

Ash Grove Cement Company

Foreman, Arkansas

**NPDES Permit No. AR0042846
AFIN: 41-00001**

May 2011

**Blanz Engineering &
Environmental Solutions, Inc.**

Prepared for

Ash Grove Cement Company

Foreman, Arkansas

ASH GROVE CEMENT COMPANY



4343 HIGHWAY 108
FOREMAN, ARKANSAS 71836
Phone (870) 542-3017
Fax (870) 542-3026

Keith Byerly
Environmental Manager

May 20, 2011

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

Subject: NPDES Permit Renewal Application
Ash Grove Cement Company, Foreman, AR
AFIN: 41-00001 Permit No. AR0042846

Dear Sirs/Madam:

Please find enclosed the application for renewal of the NPDES permit for the referenced facility. Due to process changes and dry weather in southern Arkansas at the time of preparation of this application, Ash Grove was unable to obtain effluent samples for all of the outfalls for the Priority Pollutant Scan (PPS) and EPA Form 2C. The application contains the following:

1. ADEQ Form 1
2. FEMA Flood Plain Map
3. Site Maps
4. Outfall Descriptions and Wastewater Flow Diagram
5. EPA Form 2C (Partial Analysis for Outfalls 001, 03A, and 003)
6. ADEQ Application Form PPS and Analytical Results for Outfalls 002 and 03B
7. A request to increase the effluent pH limit on internal Outfall 03A
8. Ash Grove Disclosure Statement

Ash Grove was able to obtain an effluent sample for Outfall 003 on April 28, 2011, however the analysis was not completed in time to include the data in the appropriate application forms with this submittal. These will be completed and submitted under separate cover as they become available.

In the 2006 renewal and the 2008 modification, temperature and dissolved oxygen, respectively, were added to outfall 003 monitoring requirements. Since DMR data to date does not reveal any significant deviations from ambient for either of these parameters, Ash Grove request that they be deleted from the permit.

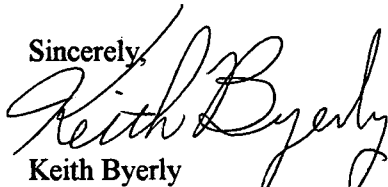
If you have any questions or desire additional information please contact the undersigned or Blanz Engineering and Environmental Solutions, Inc at (501) 821-4181.

ADEQ Permit Branch

May 20, 2011

Page 2 of 2

Sincerely,

A handwritten signature in cursive script that reads "Keith Byerly". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

Keith Byerly
Environmental Manager

cc: Carey Austell, Foreman
Mike Harrell, Overland Park
Curtis Leslie, Overland Park
Bob Blanz, Blanz Engineering

Ash Grove Cement Company

Foreman, Arkansas

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Table of Contents

Tab Number	Description
1	ADEQ Form I
2	FEMA Flood Plain Map
3	Area and Site Maps
4	Outfall Descriptions and Wastewater Flow Diagram
5	EPA Form 2C (Partial Analysis for Outfalls 001, 03A, and 003)
6	ADEQ Application Form PPS and Analytical Results for Outfalls 002 and 03B
7	Request for Alternative pH limit for Outfall 03A
8	Ash Grove Disclosure Statement

Tab 1

ADEQ Form 1
ADEQ Form 1 Additional Information Section A, Item 8

NPDES PERMIT APPLICATION
FORM 1

ARKANSAS DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION
5301 Northshore Drive
North Little Rock, AR 72118-5317
www.adeg.state.ar.us/water

PURPOSE OF THIS APPLICATION

- INITIAL PERMIT APPLICATION FOR NEW FACILITY
 INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
 MODIFICATION OF EXISTING PERMIT
 REISSUANCE (RENEWAL) OF EXISTING PERMIT
 MODIFICATION AND CONSTRUCTION OF EXISTING PERMIT
 CONSTRUCTION PERMIT

SECTION A- GENERAL INFORMATION

1. Operator (Legal) Applicant Name (who has ultimate decision making responsibility over the operation of a facility or activity):

Ash Grove Cement Company

Note: The legal name of the operator must be identical to the name listed with the Arkansas Secretary of State.

2. Operator Type: Private State Federal Partnership Corporation Other

State of Incorporation: _____

3. Facility Name: Ash Grove Cement Company, Foreman Plant

4. Is the operator identified in number 1 above, the owner of the facility? Yes No

5. NPDES Permit Number (If Applicable): AR0042846

6. NPDES General Permit Number (If Applicable): ARG

7. NPDES General Storm Water Permit Number (If Applicable): _____

8. Permit Numbers and/or names of any permits issued by ADEQ or EPA for an activity located in Arkansas that is presently held by the applicant or its parent or subsidiary corporation which are not listed above:

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held by</u>
<u>Air Operating Permit</u>	<u>0075-AOP-R-12</u>	<u>Ash Grove Cement</u>

See attached at end of FORM 1

9. Give driving directions to the wastewater treatment plant with respect to known landmarks:

From the City of Foreman, AR proceed south on Arkansas Highway 108 for approximately two miles to the plant entrance

10. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)

Street: 4343 Highway 108 W

City: Foreman

County: Little River

State: AR

Zip: 71836

11. Facility Mailing Address for permit, DMR, and Invoice (Street or Post Office Box):

Name: Keith Byerly Title: Environmental Manager
Street: 4343 Highway 108 W P.O. Box _____
City: Foreman State: AR Zip: 71836
E-mail address*: Keith.Byerly@ashgrove.com Fax: (870) 542-3026

* Is emailing all documents (permit, letters, DMRs, invoices, etc.) acceptable to the applicant? Yes No

12. Neighboring States Within 20 Miles of the permitted facility (Check all that apply):

Oklahoma Missouri Tennessee Louisiana Texas Mississippi

13. Indicate applicable Standard Industrial Classification (SIC) Codes and NAICS codes for primary processes

3241 SIC Facility Activity under this SIC or NAICS:
NAICS Manufacturing hydraulic cement

14. Design Flow: varies by outfall MGD Highest Monthly Average of the last two years Flow: Varies by outfall MGD

15. Is Outfall equipped with a diffuser? Yes No

16. Responsible Official (as described on the last page of this application):

Name: Carey Austell Title: Plant Manager
Address: 4343 Highway 108 Phone Number: (870) 542-3010
E-mail Address: _____
City: Foreman State: AR Zip: 71836

17. Cognizant Official (Duly Authorized Representative of responsible official as describe on the last page of this application):

Name: Carey Austell Title: Plant Manager
Address: 4343 Highway 108 Phone Number: (870) 542-3010
E-mail Address: Carey.austell@ashgrove.com
City: Foreman State: AR Zip: 71836

18. Name, address and telephone number of active consulting engineer firm (If none, so state):

Contact Name: Robert E. Blanz
Company Name: Blanz Engineering and Environmental Solutions, Inc.
Address: 2112 Live Oaks Drive Phone Number: (501) 821-4181
E-mail Address: blanzengineering@sbcglobal.net
City: Little Rock State: AR Zip: 72223

19. Wastewater Operator Information

Wastewater Operator Name: Keith Byerly License number: 006598
Class of municipal wastewater operator: I II III IV
Class of industrial wastewater operator: Basic Advanced

SECTION B: FACILITY AND OUTFALL INFORMATION

1. Facility Location (All information must be based on front door (Gate) location of the facility):

Lat: 33 ° 41 ' 45 " Long: 94 ° 25 ' 24 " County: Little River Nearest Town: Foreman

2. Outfall Location (The location of the end of the pipe Discharge point.):

Outfall No. 001:

Latitude: 33 ° 41 ' 00 " Longitude: 94 ° 25 ' 30 "

Where is the collection point? End of pipe

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

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

Outfall No. 002:

Latitude: 33 ° 41 ' 30 " Longitude: 94 ° 25 ' 30 "

Where is the collection point? outfall

Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

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

3. Monitoring Location (If the monitoring is conducted at a location different than the above Outfall location):

Outfall No. 003:

Lat: 33 ° 41 ' 10 " Long: 94 ° 25 ' 30 "

Outfall No. 003A:

Lat: 33 ° 41 ' 16 " Long: 94 ° 25 ' 14 "

Outfall No. 003B:

Lat: 33 ° 41 ' 22.8 " Long: 94 ° 25 ' 26.7 "

4. Type of Treatment system (Included all components of treatment system and Attach the process flow diagram):

Package activated sludge plant for sanitary wastewater, settling lagoons for process wastewater

5. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current:	Flow Metering	<input type="checkbox"/>	Yes	Type: _____	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Sampling Equipment	<input type="checkbox"/>	Yes	Type: _____	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
Planned:	Flow Metering	<input type="checkbox"/>	Yes	Type: _____	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>
	Sampling Equipment	<input type="checkbox"/>	Yes	Type: _____	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	N/A	<input type="checkbox"/>

If yes, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

v-notch weir

6. Is the proposed or existing facility located above the 100-year flood level? Yes No

NOTE: FEMA Map must be included with this application. Maps can be ordered at www.fema.gov.

