that:

- 1.1. involve the same or substantially similar types of operations;
- 1.2. discharge the same types of wastes;
- 1.3. require the same effluent limitations or operating conditions;
- 1.4. require the same or similar monitoring requirements; and
- 1.5. in the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

The violation of any condition of a general permit constitutes a violation of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 *et seq.*) and may subject the discharger to the penalties and revocation of coverage under the general permit. Upon issuance of the final general permit for this type of discharge, operators that are considered qualified for coverage under this general permit must submit a written notice of intent to the Director for coverage under the general permit.

2. Wastewater Characterization

Water treatment plants (WTPs) may use either ground water or surface water as their source water and processes can vary depending on the treatment the source water requires. Ground water is most frequently treated to remove dissolved iron and manganese and typically includes oxidation (e.g.: ozonation, addition of chlorine) to precipitate the iron and manganese followed by filtration to remove the iron and manganese oxides. The typical backwash from these oxidation/filtration processes can be characterized as follows:

Total Iron: 100 to 200 mg/l Total Manganese: 70 to 100 mg/l

Total Residual Chlorine (TRC): 0.6 to 1 mg/l

Surface water is most frequently treated by sedimentation basins followed by filtration to remove suspended solids. Precipitation, coagulation, and flocculation are frequently used to increase the effectiveness of filtration and sedimentation. Aluminum sulfate (alum) is the most common coagulant used by WTPs. Chlorine may be added before filtration as an oxidizing agent for precipitation, and to remove unwanted taste and color, and is frequently added after filtration for disinfection prior to distribution as drinking water. This chlorinated finish water is typically used to backwash the filters. Filter backwash from standard coagulation/flocculation processes associated with treating surface water can be characterized as follows:

Suspended Solids: 50 to 400 mg/l with the following make-up:

Aluminum Hydroxide (additive) - 25 to 50% Clay/Silt (source water) - 35 to 50%

Organic Matter (source water) - 15 to 25%

Total Residual Chlorine, TRC (additive): 0.1 to 1 mg/l

These pollutants concentrations show the need for limits on filter backwash water discharge.

3. Major Changes from the Previous Permit

- 3.1 Parts 1-8 of the permit have been reorganized.
- 3.2 Exclusions from the permit were separated into their own section of Part 1.
- 3.3 Exclusions for: facilities discharging into impaired waters as listed on the 303(d) list; and facilities discharging into an ERW, ESW, NSW, or losing stream have been added to Part 1.3.
- 3.4 Disclosure forms are now required per Arkansas Code Annotated Section 8-1-106, if applicable.
- 3.5 The General Conditions of the permit were broken down into separate parts.
- 3.6 Public Notice requirements have been added in Part 1.4.5.
- 3.7 Industrial Wastewater Operator License requirements have been added in Part 1.4.6.
- 3.8 Effluent limitations for Iron and Manganese have been added to the permit. These limits apply only to facilities that use ground water as the drinking water source.
- 3.9 Effluent limitations for Aluminum have been added to the permit. These limits apply only to facilities that use aluminum-based coagulants in the water treatment process.
- 3.10 Effluent limitations for Total Residual Chlorine have been added to the permit. These limits do not apply to facilities that do not use chlorinated water for backwashing filters, nor to facilities with backwash water retention ponds with a retention time greater than 24 hours.

4. Permit Coverage

The permit provides coverage for discharges associated with water treatment plant wastewater discharge. Operations covered under this permit are authorized to discharge wastewater to waters of the State of Arkansas subject to the conditions contained in the permit except as stated in Part 1.3 of the permit. Those facilities with activities designated by Standard Industrial Classification (SIC) code of 4941 are subject to coverage under the general permit for wastewater discharges from potable water treatment plants. The criteria for coverage under the proposed general permit are listed in Part 1 of this general permit. Part 1.3 of the permit identifies specific situations where facilities are excluded from coverage under the general permit and may require coverage under an individual permit.

The applicability of this permit shall be limited to discharges associated with the water treatment plants which include wastewater from the following types of potable water treatment facilities: iron and manganese removal, micro-filtration, chemical softening, and coagulation/sedimentation with filter backwash storage/treatment. Process flows contributing to the discharge include, but are not limited to: filter backwash, filtration reject, decanted sludge dewatering, influent screen backwash and/or miscellaneous low volume waste sources associated with potable water facility operation. Miscellaneous low volume waste sources may include, but are not limited to: processed potable water, dehumidifier water, sump drainage water, hydraulic valve operator water and/or pump seal water.

