

ADEQ

ARKANSAS
Department of Environmental Quality

March 15, 2012

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (91 7199 9991 7030 4904 1934)

Carey Austell, Plant Manager
Ash Grove Cement Company
4343 Highway 108 W
Foreman, AR 71836

RE: Discharge Permit Number AR0042846 – AFIN 41-00001

Dear Mr. Austell:

Enclosed is the public notice, a copy of the draft permit and Statement of Basis that the Arkansas Department of Environmental Quality (ADEQ) has prepared and mailed to you on above date under the authority of the National Pollutant Discharge Elimination System (NPDES) and the Arkansas Water and Air Pollution Control Act. A copy of the final permit will be mailed to you when the Department has made a final permitting decision.

In accordance with Reg. 8.207, the enclosed public notice will be or has been published by ADEQ in a newspaper of general circulation of your facility for one (1) day only. An invoice for the cost of publishing the public notice and proof of publication will be sent to you by the advertising newspaper. The permittee must send proof of publication and proof of payment to the address at the bottom of this letter as soon as possible but no later than 30 days from the above date. Until this Department receives proof of publication of the public notice and payment of all permit fees, no further action will be taken on the issuance of your discharge permit.

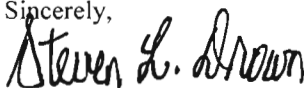
The following is a list of the major changes to the previously issued permit:

1. Internal Outfalls 03A and 03B were removed from the permit.
2. BOD5 and DO limits were added to Outfall 003.
3. Production-based TSS mass limits were added at Outfall 003.
4. A temperature rise limitation and temperature monitoring at intake was added.
5. Requirement to conduct a priority pollutant scan at Outfall 001 at the first discharge was added.
6. Requirement to sample for Total Recoverable Copper at Outfall 002 at the first discharge was added.
7. Flow sample type at Outfalls 001 and 002 were changed from "instantaneous" to "calculated".

For more details on this list of changes, please see Section 6 of the enclosed Statement of Basis.

Comments must be received at ADEQ prior to the close of the public comment period as described in the enclosed public notice. Once a final permit is issued by the Director and becomes effective, the permittee must comply with all terms and conditions of the permit, or be subject to enforcement actions for any instances of noncompliance during the duration of the permit, usually five (5) years. Consequently, it is imperative that you, as the applicant, thoroughly review the enclosed documentation for accuracy, applicability, and your ability to comply with all conditions therein. If you have any questions concerning any part of the draft permit, please contact Shane Byrum at (501) 682-0618.

Sincerely,



Steven L. Drown
Chief, Water Division

SD:sb
Enclosure

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY

PUBLIC NOTICE OF DRAFT DISCHARGE PERMIT AND 208 PLAN
PERMIT NUMBER AR0042846, AFIN 41-00001

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 permit for which an application was received on 5/27/2011 for the following applicant under the National Pollutant Discharge Elimination System (NPDES) and the Arkansas Water and Air Pollution Control Act.

Applicant: Ash Grove Cement Company, 4343 Highway 108W, Foreman, AR 71836. Location: approximately two miles southwest of Foreman, AR on Highway 108 West; Latitude: 33° 41' 59.3"; Longitude: 94° 24' 57.8" in Little River County, Arkansas. The discharge from this facility is into an unnamed tributary of French Creek, thence to French Creek, thence to Walnut Bayou, thence to the Red River in Segment 1B of the Red River Basin. The discharge consists of the following sources: active quarry dewatering, stormwater runoff from active and inactive cement kiln dust landfill, chalk dryer wet scrubber discharge, truck washout water, treated domestic wastewater effluent, non-contact cooling water, and process area wash down water.

The 208 Plan, developed by the ADEQ under provisions of Section 208 of the federal Clean Water Act, is a comprehensive program to work toward achieving federal water goals in Arkansas. The initial 208 Plan, adopted in 1979, provides for annual updates, but can be revised more often if necessary. The 208 Plan has been revised to include a monthly average BOD5 limit of 10 mg/l at Outfall 003, and to include instantaneous minimum Dissolved Oxygen limitations at Outfall 003 of 2.0 mg/l during May through October and 5.0 mg/l during November through April.

ADEQ's contact person for submitting written comments, requesting information regarding the draft permit, or obtaining a copy of the permit and the Statement of Basis is Shane Byrum, 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 permit as well as the publication date may be found on the ADEQ's website at: http://www.adeq.state.ar.us/water/branch_permits/individual_permits/pn_permits/pnpermits.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. For information regarding the actual publication date along with the actual date and time the comment period will end, please contact Shane Byrum at the above address and telephone number or by email at Water-Draft-Permit-Comment@adeq.state.ar.us. Public notice, comments, and hearings will be conducted in accordance with Regulation 6.104(A)(5) [40 CFR Parts 124.10 through 124.12 by reference] and Regulation 8.209 and 8.210. All persons, including the permittee, who wish to comment on ADEQ's draft permitting decision, must submit written comments to ADEQ, along with their name and mailing address. A Public Hearing will be held when ADEQ finds a significant degree of public interest. After the public comment period, ADEQ will issue a final permitting decision. ADEQ will notify the applicant and each person who has submitted written comments or request notice of the final permitting decision. Any interested person who has submitted comments may appeal a final decision by ADEQ in accordance with the APCEC Regulation No. 8.603 (Administrative Procedures).

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Statement of Basis

This Statement of Basis is for information and justification of the permit limits only. Please note that it is not enforceable. This draft permitting decision is for renewal of the discharge Permit Number AR0042846 with Arkansas Department of Environmental Quality (ADEQ) Facility Identification Number (AFIN) 41-00001 to discharge to Waters of the State.

1. PERMITTING AUTHORITY.

The issuing office is:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT.

The applicant's mailing and facility address is:

Ash Grove Cement Company
4343 Highway 108 W
Foreman, AR 71836

3. PREPARED BY.

The permit was prepared by:

Shane Byrum
Staff Engineer
Discharge Permits Section, Water Division
(501) 682-0618
E-mail: byrum@adeq.state.ar.us

4. PERMIT ACTIVITY.

Previous Permit Effective Date:	12/01/2006
Previous Permit Modification Date:	09/01/2008
Previous Permit Expiration Date:	11/30/2011

The permittee submitted a permit renewal application on 5/27/2011. It is proposed that the current discharge permit be reissued for a 5-year term in accordance with regulations promulgated at 40 CFR Part 122.46(a). The monitoring requirements and limits at Internal Outfalls 03A and 03B are being removed with this permit renewal. The permit writer determined that permit limits on the discharges from both of these internal outfalls is not necessary because these wastestreams receive additional treatment in the process water pond

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prior to being ultimately discharged to Waters of the State at Outfall 003. Since the effluent limits on the Internal Outfall 03B were removed, water quality-based limits for BOD₅ and Dissolved Oxygen were added at Outfall 003 since the process water pond receives the treated domestic wastewater previously monitored at Internal Outfall 03B. A temperature rise limitation and production-based mass limits for TSS were also added to Outfall 003 as required by 40 CFR Part 411, Subpart A.