If "No", what measures are (or will be) used to protect the facility? Flooding occurs in the fishing lake and process water pond, outfalls 001 and 003. Flood water is used to replenish the cooling water supply in the ponds

7. Population for Municipal and Domestic Sewer Systems: 50

8. Backup Power Generation for Treatment Plants

Are there any permanent backup generators? Yes No

If Yes, How many? _____ Total Horespower (hp)? _____

If No, Please explain? passive treatment, discharge by gravity

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

1. Sludge Disposal Method (Check as many as are applicable):

Landfill

Landfill Site Name Upper Southwest Regional

ADEQ Solid Waste Permit No. 0265-S1-R1

Land Application: ADEQ State Permit No. _____

Septic tank Arkansas Department of Health Permit No.: _____

Distribution and Marketing: Facility receiving sludge:

Name: _____ Address: _____

City: _____ State: _____ Zip: _____ Phone: _____

Rail: _____ Pipe: _____ Other: _____

Subsurface Disposal (Lagooning):

Location of lagoon _____ How old is the lagoon? _____

Surface area of lagoon: _____ Acre Depth: _____ ft Does lagoon have a liner? Yes No

Incineration: Location of incinerator _____

Remains in Treatment Lagoon(s):

How old is the lagoon(s)? _____ Has sludge depth been measured? Yes No

If Yes, Date measured? _____ Sludge Depth? _____ ft If No, When will it be measured? _____

Has sludge ever been removed? Yes No If Yes, When was it removed? _____

Other (Provide complete description): _____

SECTION D - WATER SUPPLY

Water Sources (check as many as are applicable):

Private Well - Distance from Discharge point: Within 5 miles Within 50 miles

Municipal Water Utility (Specify City): City of Foreman

Distance from Discharge point: Within 5 miles Within 50 miles

Surface Water- Name of Surface Water Source: _____

Distance from Discharge point: Within 5 miles Within 50 miles

Lat: _____ ° _____ ' _____ " Long: _____ ° _____ ' _____ "

Other (Specify): _____

Distance from Discharge point: Within 5 miles Within 50 miles

SECTION E: FINANCIAL ASSURANCE AND DISCLOSURE STATEMENT

Act 409 of the 2009 Regular Session of the Arkansas Legislature (Act 409) provides for financial assurance requirements for permitting non-municipal domestic sewage treatment systems. Arkansas Code 8-4-203 (b)(1)(A)(i) – “The department shall not issue, modify, or renew a National Pollutant Discharge Elimination System permit or state permit for a non-municipal domestic sewage treatment works without the permit applicant first demonstrating to the department its financial ability to cover the estimated costs of operating and maintaining the non-municipal domestic sewage treatment works for a minimum period of five (5) years.”

The applicant must provide a detailed estimate of the operation and maintenance (O&M) costs for the facility for a five year period. Once the O&M estimate is approved, the applicant must provide **financial assurance** in order to show that the facility is able to cover the costs of operating and maintaining the treatment system for the next five years.

The minimal financial assurance may be demonstrated to the department by using the following as outlined in Arkansas Code 8-4-203(b)(2):

- A. Obtaining insurance that specifically covers operation and maintenance costs
- B. Obtaining a letter of credit;
- C. Obtaining a surety/performance bond;
- D. Obtaining a trust fund or an escrow account; or
- E. Using a combination of insurance, letter of credit, surety bond, trust fund, or escrow account.

2. Disclosure Statement:

Arkansas Code Annotated Section 8-1-106 requires that all applicants for any type of permit or transfer of any permit, license, certification or operational authority issued by the Arkansas Department of Environmental Quality (ADEQ) file a Disclosure Statement with their application. The filing of a Disclosure Statement is mandatory. No application can be considered administratively complete without a completed Disclosure Statement. The form may be obtained from the ADEQ web site at:

http://www.adeg.state.ar.us/disclosure_stmt.pdf

SECTION F – INDUSTRIAL ACTIVITY

1. Does an effluent guideline limitation promulgated by EPA ([Link to a Listing of the 40 CFR Effluent Limit Guidelines](#)) under Section 304 of the Clean Water Act (CWA) apply to your facility?

YES (Answer questions 2 and 3) NO

2. What Part of 40 CFR? 411

3. What Subpart(s)? C

4. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary):

Manufacturing of Portland Cement. Facility uses fossil, hazardous waste, solid waste, and tire derived fuel.

5. Production: (projected for new facilities)

Product(s) Manufactured (Brand name)	Last 12 Months		Highest Production Year of Last 5 Years	
	lbs/day*		lbs/day*	
	Highest Month	Days of Operation	Monthly Average	Days of Operation
Portland Cement	151431166	30		

* These units could be off-lbs, lbs quenched, lbs cleaned/etched/rinsed, lbs poured, lbs extruded, etc.

SECTION H - TECHNICAL INFORMATION

Technical information to support this application shall be furnished in appropriate detail to understand the project. Information in this Part is required for obtaining a **construction permit** or for **modification** of the treatment system.

1. Describe the treatment system. Include the types of control equipment to be installed along with their methods of operation and control efficiency.

2. One set of construction plans and specifications, approved (Signed and stamped) by a **Professional Engineer (PE)** registered in **Arkansas**, must be submitted as follows:
 - a. The plans must show flow rates in addition to pertinent dimensions so that detention times, overflow rates, and loadings per acre, etc. can be calculated.
 - b. Specifications and complete design calculations.
 - c. All treated wastewater discharges should have a flow measuring device such as a weir or Parshall flume installed. Where there is a significant difference between the flow rates of the raw and treated wastewater, a flow measuring device should be provided both before and after treatment.
3. If this application includes a construction permit disturbing five or more acres, a storm water construction permit must be obtained by submitting a notice of intent (NOI) to ADEQ.

SECTION I: SIGNATORY REQUIREMENTS

Cognizant Official (Duly Authorized Representative)

40 CFR 122.22(b) states that all reports required by the permit, or other information requested by the Director, shall be signed by the applicant (or person authorized by the applicant) or by a duly authorized representative of that person. A person is duly authorized representative only if:

- (1) the authorization is made in writing by the applicant (or person authorized by the applicant);
- (2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity responsibility, or an individual or position having overall responsibility for environmental matters for the company.

The applicant hereby designates the following person as a Cognizant Official, or duly authorized representative, for signing reports, etc., including Discharge Monitoring Reports (DMR) required by the permit, and other information requested by the Director:

Signature of Cognizant Official: _____ Date: _____
Printed name of Cognizant Official: Carey Austell
Official title of Cognizant Official: Plant Manager Telephone Number: (870) 542-3010

Responsible Official

The information contained in this form must be certified by a responsible official as defined in the "signatory requirements for permit applications" (40 CFR 122.22).

Responsible official is defined as follows:

- Corporation**, a principal officer of at least the level of vice president
- Partnership**, a general partner
- Sole proprietorship**: the proprietor
- Municipal, state, federal, or other public facility**: principal executive officer, or ranking elected official.

_____ (Initial) "I certify that the cognizant official designated above is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b)." NOTE: If no duly authorized representative is designated in this section, the Department considers the applicant to be the responsible official for the facility and only reports, etc., signed by the applicant will be accepted by the Department.

_____ (Initial) "I certify that, if this facility is a corporation, it is registered with the Secretary of State in Arkansas. Please provide the full name of the corporation if different than that listed in Section A above."

"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. I further certify under penalty of law that all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested."

Signature of Responsible Official: Carey Austell Date: 5/20/11
Printed name of Responsible Official: Carey Austell
Official title of Responsible Official: Plant Manager Telephone Number: (870) 542-3010