Facilities with significant non-compliance, facilities discharging into impaired waters as listed on the 303(d) list, facilities discharging into an ERW, ESW, NSW, or losing stream are excluded from coverage under the general permit because these issues fall outside the scope of the purpose of a general permit, which is to simplify the process of obtaining NPDES permit coverage for similar facilities that do not warrant individual or specialized consideration.

4.1. Notification Requirements

40 CFR 122.28(b)(2)(ii) requires a completed and signed application to be submitted to the Director.

4.2. Individual Permits

40 CFR 122.28(b)(3) allows the Director to determine, on a case-by-case basis, that certain facilities covered by general permits that do not generally require an individual permit may be required to obtain an individual permit because of their contributions to water pollution.

5. Best Conventional Pollutant Control Technology (BCT) and Best Available Technology Economically Achievable (BAT)

Two types of technology-based effluent limitations must be included in the permits proposed here. With regard to conventional pollutants, i.e., pH, CWA section 301 (b)(1)(E) requires effluent limitations based on "best conventional pollution control technology" (BCT). With regard to nonconventional and toxic pollutants, CWA section 301(b)(2)(A), (C), and (D) require effluent limitations based on "best available pollution control technology economically achievable" (BAT), a standard which generally represents the best performing existing technology in an industrial category or subcategory. BAT and BCT effluent limitations may never be less stringent than corresponding effluent limitations based on best practicable control technology (BPT), a standard applicable to similar discharges prior to March 31, 1989 under CWA 301(b)(1)(A).

Frequently, EPA adopts nationally applicable guidelines identifying the BPT, BCT, and BAT standards to which specific industrial categories and subcategories are subject. Until such guidelines are published, however, CWA section 402(a)(1) requires that EPA determine appropriate BCT and BAT effluent limitations in its NPDES permitting actions on the basis of its best professional judgment.

6. Water Quality Requirements

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

7. Permit Limits and Basis

Following regulations promulgated at 40 CFR Part 122.44 (1) (2) (ii), the draft permit limits are based on either technology-based effluent limits pursuant to 40 CFR Part 122.44 (a) or on State water quality standards and requirements pursuant to 40 CFR Part 122.44 (d), whichever are more stringent. Regulations promulgated at 40 CFR Part 122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on effluent limitations guidelines where applicable, on Best Professional Judgment (BPJ) in the absence of guidelines, or on a combination of the two.

Effluent limitations in this general permit were established using Best Professional Judgment pursuant to 40 CFR 125.3, and are consistent with the EPA Region 6 Memorandum concerning Water Treatment Plant Effluent Guidelines, Recommendations and the previous general permit issued for this group of facilities.

The following effluent limitations are applicable to discharge from activities associated with the production of potable water from water treatment plants:

OUTFALL 101 – TIER 1: FACILITIES WITH A DAILY AVERAGE WASTE DISCHARGE FLOW $^1 \le 0.5 \text{ MGD}$

	<u>Discharge Limitations</u>			Monitoring Requirements		
Effluent Characteristics		Concentration				
Elitari Characteristics		(mg/l, unless				
	otherwise specified)			Frequency	Sample Type	
	Monthly	Daily	Daily			
	Avg.	Max	Avg. ¹			
Flow	Report, MGD	Report, MGD	N/A	five/week	instantaneous/ totalizing/ calculated ²	
Total Suspended Solids (TSS)	20.0	30.0	N/A	once/quarter	grab	
Iron (Dissolved) ³	1.0	2.0	N/A	once/quarter	grab	
Manganese (Dissolved) ³	1.0	2.0	N/A	once/quarter	grab	
Aluminum (Dissolved) ⁴	1.0	2.0	N/A	once/quarter	grab	
Total Residual Chlorine (TRC) ⁵	<0.1 (Inst. Max.) N/A		once/quarter	grab		
рН	Minimum 6.0 s.u.	Maximum 9.0 s.u.	N/A	once/quarter	grab	