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

BAT - best available technology economically achievable
BCT - best conventional pollutant control technology
BMP - best management practice
BOD₅ - five-day biochemical oxygen demand
BPJ - best professional judgment
BPT - best practicable control technology currently available
CBOD₅ - carbonaceous biochemical oxygen demand
CD - critical dilution
CFR - Code of Federal Regulations
cfs - cubic feet per second
COD - chemical oxygen demand
COE - United States Corp of Engineers
CPP - continuing planning process
CWA - Clean Water Act
DMR - discharge monitoring report
DO - dissolved oxygen
ELG - effluent limitation guidelines
EPA - United States Environmental Protection Agency
ESA - Endangered Species Act
FCB - fecal coliform bacteria
gpm - gallons per minute
MGD - million gallons per day
MQL - minimum quantification level
NAICS - North American Industry Classification System
NH₃-N - ammonia nitrogen
NO₃ + NO₂-N - nitrate + nitrite nitrogen
NPDES - National Pollutant Discharge Elimination System
O&G - oil and grease
Reg. 2 - APCEC Regulation No. 2
Reg. 6 - APCEC Regulation No. 6
Reg. 8 - APCEC Regulation No. 8
Reg. 9 - APCEC Regulation No. 9

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RP - reasonable potential
SIC - standard industrial classification
TDS - total dissolved solids
TMDL - total maximum daily load
TP - total phosphorus
TRC - total residual chlorine
TSS - total suspended solids
UAA - use attainability analysis
USF&WS - United States Fish and Wildlife Service
WET - Whole effluent toxicity
WQMP - water quality management plan
WQS - Water Quality standards
WWTP - wastewater treatment plant

DMR Review:

The Discharge Monitoring Reports (DMR's) for the last three years (May 2008 to May 2011) were reviewed during the permit renewal process. There were no violations reported at Outfalls 001, 002, 003, or Internal 03A. There were violations reported in 10 reporting months for Internal Outfall 03B. Both internal outfalls are being removed from the permit because the permit writer determined that monitoring and reporting at the internal locations are not needed because both of these internal wastestreams receive additional treatment in the process water pond prior to being ultimately discharged at Outfall 003.

Legal Order Review:

There are currently no active Consent Administrative Orders (CAOs) or Notice of Violations (NOVs) for this facility.

Site Visits/Inspections

A site visit was performed on 10/12/2011. All outfalls were observed and coordinates were taken with a GPS unit. During the site visit there was no discharge occurring from Outfalls 001, 002, or 003. A stormwater outfall (SW-2) at the active mining operation was identified during the visit that is not presently covered under the industrial general stormwater permit. The facility was instructed to apply for coverage of SW-2 under the IGP.

The permit engineer also discussed the applicability of the effluent limitations guidelines under 40 CFR Part 411 for cement manufacturing. It was determined that the facility is classified under Part 411, Subpart A – Nonleaching Subcategory, and Subpart C – Materials Storage Piles Runoff Subcategory. In the previous permit, the facility was only classified under Subpart C, thus the previous permit did not contain the production-based effluent

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limits for TSS, nor did the previous permit contain the technology-based limit on allowable temperature rise from the intake to the discharge.

5. FINANCIAL ASSURANCE

Financial Assurance is not required since the permittee does not operate a “non-municipal domestic sewage treatment works” as defined in Arkansas Code § 8-4-203(b).

6. SIGNIFICANT CHANGES FROM THE PREVIOUSLY ISSUED PERMIT.

The permittee is responsible for carefully reading the permit in detail and becoming familiar with all of the changes therein:

1. Internal Outfalls 03A and 03B were removed from the permit. The permit writer determined that monitoring and reporting at the internal locations are not needed because both of these internal wastestreams receive additional treatment in the process water pond prior to being ultimately discharged at Outfall 003.
2. BOD5 and DO limits were added to Outfall 003 since Internal Outfall 03B (treated domestic wastewater) was removed from the permit.
3. Production-based TSS mass limits were added at Outfall 003 based on the effluent limitation guidelines found in 40 CFR Part 411, Subpart A.
4. A temperature rise limitation and temperature monitoring at intake from process water pond and at Outfall 003 was added to demonstrate compliance with 40 CFR 411, Subpart A.
5. Requirement to conduct a priority pollutant scan at Outfall 001 at the first discharge after the effective date of the permit was added because a PPS was not submitted with the May 2011 renewal application due to no discharge occurring from this outfall since May 2010.
6. Requirement to sample for Total Recoverable Copper at Outfall 002 at the first discharge after the effective date of the permit was added due to the copper test results submitted with the application not meeting the required test method MQL.
7. Flow sample type at Outfalls 001 and 002 were changed from “instantaneous” to “calculated” since the permittee does not utilize any type of weir or meter to determine flow rate at these outfalls.
8. Facility and outfall latitude/longitude coordinates were revised to more accurate values.

7. RECEIVING STREAM SEGMENT AND DISCHARGE LOCATION.

The outfalls are located at the following coordinates based on a handheld Garmin GPS unit measured on an October 12, 2011 site visit:

Outfall 001: Latitude: 33° 41' 9.2" Longitude: 94° 25' 28.4"

Outfall 002: Latitude: 33° 41' 29.6" Longitude: 94° 25' 36.3"

Outfall 003: Latitude: 33° 41' 15.3" Longitude: 94° 25' 28.7"

The receiving waters are described as follows:

unnamed tributary of French Creek, thence to French Creek, thence to Walnut Bayou, thence to the Red River in Segment 1B of the Red River Basin. The receiving stream with USGS Hydrologic Unit Code (H.U.C) of 11140106 and Reach 004 is a Water of the State classified for secondary contact recreation, raw water source for domestic (public and private), industrial, and agricultural water supplies, propagation of desirable species of fish and other aquatic life, and other compatible uses.

8. 316(B) REQUIREMENTS FOR COOLING WATER INTAKE STRUCTURE

The facility withdraws water used for cooling purposes from its waste treatment ponds known as the "blue hole pond" and "process water pond". These waste treatment ponds were constructed and designed for treatment of wastewater generated at the facility and stormwater runoff prior to discharging to Waters of the United States via the permitted outfall. Cooling water intake structure (CWIS) is defined in 40 CFR Part 122, Subpart J as "the total physical structure and any associated constructed waterways used to withdraw cooling water from waters of the United States". Furthermore, 40 CFR 122.22 states that waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act are not considered waters of the United States. Thus, Section 316(b) requirements for cooling water intake structures are not applicable to this facility's cooling water intakes since the cooling water is not withdrawn from waters of the United States.