Ash Grove Cement
Foreman, AR
NPDES Permit No. AR0042846

ADEQ FORM 1 - Additional Information

Section A

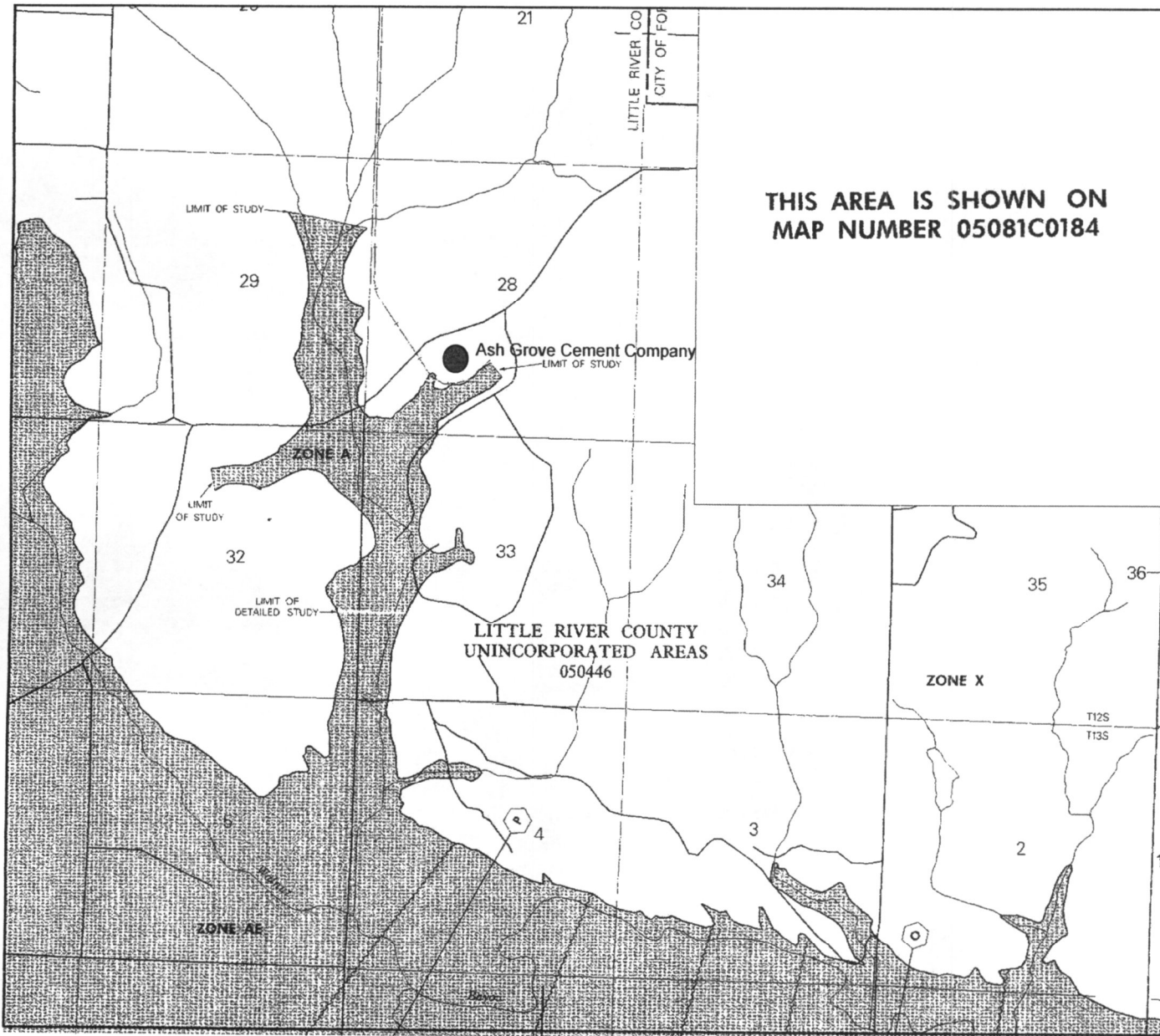
Item 8. Additional ADEQ or EPA Permits

Permit Name	Permit Number	Held by
Hazardous Waste Generator	ARD981512270	Ash Grove Cement
Class 3N Noncommercial Landfill	0302-S3N	Ash Grove Cement
Waste Tire Process Permit	0016SWTP	Ash Grove Cement
Registered Storage Tank	41000002	Ash Grove Cement
Hazardous Waste TSD	21-H	Ash Grove Cement

Section E. Disclosure Statement - See Attachment 7

Tab 2

FEMA Flood Plain Map



**THIS AREA IS SHOWN ON
MAP NUMBER 05081C0184**



APPROXIMATE SCALE IN FEET
2000 0 2000

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP**

**LITTLE RIVER COUNTY,
ARKANSAS AND
INCORPORATED AREAS**

PANEL 200 OF 475

(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS COMMUNITY	NUMBER	PANEL	SUFFIX
FOREMAN, CITY OF LITTLE RIVER COUNTY, UNINCORPORATED 48545	050446	0200	D
	050446	0200	D

**MAP NUMBER
05081C0200 D**

**EFFECTIVE DATE:
JANUARY 7, 1998**



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using FIRM OnLine. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



Foreman, AR 71836

Ash Grove Cement Company

Little River

Ashdown

41

8

New Boston

86

Hooks

30

32

Nash

59

296

Texarkana

Google

Vicinity Image
Ash Grove Cement Company
Foreman, AR 71836
AR0042846
May 2011

Texas Orthoimagery Program
© 2011 Google
Image USDA Farm Service Agency
Image State of Arkansas

33°33'16.32" N 94°15'21.43" W elev 290 ft

Eye alt 28.37 mi



Foreman, AR 71836

Ash Grove Cement Company

Site Image
Ash Grove Cement Company
Foreman, AR 71836
AR0042846
May 2011

Texas Orthoimagery Program
© 2011 Google
Image USDA Farm Service Agency

©2010 Google

Imagery Dates: Apr 1, 2008 - Jul 24, 2009

33°42'10.64" N 94°24'38.43" W elev. 410 ft

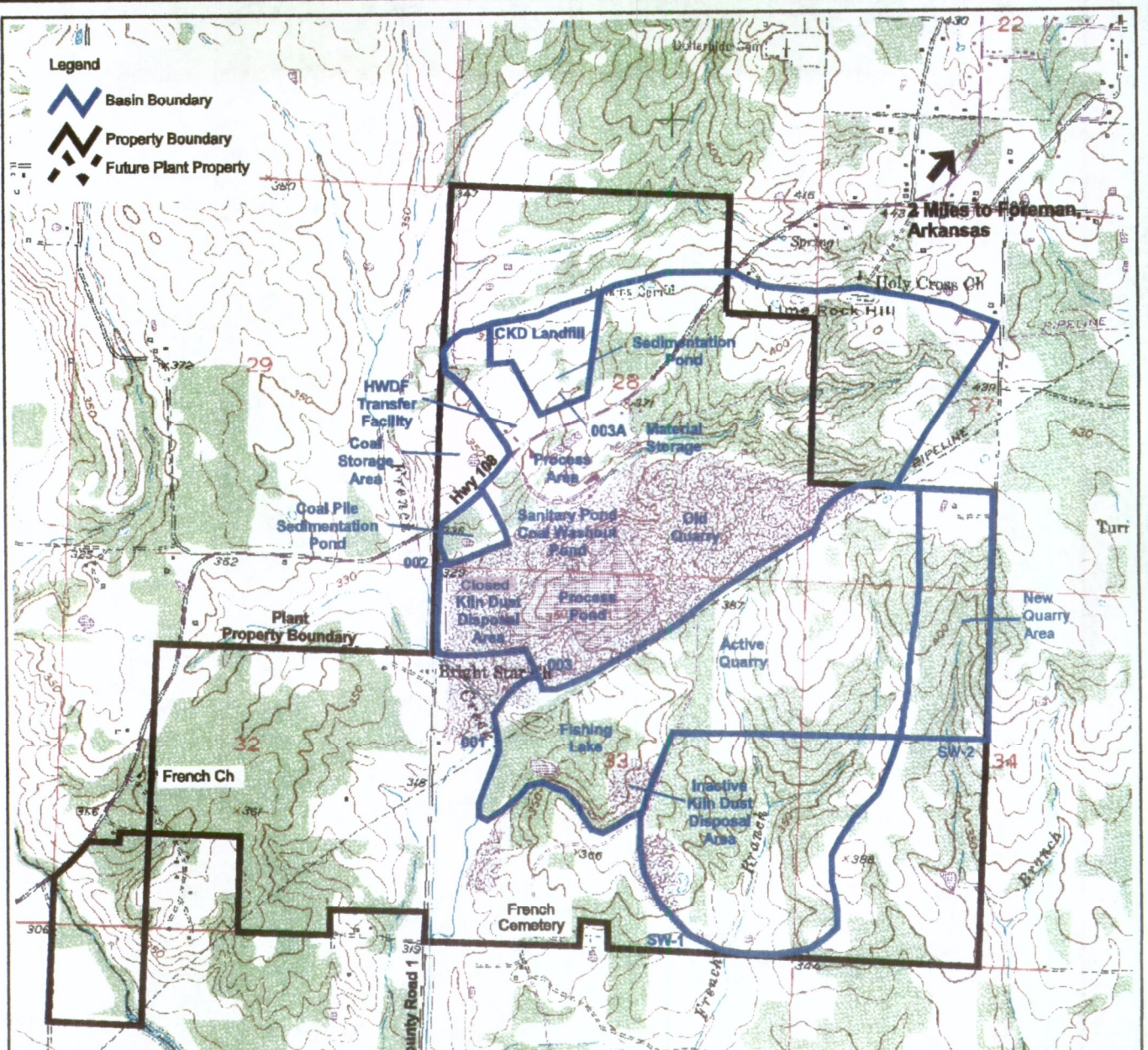
Eye alt 20282 ft

Tab 3

Vicinity Image
Site Image
Site Map

Legend

-  Basin Boundary
-  Property Boundary
-  Future Plant Property



Legal Property Description

Part or Lot	SEC	TWP	RNG	Acres
SW4 SW4	27	12S	32W	40.00
SE4 SW4	27	12	32	40.00
S/Rd Pt SW4	28	12	32	91.30
N/Rd Pt SW4	28	12	32	68.50
NE4 SE4	28	12	32	40.00
Lot 2 NW4 SE	28	12	32	40.00
SW4 SE4	28	12	32	40.00
SE4 SE4	28	12	32	40.00
SW4 NE4	32	12	32	40.00
Pt SE4 NE4	32	12	32	39.50
SE4 NW4	32	12	32	40.00
NE4 SW4	32	12	32	40.00
Pt SW4 SW4	32	12	32	33.83
N2 SE4	32	12	32	80.00
SW4 SE4	32	12	32	40.00
N 30 Ac SE4	32	12	32	30.00
All	33	12	32	640.00
W2	34	12	32	320.00
NW4 NW4	5	13	32	40.00
W 1/2 NE 1/4	28	12	32	80.80
NW 1/4	28	12	32	159.10
Total				1983.03

Outfall	Approximate Drainage Area
001	146.1 Acres
002	8.2 Acres
003	468.4 Acres
003A	48.0 Acres
SW-1	139.0 Acres
SW-2	45.0 Acres

**FIGURE 1
SITE MAP**
ASH GROVE CEMENT FACILITY
Foreman, Arkansas

Tab 4

Outfall Descriptions
Wastewater Flow Diagram

Ash Grove Cement Company

Outfall Descriptions

Ash Grove operates a manufacturing facility in Little River County in southwestern Arkansas, near the City of Foreman. The 1,983-acre facility produces Portland cement and masonry cement using raw materials quarried from the underlying geologic strata. The facility has been in operation since 1958. To supplement traditional fossil fuels used in the process, Ash Grove utilizes hazardous waste-derived fuel (HWDF) and operates a hazardous waste storage and treatment facility permitted by the Arkansas Department of Environmental Quality (ADEQ), Hazardous Waste Division, Permit No. 21-H.

All stormwater that contacts industrial process areas and wastewater generated within the plant flow into one of three retention basins on plant property. Each of the retention basins discharges via one of the permitted outfalls as described below.

Figure 1 is the site map of the facility that shows the property boundaries, each outfall and its drainage basin, and other information required on ADEQ Form 1.

Outfall Descriptions

The following briefly describes each of the permitted outfalls at the Ash Grove facility.