OUTFALL 102 - TIER 2: FACILITIES WITH A DAILY AVERAGE WASTE DISCHARGE FLOW $^1 > 0.5 \text{ but} \le 1.0 \text{ MGD}$

	<u>Discharge Limitations</u>			Monitoring Requirements		
Effluent Characteristics	Concentration					
Efficient Characteristics		(mg/l, unless				
	otherwise specified)			Frequency	Sample Type	
	Monthly	Daily	Daily			
	Avg.	Max	Avg. ¹			
Flow	Report, MGD	Report, MGD	N/A	five/week	instantaneous/ totalizing/ calculated ²	
Total Suspended Solids (TSS)	20.0	30.0	N/A	once/month	grab	
Iron (Dissolved) ³	1.0	2.0	N/A	once/month	grab	
Manganese (Dissolved) ³	1.0	2.0	N/A	once/month	grab	
Aluminum (Dissolved) ⁴	1.0	2.0	N/A	once/month	grab	
Total Residual Chlorine (TRC) ⁵	<0.1 (Inst. Max.) N/A		N/A	once/month	grab	
рН	Minimum 6.0 s.u.	Maximum 9.0 s.u.	N/A	once/month	grab	

OUTFALL 103 – TIER 3: FACILITIES WITH A DAILY AVERAGE WASTE DISCHARGE FLOW $^1 > 1.0\,\mathrm{MGD}$

	<u>Discharge Limitations</u>			Monitoring Requirements	
Effluent Characteristics	Concentration				
Efficient Characteristics		(mg/l, unless			
	otherwise specified)			Frequency	Sample Type
	Monthly	Daily	Daily		
	Avg.	Max	Avg. ¹		
Flow	Report, MGD	Report, MGD	N/A	five/week	instantaneous/ totalizing/ calculated ²
Total Suspended Solids (TSS)	20.0	30.0	N/A	once/week	grab
Iron (Dissolved) ³	1.0	2.0	N/A	once/week	grab
Manganese (Dissolved) ³	1.0	2.0	N/A	once/week	grab
Aluminum (Dissolved) ⁴	1.0	2.0	N/A	once/week	grab
Total Residual Chlorine (TRC) ⁵	<0.1 (Inst. Max.) N/A		once/week	grab	
рН	Minimum 6.0 s.u.	Maximum 9.0 s.u.	N/A	once/week	grab

See Part 3.1 for the

definition of Daily Average Waste Discharge Flow.

- ² See Part 6.2 of the permit.
- ³ These limits apply only to facilities that use groundwater as source water.
- These limits apply only to facilities that use aluminum-based coagulants in the treatment process.
- ⁵ This limit does not apply to facilities that do not use chlorinated water for backwashing filters, nor to facilities with backwash water retention ponds with a retention time greater than 24 hours.

The following are the specific bases for each of the particular pollutant limitations:

Total Suspended Solids (TSS):

Technology-based limitations for the TSS are based on the EPA Region 6 document titled "Water Treatment Plant Effluent Guidelines and Recommendations", the previous general permit, and 40 CFR Part 122.44(1). These limitations are judged to represent the level of treatment attainable through the application of the best conventional pollutant control technology (BCT). Regulation 2.408 states that there shall not be any formation of slime, bottom deposits, or sludge banks. Solids could still be present in the discharge even after the effluent has been treated. Measurement of TSS helps to ensure that the receiving stream and its intended uses are protected. TSS has been placed in the permit in lieu of turbidity because both of these parameters are indicative of the sediment content of the effluent, but TSS gives a measurement of the actual amount of pollutant in the discharge, in the form of concentration and mass values.

Iron and Manganese

Iron and Manganese are common constituents of groundwater that are treated and removed by drinking water treatment facilities. There are no water quality-based limitations for these constituents. These technology-based (BPJ) limitations are based on the EPA Region 6 document titled "Water Treatment Plant Effluent Guidelines, Recommendations". These limitations are judged to represent the level of treatment attainable through the application of the best conventional pollutant control technology (BCT). These limits are only applicable to facilities that use groundwater as source water.

Aluminum

There are no water quality-based limitations for this pollutant. These technology-based (BPJ) limitations are based on the EPA Region 6 document titled "Water Treatment Plant Effluent Guidelines, Recommendations". These limitations are judged to represent the level of treatment attainable through the application of the best conventional pollutant control technology (BCT). These limits are only applicable to facilities that use aluminum-based coagulants.

The permittee may apply for a waiver from the monitoring and reporting of Aluminum if the results of all analyses has been non-detect for 2 years.