9. 303(d) LIST, ENDANGERED SPECIES, AND ANTI-DEGRADATION CONSIDERATIONS.

A. 303(d) List:

The receiving stream is not listed on the 2008 303(d) list. Therefore no permit action is needed.

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B. Endangered Species:

No comments on the application were received from the U.S. Fish and Wildlife Service (USF&WS). The draft permit and Statement of Basis will be sent to the USF&WS for their review.

C. Anti-Degradation:

The limitations and requirements set forth in this permit for discharge into waters of the State are consistent with the Antidegradation Policy and all other applicable water quality standards found in APC&EC Regulation No. 2.

10. OUTFALL, TREATMENT PROCESS DESCRIPTION, AND FACILITY CONSTRUCTION.

The following is a description of the facility described in the application:

A. Highest Monthly Average Flow during past 2 years:

Outfall 001: 0.115 MGD
Outfall 002: 0.14 MGD
Outfall 003: 0.83 MGD

B. Type of Treatment:

Outfall 001: sedimentation pond
Outfall 002: sedimentation pond
Outfall 003: sedimentation pond

C. Discharge Description:

Outfall 001: discharge from the Fishing Lake consisting of active quarry dewatering and stormwater runoff.
Outfall 002: discharge from the Coal Pile Sedimentation Pond consisting of stormwater runoff from the coal storage area and closed CKD landfill.
Outfall 003: discharge from the process water pond consisting of the following sources: chalk dryer wet scrubber discharge, stormwater runoff from coal processing area, truck washout water, sanitary wastewater treatment lagoon effluent, lab/office building sanitary package plant effluent, non-contact cooling water, process area washdown water, stormwater runoff from closed Cement Kiln Dust landfill, and active CKD landfill leachate and runoff discharged from a sedimentation pond.

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- D. Facility Status: This facility was evaluated using the NPDES Permit Rating Worksheet (MRAT) to determine the correct permitting status. Since the facility's MRAT score (35) is less than 80, this facility is classified as a minor industrial.
- E. Facility Construction: This permit does not authorize or approve the construction or modification of any part of the treatment system or facilities. Approval for such construction must be by permit issued under Reg. 6.202.

11. ACTIVITY.

Under the Standard Industrial Classification (SIC) code of 3241 or North American Industry Classification System (NAICS) code of 327310, the applicant's activity is the manufacturing of portland cement.

12. SEWAGE SLUDGE PRACTICES.

Sewage sludge generated from the domestic wastewater treatment unit is hauled off and disposed of in the Upper Southwest Regional landfill under solid waste permit No. 0265-S1-R1.

13. PERMIT CONDITIONS.

The Arkansas Department of Environmental Quality has made a determination to issue a draft permit for the discharge described in the application. Permit requirements are based on federal regulations (40 CFR Parts 122, 124, and Subchapter N), the National Pretreatment Regulation in 40 CFR Part 403 and regulations promulgated pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. 8-4-101 et. seq.).

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A. Effluent Limitations

Outfall 001- discharge from Fishing Lake (active quarry dewatering and stormwater runoff)

1. **Conventional and/or Toxic Pollutants**

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/month ¹	calculated ²
Total Suspended Solids (TSS)	N/A	N/A	N/A	50	once/month ¹	grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month ¹	grab

1 Samples shall be taken at the first discharge of each calendar month.

2 Flow is calculated using bucket and stopwatch method.

2. **Solids, Foam, and Free Oil:** There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen due to the presence of oil (Sheen means an iridescent appearance on the surface of the water).

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B. Effluent Limitations

Outfall 002 - discharge from the coal pile sedimentation pond (stormwater runoff from the coal storage area and closed CKD landfill).

1. **Conventional and/or Toxic Pollutants**

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/month ¹	calculated ²
Total Suspended Solids (TSS)	N/A	N/A	N/A	50	once/month ¹	grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month ¹	grab

1 Samples shall be taken at the first discharge of each calendar month.

2 Flow is calculated using the cross-sectional area of the outfall pipe and measured velocity through the pipe.

2. **Solids, Foam, and Free Oil:** There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen due to the presence of oil (Sheen means an iridescent appearance on the surface of the water).

C. Effluent Limitations

OUTFALL 003 – discharge from the process water pond consisting of the following sources: chalk dryer wet scrubber discharge, stormwater runoff from coal processing area, truck washout water, sanitary wastewater treatment lagoon effluent, lab/office building sanitary package plant effluent, non-contact cooling water, process area washdown water, stormwater runoff from closed Cement Kiln Dust landfill, and active CKD landfill leachate and runoff discharged from a sedimentation pond.

1. **Conventional and/or Toxic Pollutants**

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/month ¹	instantaneous ³
Biochemical Oxygen Demand (BOD ₅)	N/A	N/A	10	15	once/month ¹	grab
Total Suspended Solids (TSS)	N/A	34.9	N/A	50	once/month ¹	grab
Discharge Temperature ($T_{\text{discharge}}$) ²	N/A	N/A	N/A	Report °C	once/month ¹	in-situ
Intake Temperature (T_{intake}) ²	N/A	N/A	N/A	Report °C	once/month ¹	in-situ
Temperature Rise (ΔT) ²	N/A	N/A	N/A	3 °C	once/month ¹	calculate
Dissolved Oxygen (DO)						
(May-October)	N/A	N/A	2.0 (Instantaneous Min.)		once/month ¹	grab
(November-April)	N/A	N/A	5.0 (Instantaneous Min.)		once/month ¹	grab
Fecal Coliform Bacteria (FCB)			(colonies/100ml)			
	N/A	N/A	1000	2000	once/month ¹	grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month ¹	grab

- 1 Samples shall be taken at the first discharge of each calendar month.
- 2 See Condition No. 8 of Part II. $T_{\text{discharge}} - T_{\text{intake}}$ (ΔT) shall not exceed 3 °C.
- 3 Flow is determined using a rectangular weir.

2. **Solids, Foam, and Free Oil:** There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen due to the presence of oil (Sheen means an iridescent appearance on the surface of the water).