Outfall 001–Fishing Lake

Outfall 001 is located on the west side of the Fishing Lake. The discharge from this outfall consists of surface water runoff (i.e. stormwater) from the 146.1-acre drainage basin surrounding the Fishing Lake and water pumped from the active quarry. The water pumped from the quarry includes stormwater, washwater from a halo used to rinse the windshields and mirrors of large haul trucks, and washwater from rinsing mud off various vehicles. Additionally, within the drainage area for Outfall 001, there is an inactive, 15-acre CKD disposal site, which was used from 1959 through 1975 and is now covered with compacted soil overburden and vegetation, and an overburden stockpile area. Since the last NPDES permit modification, the landfill adjacent to the Process Water Pond, Outfall 003, has been closed and a new landfill constructed north of Highway 108.

Outfall 001 discharges via unnamed tributaries to French Creek, a tributary to Walnut Bayou in the Red River Basin. A concrete low water crossing drains to the Process Water Pond (Outfall 003) when the Fishing Lake reaches a certain elevation to prevent overtopping.

Outfall 002–Coal Yard Sedimentation Pond

Stormwater runoff from the plant's coal storage area, located in the northwest portion of the property, and a small portion of the closed area of the plant's inactive CKD landfill is discharged through NPDES Outfall 002. This CKD landfill has been closed pursuant to the CAO LIS-01-100. The drainage area consist of approximately 8.2 acres, most of which is covered in vegetation. Bulk storage tanks for the liquid HWDF are located within the Outfall 002 drainage basin; however, secondary containment provided for the bulk storage tanks prevents stormwater run-on and run-off from this area. Runoff from this area is retained in the Coal Yard Sedimentation Pond before being discharged. Outfall

002 discharges to unnamed tributaries of French Creek, a tributary of Walnut Bayou in the Red River Basin.

Outfall 003—Process Water Pond

Outfall 003 is located on the southwest side of the plant's Process Water Pond. The Process Water Pond is the primary source of make-up water for the facility. The Outfall 003 drainage basin consist of approximately 468.4 acres (516.4 acres when including the Outfall 03A area as described below) and includes the following: the plant process area, raw material storage, salvage storage areas, the inactive CKD landfill, and CKD Landfill Sedimentation Pond.

A small sedimentation basin (Coal Washout Pond) and a sanitary wastewater treatment lagoon also discharge to the Process Water Pond. Portions of the stormwater runoff from the coal storage area and coal truck wash water are discharged into the Coal Washout Pond. Sanitary wastewater is discharged and treated in the Sanitary Treatment Lagoon.

Other sources of water discharged to the Process Water Pond are non-contact cooling water, wash down water from process areas, and truck wash water from a cement transportation facility located on Ash Grove property. Internal drainage ditches are used to route stormwater and other water generated within the plant and the raw material storage areas to the Process Water Pond. As mentioned previously, the Fishing Lake, Outfall 001, discharges to the Process Water Pond during periods of heavy rainfall. Outfall 003 discharges to unnamed tributaries of French Creek, a tributary of Walnut Bayou in the Red River Basin. Additionally, during periods of dry weather, water from the quarry is routed to the Process Pond for make-up water for non-contact cooling

Outfall 03A—CKD Landfill Sedimentation Pond

This internal outfall is the sedimentation/process pond for the CKD landfill located north of Highway 108. This pond has been sized to provide sufficient water to supply a pugmill located adjacent to the landfill and for use as a dust suppressant. The CKD coming from the plant is mixed with about 20 percent water before being placed in the landfill. With 150 tons per day of CKD being generated, approximately 7,500 gallons per day will be needed for this process. Additionally, water will be taken from this pond for dust control on haul roads within the Landfill Area. Therefore, discharges from Outfall 03A will be limited to periods of extended wet weather. The discharge will flow over the spillway into an unnamed drainage ditch, under Highway 180, and into the main plant drainage ditch which flows in to the Process Water Pond, Outfall 003. The drainage area is approximately 48 acres.

Outfall 03B – Internal Outfall, discharge from wastewater treatment plant to process water pond.

The new sanitary treatment system will consist of an Aeromix, extended aeration package plant. The equipment plans were included in a previous application. The system discharges into the existing process water pond (internal outfall 003B) prior to discharge via Outfall 003. There will be no change in any of the other waste streams discharging into the pond.

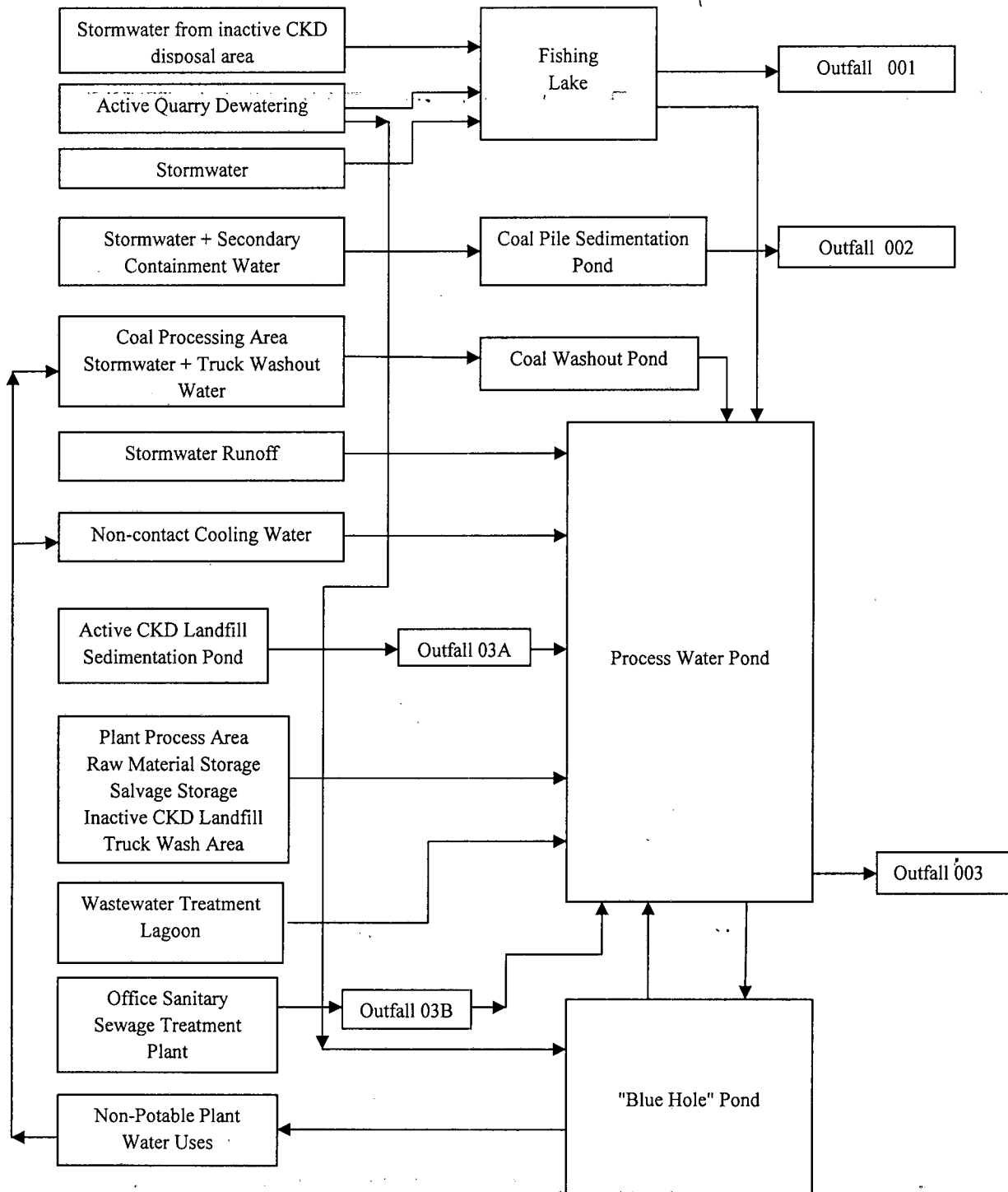
SW-1-Stormwater Outfall

The drainage basin for this outfall is approximately 139 acres, and is located on the southern property boundary. Manufacturing activities are not conducted in this drainage basin. The area north of the Stormwater Outfall has been mined to the point that storm water flows to the bottom of the quarry.

SW-2-Stormwater Outfall

The drainage basin for this outfall is approximately 45 acres, and is located along the eastern property boundary. Manufacturing activities are not conducted in this drainage basin. Mining is being conducted in this area. The discharge from outfall SW-2 will continue for about one to two years until the elevation in the quarry is low enough to allow for storm water drainage back into the quarry.