Total Residual Chlorine (TRC):

Reg. 2.409 states "Discharges shall not be allowed into any waterbody which, after consideration of the zone of initial dilution, the mixing zone and critical flow conditions, will cause toxicity to human, animal, plant or aquatic life or interfere with normal propagation, growth, and survival of aquatic biota." Since residual chlorine may cause toxicity conditions in the receiving stream, and facilities covered under this general permit may discharge into waterbodies without sufficient background flow to dilute the residual chlorine concentration to levels that will prevent toxicity, a TRC limit has been included in the permit. This limit only applies to facilities which use chlorinated water to backwash their filters.

Prior to final discharge, the effluent shall contain NO MEASURABLE TRC at any time. NO MEASURABLE TRC will be defined as less than 0.1 mg/l (the non- detectable concentration of TRC as determined by any approved method established in 40 CFR Part 136). The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes. TRC shall be measured with fifteen (15) minutes of sampling.

The monitoring and reporting requirements for TRC do not apply to facilities that do not use chlorinated water for backwashing filters, nor to facilities with backwash water retention ponds with a retention time greater than 24 hours.

Facilities that do not use chlorinated water for filter backwash do not require a limit because no chlorine has been added to the wastewater. Facilities with backwash water retention ponds with a retention time greater than 24 hours do not require a limit because added chlorine is expected to dissipate in less than 24 hours.

The permittee may apply for a waiver from the monitoring and reporting of TRC if the results of all analyses has been non-detect for 2 years.

pH:

Water quality-based limits for pH are based on the APCEC Regulation No. 2.504, 40 CFR Part 122.44(1), and the previous permit. These limitations are judged to represent the level of treatment attainable through the application of the best conventional pollutant control technology (BCT). Measurement of pH helps to ensure that the alkalinity of the discharge has not been altered by products or other items on-site so that receiving stream and its intended uses are protected.

8. Monitoring and Reporting Requirements

Requirements for sample type and sampling frequency have been based on the requirements from the previous permit. All facilities operating under conditions of this general permit are required to monitor as follows:

Outfall 101 - Tier 1 (facilities with a DAWDF $\leq 0.5 \text{ MGD}$) – once/quarter for all pollutants and five/week for flow.

Outfall 102 - Tier 2 (facilities with a DAWDF > 0.5 but $\leq 1.0 \text{ MGD}$) – once/month for all pollutants and five/week for flow.

Outfall 103 – Tier 3 (facilities with a DAWDF > 1.0 MGD) – once/week for all pollutants and five/week for flow.

Sampling and testing must be conducted in accordance with 40 CFR Part 136. Permittees are required to report the results of sampling and analysis on a Discharge Monitoring Report. Reports are required to be submitted by the 25th day of the month following the reporting period. The first report will be due at the end of the reporting period following the date this general permit becomes applicable to the permittee. Oral 24-hour reporting is required for any by-pass or upset or any noncompliance which may endanger health or the environment. Unless specifically waived by the Director, written reports must also be provided within 5 days of the above occurrences.

A DMR must be submitted if a discharge occurs during a permit reporting period.

9. Other Conditions

9.1. Geographic Area and Covered Facilities

The general permit, when issued, will authorize discharges from water treatment plants throughout the State of Arkansas to all receiving waters, except those waters as described in Part 1.3. The permit will be applicable only to facilities which have direct discharges to Waters of The United States as defined in 40 CFR 122.2 and are therefore subject to the requirements of Sections 301 and 402 of the Clean Water Act. Additionally, the facility is required to be in receipt of a state construction permit issued by this Department prior to coverage under this permit.

9.2. Timing of Requests

Requests for Coverage shall be submitted as follows:

- 9.2.1. For new dischargers, at least 30 business days prior to installation.
- 9.2.2. For existing dischargers operating under the expired general permit, as soon as possible, but no later than 90 days after the effective date of this permit.

9.3. Expiration Date

This general permit will expire 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.

9.4. Standard Conditions

The conditions applicable to all NPDES permits under the provisions of 40 CFR 122.41 have been included in this General Permit, as appropriate.

9.5. Continuation of Expired Permit

In accordance with 40 CFR 122.28(b)(2)(ii), an expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. To continue coverage past the expiration date, the operator must submit an NOI, and all necessary information, no later than the expiration date of the current general permit. Permit coverage will automatically be continued until the earliest of:

- 9.5.1. Reissuance or replacement of this permit, at which time the operator must comply with the conditions of the new permit to maintain authorization to discharge; or
- 9.5.2. Submittal of a Notice of Termination; or
- 9.5.3. Issuance of an individual permit for the facility's discharges; or
- 9.5.4. A formal permit decision by the ADEQ to not re-issue this general permit, at which time the facility must seek coverage under an individual permit or other alternate permits.