14. BASIS FOR PERMIT CONDITIONS.

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

Technology-Based Versus Water Quality-Based Effluent Limitations And Conditions

Following regulations promulgated at 40 CFR Part 122.44, 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 as follows:

Parameter	Water Quality-Based		Technology-Based		Previous Permit		Draft Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
Outfall 001								
TSS	N/A	N/A	N/A	50	N/A	50	N/A	50
pH	6.0 – 9.0 s.u.		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.	
Outfall 002								
TSS	N/A	N/A	N/A	50	N/A	50	N/A	50
pH	6.0 – 9.0 s.u.		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.		6.0 – 9.0 s.u.	
Outfall 003								
BOD5	10	15	N/A	N/A	N/A	N/A	10	15
TSS	N/A	N/A	N/A	50	N/A	50	N/A	50
Discharge Temperature	N/A	N/A	N/A	Report	Report	Report	N/A	Report
Intake Temperature	N/A	N/A	N/A	Report	N/A	N/A	N/A	Report
Temperature Rise from intake to discharge	N/A		3°C (Daily Max)		N/A		3°C (Daily Max)	
DO (May-Oct)	2.0 (Inst. Min.)		N/A		Report (Inst. Min.)		2.0 (Inst. Min.)	
DO (Nov-Apr)	5.0 (Inst. Min.)		N/A		Report (Inst. Min.)		5.0 (Inst. Min.)	

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Parameter	Water Quality-Based		Technology-Based		Previous Permit		Draft Permit	
	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l	Monthly Avg. mg/l	Daily Max. mg/l
FCB (col/100ml)	1000	2000	N/A	N/A	1000	2000	1000	2000
pH	6.0-9.0 s.u.		6.0-9.0 s.u.		6.0-9.0 s.u.		6.0-9.0 s.u.	

A. Justification for Limitations and Conditions of the draft permit:

Parameter	Water Quality or Technology	Justification
Outfall 001		
TSS	Technology	40 CFR 411.32(a)
pH	Technology	40 CFR 411.32(a)
Outfall 002		
TSS	Technology	40 CFR 411.32(a)
pH	Technology	40 CFR 411.32(a)
Outfall 003		
BOD5	Water Quality	MultiSMP Model dated 10/24/2011
TSS	Technology	40 CFR 411.32(a) (daily maximum concentration limit)
		40 CFR 411.12 (daily maximum mass limit)
Temperature rise from intake to discharge	Technology	40 CFR 411.12
DO	Water Quality	MultiSMP Model dated 10/24/2011 and Reg. 2.505
FCB	Water Quality	Reg. 2.507
pH	Technology	40 CFR 411.32(a)

B. Anti-backsliding

The draft 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 40 CFR 122.44 (l)(2)(i).

The limits at Outfalls 001, 002, and 003 are as stringent as those in the previous permit, with TSS mass limits and temperature rise limit being added at Outfall 003. The removal of the limits and monitoring requirements at internal outfalls 03A and 03B is not considered backsliding since the previous internal outfall limits were applied prior to the final treatment (process water pond) and the discharge from the process water pond

(Outfall 003) already includes the same technology-based limits as the previous internal outfall 03A. The removal of limits at internal outfall 03B is justified since this treated domestic wastewater undergoes additional treatment in the process water pond prior to being discharged at Outfall 003, and water-quality based BOD5, FCB, and DO limits are included at Outfall 003 to regulate the quality of this internal domestic wastestream after final treatment in the process water pond.

C. Limits Calculations

1. Mass limits:

In accordance with 40 CFR 122.45(f)(1), all pollutants limited in permits shall have limitations expressed in terms of mass if feasible. 40 CFR 122.45(f)(2) allows for pollutants which are limited in terms of mass to also be limited in terms of other units of measurement.

Since the discharge from all outfalls is highly dependent on rainfall and the magnitude of storm events, the only mass limit included in the permit is the technology-based mass limit for TSS applied at Outfall 003. Outfall 003 is the discharge from the process water pond which receives all process wastewater generated at the facility. The calculation of the TSS mass limit at Outfall 003 is shown in Section 14.C.3 below.

2. Daily Maximum Limits:

The daily maximum limits for BOD5 is based on Section 5.4.2 of the Technical Support Document for Water Quality-Based Toxics Control.

Daily Maximum limits = Monthly average limits X 1.5

The daily maximum limits for FCB is based on Reg. 2.507.

3. Applicable Effluent Limitations Guidelines

Discharges from facilities of this type are covered by Federal effluent limitations guidelines promulgated under 40 CFR Part 411, Cement Manufacturing Point Source Category, Subcategory A – Non-leaching process subcategory, and Subcategory C – Runoff from Material Storage Piles. The technology-based effluent limits for each of these subcategories is summarized in the tables below:

40 CFR Part 411.12, Subpart A – Non-Leaching Subcategory	
Parameter	Effluent Limitations
TSS	0.005 lb/1000 lb product
Temperature rise from inlet to discharge	< 3°C
pH	6.0-9.0 s.u.

40 CFR Part 411.32(a), Subpart C – Material Storage Piles Runoff Subcategory	
Parameter	Effluent Limitations
TSS	50 mg/l daily maximum
pH	6.0-9.0 s.u.

The TSS and pH limits for Subpart C are included in the permit for Outfalls 001, 002, and 003 since all of these outfalls receive runoff from material storage piles.

The production based TSS limit for Subpart A was included at Outfall 003 since this outfall receives process wastewater. The facility replaced the three “wet process” kilns with one “preheater/precalciner kiln system” also called a “pyroprocessing” system, which uses a “dry process” to produce cement clinker. Operation of this new system started in March 2010. Since the new process started up the facility has achieved a maximum monthly production of 104,793 tons/month. (March 2011). Based on 30 days of operation per month, this equates to 3493 tons/day. Therefore, the TSS mass limit included in the permit at Outfall 003 is calculated based on a cement production rate of 3493 tons/day. This production rate is considered a reasonable measure of actual production for the purpose of calculating the production-based effluent limitation for TSS.

The calculation of the TSS production-based effluent limit for Outfall 003 is as follows:

$$\text{TSS (lb/day)} = 3493 \text{ tons/day} \times 2000 \text{ lb/ton} \times 0.005 \text{ lb/1000 lb} = 34.9 \text{ lb/day}$$

The permit also contains a requirement to measure the temperature of the intake from the process water pond and the temperature of the discharge from Outfall 003 to demonstrate compliance with the temperature rise limitation in 40 CFR 411, Subpart A.

4. Stormwater Runoff

All stormwater runoff at this facility is discharged through either Outfall 001, 002, or 003, with the exception of one potential stormwater outfall (SW-2) located near the southeast corner of the facility property line in the active mining area. This stormwater outfall is currently not permitted. During the site visit, it was recommended that the facility apply for a stormwater industrial general permit (IGP)

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for outfall SW-2 to provide coverage of this stormwater discharge until such time as the mining activities reach a point where the stormwater flows back to the quarry pit.