EPA Form 2D.III.B
 Wastewater Flow Diagram
 Ash Grove Cement
 AR0042846



Tab 5

EPA Form 2C
EPA Form 2C Supplemental Information, Item IV
EPA Form 2C Item V, Part A for Outfall 001
EPA Form 2C Item V, Part A and Part B for Outfall 002
EPA Form 2C Item V, Part A for Outfall 003
EPA Form 2C Item V, Part A for Outfall 03A
EPA Form 2C Item V, Part A and Part B for Outfall 03B

Form
2C
NPDES



U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall Number (list)	Latitude			Longitude			Receiving Water (name)
	Deg	Min	Sec	Deg	Min	Sec	
001	33	41	00	94	25	30	French Creek
002	33	41	30	94	25	30	French Creek
003	33	41	10	94	25	30	French Creek
03A	33	41	16	94	25	14	French Creek
03B	33	41	22.8	94	24	26.7	French Branch

II. Flows, Sources of Pollution, and Treatment Technologies

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

1. Outfall No. (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION (list)	b. AVERAGE FLOW	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
001	Active Quarry Dewatering	Variable	Settling Pond	1-U, 4-A
	Stormwater Runoff	Variable	Settling Pond	1-U
	Fishing Lake	Variable	Settling Pond	1-U
002	Stormwater Runoff	Variable	Settling Pond	1-U, 4-A
003	Coal Processing Area	Variable	Settling Pond	1-U, 4-A
	Truck Washout Water	Variable	Settling Pond	1-U
	Sanitary Wastewater	Variable	Settling Pond	1-U
	Stormwater Runoff	Variable	Settling Pond	1-U
	Non-Contact Cooling Water	Variable	Settling Pond	1-U
	Process Area Washdown Water	Variable	Settling Pond	1-U
	Chalk Dryer Scrubber	Variable	Settling Pond	1-U
03A	CKD Landfill Leachate and Runoff	Variable	Settling Pond	1-U
03B	Sanitary Wastewater	5000gpd	Activated sludge	1-T, 3-A, 1-U, 2-F

OFFICIAL USE ONLY (effluent guidelines sub-categories)

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

YES (complete the following table)

NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				c. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		b. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
001	Quarry Dewatering	NA	6	0.083	NA	NA	NA	NA
002	Material Storage	NA	8	0.02	NA	NA	NA	NA
003	Process Water	NA	4	0.112	NA	NA	NA	NA
03A	Landfill Runoff	NA	4	0.01	NA	NA	NA	NA
03B	Sanitary	NA	12	0.0002	NA	NA	NA	NA

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

YES (complete Item III-B)

NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?

YES (complete Item III-C)

NO (go to Section IV)

C. If you answered "yes" to item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

YES (complete the following table)

NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. No	b. SOURCE OF DISCHARGE		a. RE-REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.

MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAM IS ATTACHED.

Ash Grove Cement Company
Foreman, AR
AR0042846

Supplemental Information - EPA Form 2C, Item IV

Ash Grove replaced its three (3) "wet process" kilns with one (1) "preheater/precalciner kiln system" also called a "pyroprocessing" system which utilizes the "dry process" to produce cement clinker. This fundamental process change also means that the water balance has also significantly changed. More make-up water is needed for evaporative cooling resulting in less frequent discharges from the process pond and the fishing lake.

Ash Grove continues to work through the process changes and manipulate the water balance in an effort to maximize water reuse and minimize discharges. As a result, most of the outfalls did not have a effluent to sample for the preparation of this renewal application. The following table provides discharge information by outfall:

Outfall Description	Date of Last Recorded Effluent
001 - Fishing Lake	May 2010 (No current sample results)
002 - Material Storage	February 2011 (Sample results included)
003 - Process Water Pond	March 2010 (No current sample results)
03A - Landfill Sedimentation Pond (internal outfall to 003)	September 2009 (No current sample results)
03B - Wastewater Treatment Plant (internal outfall to 003)	February 2011 (Sample results included)

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.
001

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)				
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION		b. MASS		a. LONG TERM AVERAGE VALUE	b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		
a. Biochemical Oxygen Demand (BOD)													
b. Chemical Oxygen Demand (COD)													
c. Total Organic Carbon (TOC)													
d. Total Suspended Solids (TSS)					4.5	3.0	29	mg/L	lbs				
e. Ammonia (as N)													
f. Flow												Value	
g. Temperature (winter)	Ambient											Value	
h. Temperature (summer)	Ambient											Value	
i. pH			7.59	7.98			29	STANDARD UNITS					

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)				
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION		b. MASS		a. LONG TERM AVERAGE VALUE	b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS				
a. Bromide (24959-67-9)	<input type="checkbox"/>	<input type="checkbox"/>													
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>													
c. Color	<input type="checkbox"/>	<input type="checkbox"/>													
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>													
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>													
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>													

*Estimated

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.
002

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSIS	3. UNITS (specify if blank)		4. INTAKE (optional)		b. NO. OF ANALYSES
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	2.5	NA					1	mg/L	NA			
b. Chemical Oxygen Demand (COD)	25.2	NA					1	mg/L	NA			
c. Total Organic Carbon (TOC)	5.35	NA					1	mg/L	NA			
d. Total Suspended Solids (TSS)	6.8	NA	12	3.0	3.0	0.5	25	mg/L	lb			
e. Ammonia (as N)	<0.5	NA					1	mg/L	NA			
f. Flow			0.05		0.02		25	MGD	NA	Value		
g. Temperature (winter)	Ambient									Value		
h. Temperature (summer)	Ambient									Value		
i. pH	7.99	NA	7.92	NA			28	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						d. NO. OF ANALYSIS	3. UNITS (specify if blank)		4. INTAKE (optional)		b. NO. OF ANALYSES
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
b. Chlorine, Total Residual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.19	NA					1	mg/L	NA			
c. Color	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
d. Fecal Coliform	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12	NA					1	Cfu/100 ml	NA			
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

*Estimated

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
h. Oil and Grease	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
i. Phosphorus (as P), Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.02	NA					1	mg/L	NA			
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
(2) Beta, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
(3) Radium, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
(4) Radium 226, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
k. Sulfate (as SO ₄) (14808-79-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	163	NA					1	mg/L	NA			
l. Sulfide (as S)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
n. Surfactants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.113	NA					1	mg/L	NA			
o. Aluminum, Total (7429-90-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.124	NA					1	mg/L	NA			
p. Barium, Total (7440-39-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.057	NA					1	mg/L	NA			
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
s. Iron, Total (7439-89-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.202	NA					1	mg/L	NA			
t. Magnesium, Total (7439-95-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.38	NA					1	mg/L	NA			
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
v. Manganese, Total (7439-96-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.279	NA					1	mg/L	NA			
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

*Estimated

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2c for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT				d. NO. OF ANALYSES	4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)			c. LONG TERM AVRG. VALUE (if available)		a. LONG TERM AVERAGE VALUE	b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS
METALS, CYANIDE, AND TOTAL PHENOLS													
1m. Antimony, Total (7440-38-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
2M. Arsenic, Total (7440-38-2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10.2	NA				1	ug/L	NA		
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
5M Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
6M Copper, Total (7440-50-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
7M lead, Total (7439-92-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
8M Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.68	NA				1	ng/L	NA		
9M Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
10M Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
11M Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
12M Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
13M Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
14M Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
15M Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>										
DIOXIN													
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DESCRIBE RESULTS									

*Estimated

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS (specify if blank)		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3V Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4V Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6V Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7V Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8V Chlorodibromomethane (124-48-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9V Chloroethane (75-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10V 2-Chloroethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11V Chloroform (67-66-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12V Dichlorobromomethane (75-27-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13V Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14V 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15V 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16V 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17V 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18V 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19V Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20V Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21V Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

** Not analyzed since Bis (chloromethyl)Ether (542-88-1) has been deleted from 40 CFR 122, Appendix D Table I

EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

OUTFALL NUMBER
002

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS (specify if blank)		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22 V Methylene Chloride (75-09-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23V 1,1,2,2-Tetrachloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24V Tetrachloroethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25V Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V 1,1,1-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V Trichloroethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION - ACID COMPOUNDS															
1A 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A 2,4-Dichlorophenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A 2,4-Dimethylphenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A 4,6-Dinitro-O-cresol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A 2,4-Dinitrophenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A 2-Nitrophenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A 4-Nitrophenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A p-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A Pentachlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A Phenol (108-95-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11A 2,4,6-Trichlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS (specify if blank)		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B Acenaphthene (83-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5B Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B Bis (2-Chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14 B 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B Butyl Benzyl Phthalate (85-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

OUTFALL NUMBER
002

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG-TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B 3,3'-Dichlorobenzidine (91-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B 2,4-Dinitrotoluene* (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29B Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B Nitrobenzene (98-95-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B N-Nitrosdi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS (specify if blank)		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B N-Nitrosodiphenylamine (86-30-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
44B Phenanthrene (85-01-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
45B Pyrene (129-00-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
46B 1,2,4-Trichlorobenzene (120-82-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION - PESTICIDES															
1P Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2P α-BHC (319-84-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3P β-BHC (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4P γ-BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5P δ-BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6P Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7P 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8P 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9P 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10P Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11P α-Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12P β-Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13P Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14P Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15P Endrin Aldehyde (7421-93-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16P Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

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EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.
003

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)			17	117	11	10.2	8	mg/L	lbs			
e. Ammonia (as N)												
f. Flow			0.83		0.112					Value		
g. Temperature (winter)					53		8	° F		Value		
h. Temperature (summer)					85		8	° F		Value		
i. pH			8.2	7.78			8	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	A. BE- LIEVED PRE- SENT	B. BE- LIEVED AB- SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATIO N	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Bromide (24959-67-9)	<input type="checkbox"/>	<input type="checkbox"/>												
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>												
c. Color	<input type="checkbox"/>	<input type="checkbox"/>												
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>												
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>												
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>												

*Estimated

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EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.
03A

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Organic Carbon (TOC)												
d. Total Suspended Solids (TSS)			38	11.4	10	0.1	13	mg/L	lbs			
e. Ammonia (as N)												
f. Flow			0.036 MGD		0.01 MGD		13			Value		
g. Temperature (winter)					Ambient				° F	Value		
h. Temperature (summer)					Ambient				° F	Value		
i. pH			8.9	8.1			13	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	A. BE- LIEVED PRE- SENT	B. BE- LIEVED AB- SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
a. Bromide (24959-67-9)	<input type="checkbox"/>	<input type="checkbox"/>												
b. Chlorine, Total Residual	<input type="checkbox"/>	<input type="checkbox"/>												
c. Color	<input type="checkbox"/>	<input type="checkbox"/>												
d. Fecal Coliform	<input type="checkbox"/>	<input type="checkbox"/>												
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input type="checkbox"/>												
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input type="checkbox"/>												