9.6. Requesting General Permit Coverage.

In order to avoid conflict with the "anti-backsliding" provisions of the Clean Water Act (CWA), an existing discharger with an individual NPDES permit may apply for this general permit if the individual permit does not contain numeric water quality-based limitations for the discharge (Note that a simple pH range limit would not necessarily have to be considered a water-quality based limit unless the limit was established to address known discharge problems at a particular facility). Compliance with the numeric limitations under the individual permit shall be considered a strong indicator of eligibility for general permit coverage.

10. Sources

- 10.1. ARG640000, previous permit.
- 10.2. Arkansas Water Quality Management Plan (WQMP).
- 10.3. APC&EC Regulation No. 2.
- 10.4. APC&EC Regulation No. 6.
- 10.5. APC&EC Regulation No. 8.
- 10.6. APC&EC Regulation No. 9.
- 10.7. 40 CFR Parts 122, 124 and 125.
- 10.8. EPA Region 6 Memorandum titled "Water Treatment Effluent Guidelines, Recommendations".
- 10.9. "Fact Sheet for NPDES General Permit Water Treatment Plants Wastewater Discharge", State of Washington Department of Ecology.
- 10.10. DMRs from the previous permit period from all facilities covered under General Permit ARG640000.
- 10.11. No Objection to Draft General Permit letter, dated May 11, 2011, from Troy C. Hill, P.E. of USEPA to Morteza Shafii, Asst. Chief, Water Division, ADEO.

11. Public Notice and Comment

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 permit and public notice was sent via email to the Corps of Engineers, the Regional Director of the U.S. Fish and Wildlife Service, the Department of Arkansas Heritage, the EPA, and the Arkansas Department of Health.

12. Contact Information

Guy Lester, Staff Engineer Permits Branch, Water Division Arkansas Department of Environmental Quality 5301 Northshore Drive North Little Rock, AR 72118 (501) 682-0623

Public Notice Wastewater Discharge from Water Treatment Plants General Permit Permit Number ARG640000

This is to give notice that the Permits Branch of the Water Division of the Arkansas Department of Environmental Quality (ADEQ), 5301 Northshore Drive, North Little Rock, Arkansas 72118-5317 at telephone number (501) 682-0622, proposes a draft renewal of the general permit for Wastewater Discharge from Water Treatment Plants located within the State of Arkansas under the National Pollutant Discharge Elimination System (NPDES) and the Arkansas Water and Air Pollution Control Act.

Operators of water treatment plants located within the State of Arkansas requesting coverage will be authorized to discharge to all allowable waters, as set forth in General Permit ARG640000. All receiving waters are a Water of the State classified for raw water source for public, industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses.

ADEQ's contact person for submitting written comments, requesting information regarding the draft general permit, or obtaining copy of the general permit and the Fact Sheet is Guy Lester, at the above address and telephone number or by email at Water-Draft-Permit-Comment@adeq.state.ar.us. For those with Internet access, a copy of the proposed draft general permit may be found on the ADEQ's website at: http://www.adeq.state.ar.us/water/branch_permits/individual_permits/pn_permits/pn_permits.asp.

The last day of the comment period is 30 days after the publication date. If the last day of the comment period is a Saturday, Sunday or legal holiday, the public comment period shall expire on the next day that is not a Saturday, Sunday or legal holiday. The permit will become effective approximately two weeks after the close of the comment period unless comments are received and/or a public hearing is requested prior to the close of the comment period requiring a delay of the effective date. Comments and public hearing procedures may be found at 40 CFR Parts 124.10 through 124.12 and APC&EC Regulation No. 8, Administrative Procedures. All persons who wish to comment on ADEQ's draft permitting decision must submit written comments to ADEQ, along with their name and mailing address. After the public comment period, and public hearing, if one is held, ADEQ will issue a final permitting decision. A Public Hearing will be held when ADEQ finds a significant degree of public interest. ADEQ will notify each person who has submitted written comments or requested notice of the final permitting decision. Any interested person who has submitted comments may appeal a final decision by ADEQ in accordance with Regulation No. 8.