D. 208 Plan (Water Quality Management Plan)

The 208 Plan, developed by the ADEQ under provisions of Section 208 of the federal Clean Water Act, is a comprehensive program to work toward achieving federal water goals in Arkansas. The initial 208 Plan, adopted in 1979, provides for annual updates, but can be revised more often if necessary. The 208 Plan has been revised to include a monthly average BOD5 limit of 10 mg/l at Outfall 003, and instantaneous minimum Dissolved Oxygen limitations at Outfall 003 of 2.0 mg/l during May through October and 5.0 mg/l during November through April.

E. Priority Pollutant Scan (PPS)

ADEQ has reviewed and evaluated the effluent in accordance with the potential toxicity of each analyzed pollutant using the procedures outlined in the Continuing Planning Process (CPP).

The concentration of each pollutant after mixing with the receiving stream was compared to the applicable water quality standards as established in the Arkansas Water Quality Standards (AWQS), Regulation No. 2 (Reg. 2.508).

Under Federal Regulation 40 CFR Part 122.44(d), as adopted by Regulation No. 6, if a discharge poses the reasonable potential to cause or contribute to an exceedance above a water quality standard, the permit must contain an effluent limitation for that pollutant. Effluent limitations for the toxicants listed below have been derived in a manner consistent with the Technical Support Document (TSD) for Water Quality-based Toxics Control (EPA, March 1991), the CPP, and 40 CFR Part 122.45(c).

The following items were used in calculations:

Parameter	Value	Source
Flow = Q	<u>Outfall 002</u> 0.14 MGD = 0.22 cfs <u>Outfall 003</u> 0.83 MGD = 1.28 cfs	Reported DMR data from May 2009 to May 2011.
7Q10	0 cfs	U.S.G.S.
TSS	5.5 mg/l	CPP
Hardness as CaCo3	31 mg/l	CPP
pH	7.9 s.u.	Average of pH values reported for Outfall 003 from May 2009 to May 2011.

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The following pollutants were reported:

Pollutant	Concentration Reported, µg/l	MQL, µg/l
Outfall 002		
Copper	< 20**	0.5
Nickel	< 10***	0.5
Mercury	0.00168	0.005
Outfall 003		
Copper	0.69	0.5
Nickel	0.72	0.5
Lead	0.55	0.5
Mercury	0.00266	0.005

ADEQ has determined from the submitted information that the discharge does not pose the reasonable potential to cause or contribute to an exceedance above a water quality standard.

- * Since the facility has not had a discharge from Outfall 001 since May 2010, a priority pollutant scan was not available to analyze during the preparation of this renewed permit. Therefore, this permit contains a condition requiring a PPS to be performed and the results reported on the first discharge from Outfall 001.
- ** The PPS results performed at Outfall 002 reported a copper result of < 20 ug/l. However, the required MQL is 0.5 ug/l. An assumed copper value of 20 ug/l shows reasonable potential to violate water quality standards. However, the permit writer does not believe a copper limit is necessary based solely on the shortcomings of the test method used, therefore, the permit requires a copper sample to be collected at the first discharge from Outfall 002 using the required MQL to determine if copper is present in the effluent at levels that show reasonable potential to cause or contribute to an exceedance above a water quality standard.
- ***The PPS results performed at Outfall 002 reported a nickel result of < 10 ug/l. The required MQL is 0.5 ug/l. However, a concentration of 10 ug/l does not show reasonable potential to cause or contribute to an exceedance above a water quality standard.

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15. SAMPLE TYPE AND FREQUENCY.

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [40 CFR Part 122.48(b)] and to ensure compliance with permit limitations [40 CFR Part 122.44(i)(1)].

Requirements for sample type and sampling frequency have been based on the current discharge permit. The sampling frequency for the added parameters of intake temperature, temperature rise, and BOD5 at outfall 003 were set at once/month to be consistent with the required frequency for the other parameters monitored at this outfall.

Parameter	Previous Permit		Draft Permit	
	Frequency of Sample	Sample Type	Frequency of Sample	Sample Type
Outfall 001				
Flow	once/month	instantaneous	once/month	calculated
TSS	once/month	grab	once/month	grab
pH	once/month	grab	once/month	grab
Outfall 002				
Flow	once/month	instantaneous	once/month	calculated
TSS	once/month	grab	once/month	grab
pH	once/month	grab	once/month	grab
Outfall 003				
Flow	once/month	instantaneous	once/month	instantaneous
TSS	once/month	grab	once/month	grab
Discharge Temperature	once/month	in-situ	once/month	in-situ
Intake Temperature	n/a	n/a	once/month	in-situ
Temperature Rise	n/a	n/a	once/month	calculated
BOD5	n/a	n/a	once/month	grab
DO	once/month	grab	once/month	grab
FCB	once/month	grab	once/month	grab
pH	once/month	grab	once/month	grab

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16. PERMIT COMPLIANCE.

A Schedule of Compliance has not been included in this permit. Compliance with all permit requirements is required on the effective date of the permit.

17. MONITORING AND REPORTING.

The applicant is at all times required to monitor the discharge on a regular basis and report the results monthly. The monitoring results will be available to the public.

18. SOURCES.

The following sources were used to draft the permit:

- A. Application No. AR0042846 received 5/27/2011.
- B. APCEC Regulation No. 2.
- C. APCEC Regulation No. 3.
- D. APCEC Regulation No. 6.
- E. 40 CFR Parts 122, 125, and 411.
- F. Discharge permit file AR0042846.
- G. Discharge Monitoring Reports (DMRs).
- H. "Arkansas Water Quality Inventory Report 2008 (305B)", ADEQ.
- I. "Identification and Classification of Perennial Streams of Arkansas", Arkansas Geological Commission.
- J. Continuing Planning Process (CPP).
- K. Technical Support Document For Water Quality-based Toxic Control.
- L. U.S. EPA NPDES Permit Writer's Manual, September 2010.
- M. Monthly cement production amounts from January 2008 to September 2011.
- N. Site visit on 10/5/2011.
- O. MultiSMP desktop model dated 10/24/2011.

19. 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 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 Department of Arkansas Heritage, the EPA, and the Arkansas Department of Health.

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20. POINT OF CONTACT.

For additional information, contact:

Shane Byrum
Permits Branch, Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317
Telephone: (501) 682-0618

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AUTHORIZATION TO DISCHARGE WASTEWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

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

The applicant's mailing and physical address is:

Ash Grove Cement Company
4343 Highway 108 W
Foreman, AR 71836

is authorized to discharge from a facility located as follows: approximately two miles southwest of Foreman, AR on Highway 108 West in Little River County, Arkansas.

Latitude: 33° 41' 59.3"; Longitude: 94° 24' 57.8"

to receiving waters named:

unnamed tributary of French Creek, thence to French Creek, thence to Walnut Bayou, thence to the Red River in Segment 1B of the Red River Basin.