*Estimated

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EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO.
03B

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS		
a. Biochemical Oxygen Demand (BOD)	85.5	NA			126	0.18	10	mg/L	lbs		
b. Chemical Oxygen Demand (COD)	374	NA					1	mg/L	lbs		
c. Total Organic Carbon (TOC)	75.4	NA					1	mg/L	lbs		
d. Total Suspended Solids (TSS)					29.3	0.1	10	mg/L	lbs		
e. Ammonia (as N)	148	NA					1	mg/L	lbs		
f. Flow	NA		0.0014 MGD		0.00017 MGD		9			Value	
g. Temperature (winter)	Ambient				Ambient					Value	
h. Temperature (summer)	Ambient				Ambient					Value	
i. pH	7.84						1	STANDARD UNITS			

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS		
a. Bromide (24959-67-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.8	NA					1	mg/L	NA		
b. Chlorine, Total Residual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<0.02	NA					1	mg/L	NA		
c. Color	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
d. Fecal Coliform	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TNTC	NA					1	CFU /100ml	NA		
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>											
f. Nitrate-Nitrite (as N)	<input type="checkbox"/>	<input checked="" type="checkbox"/>											

*Estimated

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						d. NO. OF ANALYSIS	3. UNITS (specify if blank)		4. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	< 2.0	NA					1	mg/L	NA			
h. Oil and Grease	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5.6	NA					1	mg/L	NA			
i. Phosphorus (as P); Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.32	NA					1	mg/L	NA			
j. Radioactivity														
(1) Alpha, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
(2) Beta, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
(3) Radium, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
(4) Radium 226, Total	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
k. Sulfate (as SO ₄) (14808-79-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	9.34	NA					1	mg/L	NA			
l. Sulfide (as S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.487	NA					1	mg/L	NA			
m. Sulfite (as SO ₃) (14265-45-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<4.0	NA					1	mg/L	NA			
n. Surfactants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2.03	NA					1	mg/L	NA			
o. Aluminum, Total (7429-90-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.152	NA					1	mg/L	NA			
p. Barium, Total (7440-39-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.088	NA					1	mg/L	NA			
q. Boron, Total (7440-42-8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
s. Iron, Total (7439-89-6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
t. Magnesium, Total (7439-95-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4.53	NA					1	mg/L	NA			
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
v. Manganese, Total (7439-96-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.033	NA					1	mg/L	NA			
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
x. Titanium, Total (7440-32-6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

*Estimated

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions); mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2c for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS (specify if blank)		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1m. Antimony, Total (7440-36-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2M. Arsenic, Total (7440-38-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3M. Beryllium, Total (7440-41-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4M. Cadmium, Total (7440-43-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5M Chromium, Total (7440-47-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6M Copper, Total (7440-50-8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	36.0	NA					1	mg/L	NA			
7M lead, Total (7439-92-1)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.79	NA					1	mg/L	NA			
8M Mercury, Total (7439-97-6)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21.14	NA					1	ng/L	NA			
9M Nickel, Total (7440-02-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10M Selenium, Total (7782-49-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11M Silver, Total (7440-22-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12M Thallium, Total (7440-28-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13M Zinc, Total (7440-66-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14M Cyanide, Total (57-12-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15M Phenols, Total	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DESCRIBE RESULTS											

*Estimated

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS (specify if blank)		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2V Acrylonitrile (107-13-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3V Benzene (71-43-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4V Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5V Bromoform (75-25-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6V Carbon Tetrachloride (56-23-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7V Chlorobenzene (108-90-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8V Chlorodibromomethane (124-48-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9V Chloroethane (75-00-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10V 2-Chloroethylvinyl Ether (110-75-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11V Chloroform (67-66-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12V Dichlorobromomethane (75-27-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13V Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14V 1,1-Dichloroethane (75-34-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15V 1,2-Dichloroethane (107-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16V 1,1-Dichloroethylene (75-35-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17V 1,2-Dichloropropane (78-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18V 1,3-Dichloropropylene (542-75-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19V Ethylbenzene (100-41-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20V Methyl Bromide (74-83-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21V Methyl Chloride (74-87-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

** Not analyzed since Bis (chloromethyl)Ether (542-88-1) has been deleted from 40 CFR 122, Appendix D Table I

EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

OUTFALL NUMBER
03B

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS (specify if blank)		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22 V Methylene Chloride (75-09-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23V 1,1,2,2-Tetra-Chloroethane (79-34-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24V Tetrachloro-ethylene (127-18-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25V Toluene (108-88-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26V 1,2-Trans-Dichloroethylene (156-60-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27V 1,1,1-Trichloroethane (71-55-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28V 1,1,2-Trichloroethane (79-00-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29V Trichloro-ethylene (79-01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30V Trichloro-fluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31V Vinyl Chloride (75-01-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
GC/MS FRACTION - ACID COMPOUNDS															
1A 2-Chlorophenol (95-57-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2A 2,4-Dichloro-phenol (120-83-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3A 2,4-Dimethyl-phenol (105-67-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4A 4,6-Dinitro-O-cresol (534-52-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5A 2,4-Dinitro-phenol (51-28-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6A 2-Nitro-phenol (88-75-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7A 4-Nitro-phenol (100-02-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8A p-Chloro-M-Cresol (59-50-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9A Penta-chlorophenol (87-86-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10A Phenol (108-95-2)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	74	NA					1	ug/L	NA			
11A 2,4,6-Tri-chlorophenol (88-06-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS (specify if blank)		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B Acenaphthene (83-32-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
2B Acenaphthylene (208-96-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
3B Anthracene (120-12-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
4B Benzidine (92-87-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
5B Benzo (a) Anthracene (56-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
6B Benzo (a) Pyrene (50-32-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
7B 3,4-Benzo-fluoranthene (205-99-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
8B Benzo (ghi) Perylene (191-24-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
9B Benzo (k) Fluoranthene (207-08-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
10B Bis (2-Chloroethoxy) Methane (111-91-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
11B Bis (2-Chloroethyl) Ether (111-44-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
12B Bis (2-Chloroisopropyl) Ether (102-60-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
13B Bis (2-Ethylhexyl) Phthalate (117-81-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
14 B 4-Bromophenyl Phenyl Ether (101-55-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
15B Butyl Benzyl Phthalate (85-68-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
16B 2-Chloronaphthalene (91-58-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
17B 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
18B Chrysene (218-01-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
19B Dibenzo (a,h) Anthracene (53-70-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
20B 1,2-Dichlorobenzene (95-50-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
21B 1,3-Dichlorobenzene (541-73-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

EPA I.D. NUMBER (copy from Item 1 of Form 1)
AR0042846

OUTFALL NUMBER
03B

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
22B 1,4-Dichlorobenzene (106-46-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
23B 3,3'-Dichlorobenzidine (91-94-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
24B Diethyl Phthalate (84-66-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
25B Dimethyl Phthalate (131-11-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
26B Di-N-Butyl Phthalate (84-74-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
27B 2,4-Dinitrotoluene (121-14-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
28B 2,6-Dinitrotoluene (606-20-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
29B Di-N-Octyl Phthalate (117-84-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
30B 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
31B Fluoranthene (206-44-0)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
32B Fluorene (86-73-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
33B Hexachlorobenzene (118-74-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
34B Hexachlorobutadiene (87-68-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
35B Hexachlorocyclopentadiene (77-47-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
36B Hexachloroethane (67-72-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
37B Indeno (1,2,3-cd) Pyrene (193-39-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
38B Isophorone (78-59-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
39B Naphthalene (91-20-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
40B Nitrobenzene (98-95-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
41B N-Nitrosodimethylamine (62-75-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												
42B N-Nitrosodi-N-Propylamine (621-64-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>												

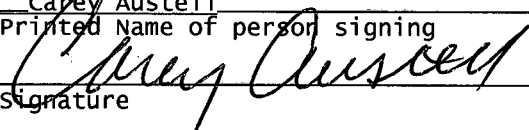
Tab 6

ADEQ PPS Requirements for Outfall 002
Analytical Data for Outfall 002
ADEQ PPS Requirements for Outfall 03B
Analytical Data for Outfall 03B

ARKANSAS Department of Environmental Quality
PPS REQUIREMENTS

1. Name of facility: Ash Grove Cement Company
2. Name, address and telephone number of laboratory:
Arkansas Analytical Inc. 11701 I-30, Bldg 1, Ste 115, Little Rock, AR 72209
(501) 455-3233
3. Is the lab certified by the State of Arkansas? Yes No
4. What are the certification dates?
Issued data _____ Expire date _____
5. Is the laboratory certified for all the parameters?
YES No (Explain)

6. Date and time of samples collected:
3/7/2011 1200 to 1430 hrs
7. Date and time samples were received in the laboratory:
3/11/2011 17:30 hrs
8. Sample location (Outfall No.): 002
9. Samples collected by:
Name Shon Rondles
Title Field Technician
Telephone (501) 455-3233
10. I certify under penalty of law that this document and all attachments were prepared under my direction of 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 submitted is, to the best of my knowledge and belief, 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.

<u>Carey Austell</u>	<u>Plant Manager</u>
Printed Name of person signing	Title
	<u>5/20/11</u>
Signature	Date signed

List all attachments to this form:
Laboratory Reports SDG No. 1103090, Outfall 002 and PPS Mercury One SDG No.1103090-01-03

METALS AND CYANIDE	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
1. Antimony (Total), Recoverable	ND	200.7	<60.0	60
2. Arsenic (Total), Recoverable		200.7	<10	0.5
3. Beryllium (Total), Recoverable	ND	200.7	<0.5	0.5
4. Cadmium (Total), Recoverable	ND	200.7	<0.5	0.5
5. Chromium (Total), Recoverable	ND	200.7	<10	10
7. Chromium (6+), Dissolved	ND	7196A/350 0-Cr B	<0.010	10
8. Copper (Total), Recoverable		200.7	<20.0	0.5
9. Lead (Total), Recoverable	ND	3113B	<0.5	0.5
10. Mercury (Total), Recoverable	0.00168	1631E	0.0018	0.005
12. Nickel (Total), Recoverable		200.7	<10	0.5
13. Selenium (Total), Recoverable	ND	3113B	<5.0	5
14. Silver (Total), Recoverable	ND	3113B	<0.50	0.5
15. Thallium (Total), Recoverable	ND	279.2	<0.50	0.5
16. Zinc (Total), Recoverable	ND	200.7	<20.0	20
129. Phenols, Total Recoverable	ND	420.1/906 5	<5.0	5
17. Cyanide (Total), Recoverable	ND	4500-CN E/9014	<10.0	10
DIOXIN	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
18. 2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)		625	<10.0	0.00001

VOLATILE COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g}/\text{l}$)
	RESULTS ($\mu\text{g}/\text{l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g}/\text{l}$)	
19. Acrolein	ND	624	<50.0	50
20. Acrylonitrile	ND	624	<20.0	20
21. Benzene	ND	624	<10.0	10
22. Bromoform	ND	624	<10.0	10
23. Carbon Tetrachloride	ND	624	<2.0	2
24. Chlorobenzene	ND	624	<10.0	10
25. Chlorodibromomethane	ND	624	<10.0	10
26. Chloroethane	ND	624	<50.0	50
27. 2-Chloroethyl vinyl ether	ND	624	<10.0	10
28. Chloroform	ND	624	<10.0	10
29. Dichlorobromomethane	ND	624	<10.0	10
30. 1,1-Dichloroethane	ND	624	<10.0	10
31. 1,2-Dichloroethane	ND	624	<10.0	10
32. 1,1-Dichloroethylene	ND	624	<10.0	10
33. 1,2-Dichloropropane	ND	624	<10.0	10
34. 1,3-Dichloropropylene	ND	624	<10.0	10
35. Ethylbenzene	ND	624	<10.0	10
36. Methyl Bromide [Bromomethane]	ND	624	<50.0	50
37. Methyl chloride [chloromethane]	ND	624	<50.0	50
38. Methylene chloride	ND	624	<20.0	20
39. 1,1,2,2-Tetrachloroethane	ND	624	<10.0	10
40. Tetrachloroethylene	ND	624	<10.0	10
41. Toluene	ND	624	<10.0	10
42. 1,2-trans-Dichloroethylene	ND	624	<10.0	10
43. 1,1,1-Trichloroethane	ND	624	<10.0	10
44. 1,1,2-Trichloroethane	ND	624	<10.0	10
45. Trichloroethylene	ND	624	<10.0	10
46. vinyl chloride	ND	624	<10.0	10

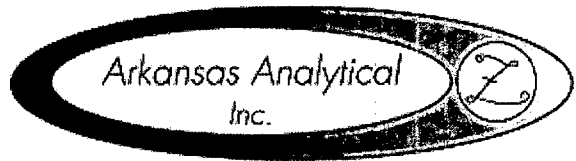
ACID COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL ($\mu\text{g/l}$)
	RESULTS ($\mu\text{g/l}$)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED ($\mu\text{g/l}$)	
47. 2-Chlorophenol	ND	625	<10.0	10
48. 2,4-Dichlorophenol	ND	625	<10.0	10
49. 2,4-Dimethylphenol	ND	625	<10.0	10
50. 4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol]	ND	625	<50.0	50
51. 2,4-Dinitrophenol	ND	625	<50.0	50
52. 2-Nitrophenol	ND	625	<20.0	20
53. 4-Nitrophenol	ND	625	<50.0	50
54. P-Chloro-m-Cresol [4 chloro-3-methylphenol]	ND	625	<10.0	10
55. Pentachlorophenol	ND	625	<5.0	5
56. Phenol	ND	625	<10.0	10
57. 2,4,6-Trichlorophenol	ND	625	<10.0	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
58. Acenaphthene	ND	625	<10.0	10
59. Acenaphthylene	ND	625	<10.0	10
60. Anthracene	ND	625	<10.0	10
61. Benzidine	ND	625	<50.0	50
62. Benzo(a)anthracene	ND	625	<5.0	5
63. Benzo(a)pyrene	ND	625	<5.0	5
64. 3,4-Benzofluoranthene	ND	625	<10.0	10
65. Benzo(ghi)perylene	ND	625	<20.0	20
66. Benzo(k)fluoranthene	ND	625	<5.0	5
67. Bis(2-chloroethoxy) methane	ND	625	<10.0	10
68. Bis(2-chloroethyl) ether	ND	625	<10.0	10
69. Bis(2-chloroisopropyl) ether	ND	625	<10.0	10
70. Bis(2-ethylhexyl) phthalate	ND	625	<10.0	10
71. 4-Bromophenyl phenyl ether	ND	625	<10.0	10
72. Butyl benzyl phthalate	ND	625	<10.0	10
73. 2-Chloronaphthalene	ND	625	<10.0	10
74. 4-Chlorophenyl phenyl ether	ND	625	<10.0	10
75. Chrysene	ND	625	<5.0	5
76. Dibenzo (a,h) anthracene	ND	625	<5.0	5
77. 1,2-Dichlorobenzene	ND	625	<10.0	10
78. 1,3-Dichlorobenzene	ND	625	<10.0	10
79. 1,4-Dichlorobenzene	ND	625	<10.0	10
80. 3,3'-Dichlorobenzidine	ND	625	<5.0	5
81. Diethyl Phthalate	ND	625	<10.0	10
82. Dimethyl Phthalate	ND	625	<10.0	10

83.	<i>Di-n-Butyl Phthalate</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>
84.	<i>2,4-Dinitrotoluene</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>
85.	<i>2,6-Dinitrotoluene</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>
86.	<i>Di-n-octyl Phthalate</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
87. 1,2-Diphenylhydrazine	ND	625	<20.0	20
89. Fluorene	ND	625	<10.0	10
90. Hexachlorobenzene	ND	625	<5.0	5
91. Hexachlorobutadiene	ND	625	<10.0	10
92. Hexachlorocyclopentadiene	ND	625	<10.0	10
93. Hexachloroethane	ND	625	<20.0	20
94. Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)	ND	625	<5.0	5
95. Isophorone	ND	625	<10.0	10
96. Naphthalene	ND	625	<10.0	10
97. Nitrobenzene	ND	625	<10.0	10
98. N-nitrosodimethylamine	ND	625	<50.0	50
99. N-nitrosodi-n-propylamine	ND	625	<20.0	20
100. N-nitrosodiphenylamine	ND	625	<20.0	20
101. Phenanthrene	ND	625	<10.0	10
102. Pyrene	ND	625	<10.0	10
103. 1,2,4-Trichlorobenzene	ND	625	<10.0	10

PESTICIDES	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
104. Aldrin	ND	608	<0.010	0.01
105. Alpha-BHC	ND	608	<0.050	0.05
106. Beta-BHC	ND	608	<0.050	0.05
107. Gamma-BHC	ND	608	<0.050	0.05
108. Delta-BHC	ND	608	<0.050	0.05
109. chlordane	ND	608	<0.20	0.2
110. 4,4'-DDT	ND	608	<0.020	0.02
111. 4,4'-DDE (p,p-DDX)	ND	608	<0.10	0.1
112. 4,4'-DDD 9(p,p-TDE)	ND	608	<0.10	0.1
113. Dieldrin	ND	608	<0.020	0.02
114. Alpha-endosulfan	ND	608	<0.010	0.01
115. Beta-endosulfan	ND	608	<0.020	0.02
116. Endosulfan sulfate	ND	608	<0.10	0.1
117. Endrin	ND	608	<0.020	0.02
118. Endrin aldehyde	ND	608	<0.10	0.1
119. Heptachlor	ND	608	<0.010	0.01
120. Heptachlor epoxide (BHC-hexachlorocyclohexane)	ND	608	<0.010	0.01
130. Chlorpyrifos	ND	608	<0.070	0.07
121. PCB-1242	ND	608	<0.20	0.2
122. PCB-1254	ND	608	<0.20	0.2
123. PCB-1221	ND	608	<0.20	0.2
124. PCB-1232	ND	608	<0.20	0.2
125. PCB-1248	ND	608	<0.20	0.2
126. PCB-1260	ND	608	<0.20	0.2
127. PCB-1016	ND	608	<0.20	0.2
128. Toxaphene	ND	608	<0.30	0.3



11701 I-30 Bldg 1, Ste 115 - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

24 March 2011

Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836

RE: Permit Renewal Sample; Outfall 002

SDG Number: 1103090

Enclosed are the results of analyses for samples received by the laboratory on 07-Mar-11 17:30. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✓
Containers Correct	✓
COC/Labels Agree	✓
Preservation Confirmed	✓
Received On Ice	✓
Temperature on Receipt	2.0°C

Sincerely,

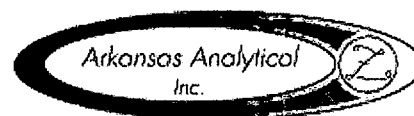
A handwritten signature in cursive script that reads "Norma James".

Norma James
President

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24 March 2011

Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002



Date Received: 07-Mar-11 17:30

CASE NARRATIVE

SAMPLE DELIVERY GROUP 1103090:

Quality control excursions resulting in data qualification are discussed below.