The outfalls are located at the following coordinates:

Outfall 001: Latitude: 33° 41' 9.2"; Longitude: 94° 25' 28.4"
Outfall 002: Latitude: 33° 41' 29.6"; Longitude: 94° 25' 36.3"
Outfall 003: Latitude: 33° 41' 15.3"; Longitude: 94° 25' 28.7"

Discharge shall be in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit. Per Part III.D.10, the permittee must re-apply on or before 180 days prior to expiration date for permit coverage past the expiration date.

Effective Date:

Expiration Date:

Steven L. Drown
Chief, Water Division
Arkansas Department of Environmental Quality

Issue Date

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PART I PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 001 – discharge from Fishing Lake (active quarry dewatering and stormwater runoff).

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 001. Such discharges shall be limited and monitored by the permittee as specified below from a treatment system consisting of sedimentation in the fishing lake.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/month ¹	calculated ²
Total Suspended Solids (TSS)	N/A	N/A	N/A	50	once/month ¹	grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month ¹	grab

1 Samples shall be taken at the first discharge of each calendar month.

2 Flow is calculated using bucket and stopwatch method.

There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen as defined in Part IV of this permit.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples shall be taken at the discharge from the fishing lake at the end of the outfall pipe.

PART I PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 002 – discharge from the coal pile sedimentation pond (stormwater runoff from the coal storage area and closed CKD landfill).

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 002. Such discharges shall be limited and monitored by the permittee as specified below from a treatment system consisting of a sedimentation pond.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/month ¹	calculated ²
Total Suspended Solids (TSS)	N/A	N/A	N/A	50	once/month ¹	grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month ¹	grab

1 Samples shall be taken at the first discharge of each calendar month.

2 Flow is calculated using the cross-sectional area of the outfall pipe and measured velocity through the pipe.

There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen as defined in Part IV of this permit.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples shall be taken at the discharge from the coal pile sedimentation pond at the end of the outfall pipe.

PART I PERMIT REQUIREMENTS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS: OUTFALL 003 – discharge from the process water pond consisting of the following sources: chalk dryer wet scrubber discharge, stormwater runoff from coal processing area, truck washout water, sanitary wastewater treatment lagoon effluent, lab/office building sanitary package plant effluent, non-contact cooling water, process area wash-down water, stormwater runoff from closed Cement Kiln Dust landfill, and active CKD landfill leachate and runoff discharged from a sedimentation pond.

During the period beginning on the effective date and lasting until the date of expiration, the permittee is authorized to discharge from Outfall 003. Such discharges shall be limited and monitored by the permittee as specified below from a treatment system consisting of sedimentation in the process water pond.

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	Mass (lbs/day, unless otherwise specified)		Concentration (mg/l, unless otherwise specified)		Frequency	Sample Type
	Monthly Avg.	Daily Max	Monthly Avg.	Daily Max		
Flow	N/A	N/A	Report, MGD	Report, MGD	once/month ¹	instantaneous ³
Biochemical Oxygen Demand (BOD5)	N/A	N/A	10	15	once/month ¹	grab
Total Suspended Solids (TSS)	N/A	34.9	N/A	50	once/month ¹	grab
Discharge Temperature ($T_{\text{discharge}}$) ²	N/A	N/A	N/A	Report °C	once/month ¹	in-situ
Intake Temperature (T_{intake}) ²	N/A	N/A	N/A	Report °C	once/month ¹	in-situ
Temperature Rise (ΔT) ²	N/A	N/A	N/A	3 °C	once/month ¹	calculate
Dissolved Oxygen (DO)						
(May-October)	N/A	N/A	2.0 (Instantaneous Min.)		once/month ¹	grab
(November-April)	N/A	N/A	5.0 (Instantaneous Min.)		once/month ¹	grab
Fecal Coliform Bacteria (FCB)			(colonies/100ml)			
	N/A	N/A	1000	2000	once/month ¹	grab
pH	N/A	N/A	<u>Minimum</u> 6.0 s.u.	<u>Maximum</u> 9.0 s.u.	once/month ¹	grab

- 1 Samples shall be taken at the first discharge of each calendar month.
- 2 See Condition No. 8 of Part II. $T_{\text{discharge}} - T_{\text{intake}}$ (ΔT) shall not exceed 3 °C.
- 3 Flow is determined using a rectangular weir.

There shall be no discharge of distinctly visible solids, scum, or foam of a persistent nature, nor shall there be any formation of slime, bottom deposits, or sludge banks. There shall be no visible sheen as defined in Part IV of this permit.

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. Samples shall be taken at the discharge from the process water pond at the rectangular weir at Outfall 003. Intake temperature shall be measured at the intake screen at the process water pond.

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SECTION B. PERMIT COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

Compliance is required on the effective date of the permit.

PART II OTHER CONDITIONS

1. The operator of this wastewater treatment facility shall be licensed as Class I and Basic Industrial by the State of Arkansas in accordance with Act 1103 of 1991, Act 556 of 1993, Act 211 of 1971, and APCEC Regulation No. 3, as amended.
2. In accordance with 40 CFR Parts 122.62 (a)(2) and 124.5, this permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations when new information is received that actual or potential exceedance of State water quality criteria and/or narrative criteria are determined to be the result of the permittee's discharge(s) to a relevant water body or a Total Maximum Daily Load (TMDL) is established or revised for the water body that was not available at the time of the permit issuance that would have justified the application of different permit conditions at the time of permit issuance.
3. Other Specified Monitoring Requirements

The permittee may use alternative appropriate monitoring methods and analytical instruments other than as specified in Part I Section A of the permit without a major permit modification under the following conditions:

- The monitoring and analytical instruments are consistent with accepted scientific practices;
- The requests shall be submitted in writing to the Permits Section of the Water Division of the ADEQ for use of the alternate method or instrument.
- The method and/or instrument is in compliance with 40 CFR Part 136 or approved in accordance with 40 CFR Part 136.5; and
- All associated devices are installed, calibrated, and maintained to insure the accuracy of the measurements and are consistent with the accepted capability of that type of device. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Control/Quality Assurance program.

Upon written approval of the alternative monitoring method and/or analytical instruments, these methods or instruments must be consistently utilized throughout the monitoring period. ADEQ must be notified in writing and the permittee must receive written approval from ADEQ if the permittee decides to return to the original permit monitoring requirements.

4. Stormwater runoff commingling with other process wastewater discharged from outfalls 001, 002, and 003 shall be managed in accordance with Best Management Practices (BMPs) to control the quality of stormwater discharges associated with industrial activity that are authorized by this permit. All spilled products and other spilled wastes must be immediately

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cleaned up and properly disposed. The permittee must amend the BMPs whenever there is a change in the facility or a change in the operation of the facility.

5. Best Management Practices (BMPs) are activities, practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of waters of the State. BMPs also include treatment technologies, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw sewage. BMPs may include structural devices or nonstructural practices.
6. The permittee shall measure and report the Total Recoverable Copper concentration at Outfall 002 at the first discharge from this outfall after the effective date of this permit. The permittee shall use a 40 CFR Part 136 approved test method with a method detection level (MDL) less than or equal to 0.5 µg/l. The results of the copper sample shall be submitted with the lab report to the Permit Branch of the Water Division within 30 days after the first discharge from Outfall 002 occurs.
7. The permittee shall perform a full Priority Pollutant Scan (PPS) at Outfall 001 at the first discharge from this outfall after the effective date of this permit. The results of the PPS shall be submitted on a Form PPS, with the lab report included, to the Permit Branch of the Water Division within 30 days after the first discharge from Outfall 001 occurs.
8. In accordance with 40 CFR 411.12, the temperature of water discharged at Outfall 003 shall not exceed a 3 °C rise from the temperature of the intake from the process water pond. Compliance with this requirement shall be demonstrated at the first discharge of each calendar month by measuring the temperature at the intake screen at the process water pond within 1 hour of measuring the temperature of discharge from Outfall 003. The intake temperature is only required to be measured when discharge from Outfall 003 occurs. The calculation of the temperature rise shall be included with and reported on each DMR for Outfall 003 using the following equation:

$$\Delta T = T_{\text{discharge}} - T_{\text{intake}}$$

PART III STANDARD CONDITIONS

SECTION A – GENERAL CONDITIONS

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; for permit termination, revocation and reissuance, or modification; and/or for denial of a permit renewal application.

Any values reported in the required Discharge Monitoring Report (DMR) which are in excess of an effluent limitation specified in Part I shall constitute evidence of violation of such effluent limitation and of this permit.

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 than 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.

3. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:

- A. Violation of any terms or conditions of this permit; or
- B. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.
- E. Failure of the permittee to comply with the provisions of APCEC Regulation No. 9 (Permit fees) as required by Part III.A.11 herein.

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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. Toxic Pollutants

Notwithstanding Part III.A.3, if any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under APCEC Regulation No. 2, as amended, 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 standards or prohibition and the permittee so notified.

The permittee shall comply with effluent standards, narrative criteria, or prohibitions established under APCEC Regulation No. 2, 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.

5. Civil and Criminal Liability

Except as provided in permit conditions for “Bypass of Treatment Facilities” (Part III.B.4), and “Upset” (Part III.B.5), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of this permit or applicable state and federal statutes or regulations which defeats the regulatory purposes of the permit may subject the permittee to criminal enforcement pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

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 to under Section 311 of the Clean Water Act.

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.

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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 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.

9. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions 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.

10. 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 such as endangered species, state or local statute, ordinance or regulation.

11. Permit Fees

The permittee shall comply with all applicable permit fee requirements for wastewater discharge permits as described in APCEC Regulation No. 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 Parts 122.64 and 124.5(d), as adopted in APCEC Regulation No. 6 and the provisions of APCEC Regulation No. 8.

SECTION B – OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

A. 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.

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- B. 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.

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.

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.

4. Bypass of Treatment Facilities

A. 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 Parts III.B.4.b and 4.c.

B. Notice

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.
2. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III.D.6 (24-hour notice).

C. Prohibition of bypass

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

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- (b) 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 or preventive maintenance; and
 - (c) The permittee submitted notices as required by Part III.B.4.b.
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 Part III.B.4.c.(1).

5. Upset Conditions

- A. 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 III.B.5.b 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.
- B. Conditions necessary for 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:
- 1. An upset occurred and that the permittee can identify the specific cause(s) of the upset;
 - 2. The permitted facility was at the time being properly operated.
 - 3. The permittee submitted notice of the upset as required by Part III.D.6; and
 - 4. The permittee complied with any remedial measures required by Part III.B.3.
- C. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

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 must be obtained from the ADEQ prior to removal of substances. Additionally, the permittee shall give at least 120 days prior notice to the Director of any change planned in the permittee's sludge disposal practice or land use applications, including types of crops grown (if applicable). Produced sludge shall be disposed of by land application only when meeting the following criteria:

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- A. Sewage sludge from treatment works treating domestic sewage (TWTDS) must meet the applicable provisions of 40 CFR Part 503; and
- B. The sewage sludge has not been classified as a hazardous waste under state or federal regulations.

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.

SECTION C – MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge during the entire monitoring period. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, 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 discharge shall be monitored.

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.

Calculated Flow Measurement

For calculated flow measurements that are performed in accordance with either the permit requirements or a Department approved method (i.e., as allowed under Part II.3), the +/- 10% accuracy requirement described above is waived. This waiver is only applicable when the method used for calculation of the flow has been reviewed and approved by the Department.

3. Monitoring Procedures

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 and 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. At a minimum, spikes and duplicate samples are to be analyzed on 10% of the samples.

4. Penalties for Tampering

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.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form provided by the Department or other form/method approved in writing by the Department (e.g., electronic submittal of DMR once approved). Monitoring results obtained during the previous monitoring period shall be summarized and reported on a DMR form postmarked no later than the 25th day of the month or submitted electronically by 6:00 p.m. of the 25th (after NETDMR is approved), following the completed reporting period beginning on the effective date of the permit. When mailing the DMRs, duplicate copies of the forms signed and certified as required by Part III.D.11 and all other reports required by Part III.D, shall be submitted to the Director at the following address:

Enforcement Branch
Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

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.

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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 Part 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 DMR. Such increased frequency shall also be indicated on the DMR.

7. Retention of Records

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

8. Record Contents

Records and monitoring information shall include:

- A. The date, exact place, time and methods of sampling or measurements, and preservatives used, if any;
- B. The individuals(s) who performed the sampling or measurements;
- C. The date(s) and time analyses were performed;
- D. The individual(s) who performed the analyses;
- E. The analytical techniques or methods used; and
- F. The measurements and results of such analyses.

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:

- A. 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;
- B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- C. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
- D. Sample, inspect, or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

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SECTION D – REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice within 180 days and provide plans and specification (if applicable) to the Director for review and approval prior to any planned physical alterations or additions to the permitted facility. In no case are any new connections, increased flows, removal of substances, or significant changes in influent quality permitted that cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

The permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part III.C.5. **Discharge Monitoring Reports must be submitted even when no discharge occurs during the reporting period.**

5. Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-four Hour Report

A. 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 the following information:

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1. A description of the noncompliance and its cause;
 2. 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
 3. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- B. The following shall be included as information which must be reported within 24 hours:
1. Any unanticipated bypass which exceeds any effluent limitation in the permit;
 2. Any upset which exceeds any effluent limitation in the permit and
 3. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part I of the permit to be reported within 24 hours to the Enforcement Section of the Water Division of the ADEQ.
- C. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours to the Enforcement Section of the Water Division of the ADEQ.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Parts III.D.4, 5, and 6, at the time monitoring reports are submitted. The reports shall contain the information listed at Part III.D.6.

8. Changes in Discharge of Toxic Substances for Industrial Dischargers

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

- A. That any activity has occurred or will occur which would result in the discharge on 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 Part 122.42(a)(1); or
- B. 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).

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9. 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. Information shall be submitted in the form, manner and time frame requested by the Director.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The complete application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated in APCEC Regulation No. 6.

11. Signatory Requirements

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

A. All **permit applications** shall be signed as follows:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) 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
 - (b) 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.

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2. For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
 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:
 - (a) The chief executive officer of the agency, or
 - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- B. 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:
1. The authorization is made in writing by a person described above.
 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
 3. The written authorization is submitted to the Director.
- C. 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.”

12. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2 and APCEC Regulation No. 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.

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13. Penalties for Falsification of Reports

The Arkansas Air and Water 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 penalties specified in Part III.A.2. and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.).

14. 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.

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PART IV DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act and 40 CFR 122.2 shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. **“Act”** means the Clean Water Act, Public Law 95-217 (33.U.S.C. 1251 et seq.) as amended.
2. **“Administrator”** means the Administrator of the U.S. Environmental Protection Agency.
3. **“APCEC”** means the Arkansas Pollution Control and Ecology Commission.
4. **“Applicable effluent standards and limitations”** means 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.
5. **“Applicable water quality standards”** means all water quality standards to which a discharge is subject under the federal Clean Water Act and which has 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 (APCEC) Regulation No. 2, as amended.
6. **“Bypass”** As defined at 122.41(m).
7. **“Composite sample”** is a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing a minimum of 4 effluent portions collected at equal time intervals (but not closer than one hour apart) during operational hours, within the 24-hour period, and combined proportional to flow or a sample collected at more frequent intervals proportional to flow over the 24-hour period.
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.
 - A. **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.
 - B. **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.
9. **Daily Maximum”** discharge limitation means the highest allowable “daily discharge” during the calendar month. The 7-day average for Fecal Coliform Bacteria (FCB) or E-Coli is the geometric mean of the values of all effluent samples collected during the calendar week in colonies per 100 ml.
10. **“Department”** means the Arkansas Department of Environmental Quality (ADEQ).
11. **“Director”** means the Director of the Arkansas Department of Environmental Quality.
12. **“Dissolved oxygen limit”**, shall be defined as follows:
 - A. When limited in the permit as a minimum monthly average, shall mean the lowest acceptable monthly average value, determined by averaging all samples taken during the calendar month;

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- B. When limited in the permit as an instantaneous minimum value, shall mean that no value measured during the reporting period may fall below the stated value.
13. **“E-Coli”** a sample consists of one effluent grab portion collected during a 24-hour period at peak loads. For E-Coli, report the monthly average as a 30-day geometric mean in colonies per 100 ml.
 14. **“Fecal Coliform Bacteria (FCB)”** a sample consists of one effluent grab portion collected during a 24-hour period at peak loads. For Fecal Coliform Bacteria (FCB) report the monthly average as a 30-day geometric mean in colonies per 100 ml.
 15. **“Grab sample”** means an individual sample collected in less than 15 minutes in conjunction with an instantaneous flow measurement.
 16. **“Industrial User”** means a nondomestic discharger, as identified in 40 CFR Part 403, introducing pollutants to a POTW.
 17. **“Instantaneous Maximum”** when limited in the permit as an instantaneous maximum value, shall mean that no value measured during the reporting period may fall above the stated value.
 18. **“Instantaneous Minimum”** an instantaneous minimum value, shall mean that no value measured during the reporting period may fall below the stated value.
 19. **“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. For Fecal Coliform Bacteria (FCB) or E-Coli, report the monthly average.
 20. **“National Pollutant Discharge Elimination System”** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under Sections 307, 402, 318, and 405 of the Clean Water Act.
 21. **“POTW”** means a Publicly Owned Treatment Works.
 22. **“Severe property damage”** means 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 products.
 23. **“Sewage sludge”** means the solids, residues, and precipitate separated from or created in sewage by the unit processes at a POTW. Sewage as used in this definition means any wastes, including wastes from humans, households, commercial establishments, industries, and stormwater runoff that are discharged to or otherwise enter a POTW.
 24. **“7-day average”** Also known as Average weekly. means the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week.
 25. **“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.
26. **“Upset”** means 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. Any upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventive maintenance, or carelessness of improper operations.
 27. **“Visible sheen”** means the presence of a film or sheen upon or a discoloration of the surface of the discharge. A sheen can also be from a thin glistening layer of oil on the surface of the discharge.
 28. **“MGD”** shall mean million gallons per day.
 29. **“mg/l”** shall mean milligrams per liter or parts per million (ppm).
 30. **“µg/l”** shall mean micrograms per liter or parts per billion (ppb).
 31. **“cfs”** shall mean cubic feet per second.
 32. **“ppm”** shall mean parts per million.
 33. **“s.u.”** shall mean standard units.
 34. **“Weekday”** means Monday – Friday.
 35. **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 monthly or more frequently, the Discharge Monitoring Report (DMR) shall be submitted by the 25th of the month following the sampling. Where the monitoring requirement for an effluent characteristic is Quarterly, Semi-Annual, Annual, or Yearly, the DMR shall be submitted by the 25th of the month following the monitoring period end date.

 - A. **MONTHLY:**

is defined as a calendar month or any portion of a calendar month for monitoring requirement frequency of once/month or more frequently.
 - B. **BI-MONTHLY:**

is defined as two (2) calendar months or any portion of 2 calendar months for monitoring requirement frequency of once/2 months or more frequently.
 - C. **QUARTERLY:**
 1. is defined as a **fixed calendar quarter** or any part of the fixed calendar quarter for a non-seasonal effluent characteristic with a measurement frequency of once/quarter. Fixed calendar quarters are: January through March, April through June, July through September, and October through December; or
 2. is defined as a **fixed three month period** (or any part of the fixed three month period) of or dependent upon the seasons specified in the permit for a seasonal effluent characteristic with a monitoring requirement frequency of once/quarter that does not coincide with the fixed calendar quarter. Seasonal calendar quarters are:

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May through July, August through October, November through January, and February through April.

D. SEMI-ANNUAL:

is defined as the fixed time periods January through June, and July through December (or any portion thereof) for an effluent characteristic with a measurement frequency of once/6 months or twice/year.

E. ANNUAL or YEARLY:

is defined as a fixed calendar year or any portion of the fixed calendar year for an effluent characteristic or parameter with a measurement frequency of once/year. A calendar year is January through December, or any portion thereof.