Acid and Base/Neutral Compounds Analysis:

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Failure: Benzidine failed to recovery within laboratory acceptability criteria in the MS and/or MSD. The out of control QC data was flagged as %D1 and data in the parent sample, 1103090-01 was qualified as estimated (E20).

Continuing Calibration Verification (CCV) Failure: Benzidine failed to meet method specified criteria in the CCV. This compound was qualified as "estimated" (E21) in sample 1103090-01 (Outfall 002).

Surrogate Failure: The surrogate, 2-Fluorobiphenyl failed to meet acceptability criteria in the MS. The QC data was flagged as %D3 and the base/neutral compounds in the MS were qualified as "estimated" (E1) due to this failure.

BOD Analysis:

Method requires a depletion of at least 2 mg/L and a residual of at least 1 mg/L dissolved oxygen in any given sample dilution tested. No dilution met these requirements; thus the BOD result for sample 1103090-01 (Outfall 002) is "estimated" (B-01).

Anions notes: The MS and MSD recoveries for NO₂, SO₄, and F all failed. These analytes were qualified as "estimated" in the parent sample which was NOT part of this sample delivery group.

Volatiles Analysis:

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Failure: Acrolein failed to recovery within laboratory acceptability criteria in the MS and/or MSD. The out of control QC data was flagged as %D1 and Acrolein in the parent sample, 1103090-01 was qualified as "estimated" (E20).

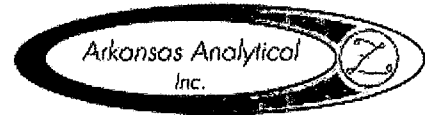
Other: The second source verification of the calibration curve failed to meet method specified requirements for Acrolein. This compound was qualified as "estimated" (E5) in sample 1103090-01.

NOTE: The Form 2C analyte, Bis Chloromethyl Ether was not recoverable. The analyte was qualified by "NR-1" on the final report.

Color Analysis:

Method requires the pH at which the color of the sample was determined be reported. In order to reduce confusion with the FIELD pH, the pH at the time the color was determined is given in the narrative. The pH of the Color sample was 7.98 SU.

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002

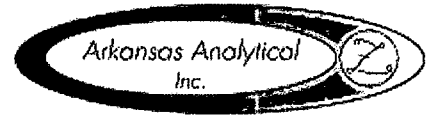
Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103090-01
Sample Name: Outfall 002 Coal settling pond
Date/Time Collected: 3/7/11 14:20
Sample Matrix: Water

<u>Acid Compounds</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
2,4,6-Trichlorophenol	ug/L	< 10.0		3/10/11 19:28	A103110	625
2,4-Dichlorophenol	ug/L	< 10.0		3/10/11 19:28	A103110	625
2,4-Dimethylphenol	ug/L	< 10.0		3/10/11 19:28	A103110	625
2,4-Dinitrophenol	ug/L	< 50.0		3/10/11 19:28	A103110	625
2-Chlorophenol	ug/L	< 10.0		3/10/11 19:28	A103110	625
2-Nitrophenol	ug/L	< 20.0		3/10/11 19:28	A103110	625
4-Chloro-3-methylphenol	ug/L	< 10.0		3/10/11 19:28	A103110	625
4-Nitrophenol	ug/L	< 50.0		3/10/11 19:28	A103110	625
Fluoranthene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Pentachlorophenol	ug/L	< 5.00		3/10/11 19:28	A103110	625
Phenol	ug/L	< 10.0		3/10/11 19:28	A103110	625
2-Methyl-4,6-dinitrophenol	ug/L	< 50.0		3/10/11 19:28	A103110	625
2,4,6-Tribromophenol [surr]	%	100		3/10/11 19:28	A103110	625
2-Fluorophenol [surr]	%	46.2		3/10/11 19:28	A103110	625
Phenol-d5 [surr]	%	33.7		3/10/11 19:28	A103110	625
<u>Base/Neutral Compounds</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
1,2,4-Trichlorobenzene	ug/L	< 10.0		3/10/11 19:28	A103110	625
1,2-Dichlorobenzene	ug/L	< 10.0		3/10/11 19:28	A103110	625
1,2-Diphenyl Hydrazine	ug/L	< 20.0		3/10/11 19:28	A103110	625
1,3-Dichlorobenzene	ug/L	< 10.0		3/10/11 19:28	A103110	625
1,4-Dichlorobenzene	ug/L	< 10.0		3/10/11 19:28	A103110	625
2,3,7,8-TCDD Screen	ug/L	< 10.0		3/10/11 19:28	A103110	625
2,4-Dinitrotoluene	ug/L	< 10.0		3/10/11 19:28	A103110	625
2,6-Dinitrotoluene	ug/L	< 10.0		3/10/11 19:28	A103110	625
2-Chloronaphthalene	ug/L	< 10.0		3/10/11 19:28	A103110	625
3,3'-Dichlorobenzidine	ug/L	< 5.00		3/10/11 19:28	A103110	625
4-Bromophenyl-phenylether	ug/L	< 10.0		3/10/11 19:28	A103110	625
4-Chlorophenyl-phenylether	ug/L	< 10.0		3/10/11 19:28	A103110	625
Acenaphthene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Acenaphthylene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Anthracene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Benzidine	ug/L	< 50.0	E20, E21	3/10/11 19:28	A103110	625
Benzo[a]pyrene	ug/L	< 5.00		3/10/11 19:28	A103110	625
Benzo[b]fluoranthene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Benzo[g,h,i]perylene	ug/L	< 20.0		3/10/11 19:28	A103110	625
Benzo[k]fluoranthene	ug/L	< 5.00		3/10/11 19:28	A103110	625
Benzo (a) anthracene	ug/L	< 5.00		3/10/11 19:28	A103110	625
Bis(2-chloroethoxy)methane	ug/L	< 10.0		3/10/11 19:28	A103110	625
Bis(2-chloroethyl)ether	ug/L	< 10.0		3/10/11 19:28	A103110	625
Bis(2-chloroisopropyl)ether	ug/L	< 10.0		3/10/11 19:28	A103110	625
Bis(2-ethylhexyl)phthalate	ug/L	< 10.0		3/10/11 19:28	A103110	625
Butylbenzylphthalate	ug/L	< 10.0		3/10/11 19:28	A103110	625
Chrysene	ug/L	< 5.00		3/10/11 19:28	A103110	625

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002

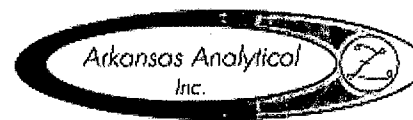
Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103090-01
Sample Name: Outfall 002
Date/Time Collected: 3/7/11 14:20
Sample Matrix: Water

<u>Base/Neutral Compounds</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Dibenz[a,h]anthracene	ug/L	< 5.00		3/10/11 19:28	A103110	625
Diethylphthalate	ug/L	< 10.0		3/10/11 19:28	A103110	625
Dimethylphthalate	ug/L	< 10.0		3/10/11 19:28	A103110	625
Di-n-butylphthalate	ug/L	< 10.0		3/10/11 19:28	A103110	625
Di-n-octylphthalate	ug/L	< 10.0		3/10/11 19:28	A103110	625
Fluoranthene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Fluorene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Hexachlorobenzene	ug/L	< 5.00		3/10/11 19:28	A103110	625
Hexachlorobutadiene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Hexachlorocyclopentadiene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Hexachloroethane	ug/L	< 20.0		3/10/11 19:28	A103110	625
Indeno[1,2,3-cd]pyrene	ug/L	< 5.00		3/10/11 19:28	A103110	625
Isophorone	ug/L	< 10.0		3/10/11 19:28	A103110	625
Naphthalene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Nitrobenzene	ug/L	< 10.0		3/10/11 19:28	A103110	625
N-Nitrosodimethylamine	ug/L	< 50.0		3/10/11 19:28	A103110	625
N-Nitroso-di-n-propylamine	ug/L	< 20.0		3/10/11 19:28	A103110	625
N-Nitrosodiphenylamine	ug/L	< 20.0		3/10/11 19:28	A103110	625
Phenanthrene	ug/L	< 10.0		3/10/11 19:28	A103110	625
Pyrene	ug/L	< 10.0		3/10/11 19:28	A103110	625
2-Fluorobiphenyl [surr]	%	87.2		3/10/11 19:28	A103110	625
Nitrobenzene-d5 [surr]	%	88.8		3/10/11 19:28	A103110	625
Terphenyl-d14 [surr]	%	99.1		3/10/11 19:28	A103110	625
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrate + Nitrite	mg/L	< 1.00		3/8/11 9:47	[CALC]	300.0/9056A
Bromide	mg/L	< 0.500		3/8/11 9:47	A103102	300.0/9056A
Fluoride	mg/L	< 0.500		3/8/11 9:47	A103102	300.0/9056A
Sulfate as SO4	mg/L	163		3/8/11 10:10	A103102	300.0/9056A
<u>Pesticides/PCBs</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Aldrin	ug/L	< 0.010		3/15/11 15:17	A103126	608
alpha-BHC	ug/L	< 0.050		3/15/11 15:17	A103126	608
beta-BHC	ug/L	< 0.050		3/15/11 15:17	A103126	608
gamma-BHC (Lindane)	ug/L	< 0.050		3/15/11 15:17	A103126	608
delta-BHC	ug/L	< 0.050		3/15/11 15:17	A103126	608
Chlordane	ug/L	< 0.200		3/15/11 15:17	A103126	608
4,4'-DDT	ug/L	< 0.020		3/15/11 15:17	A103126	608
4,4'-DDE	ug/L	< 0.100		3/15/11 15:17	A103126	608
4,4'-DDD	ug/L	< 0.100		3/15/11 15:17	A103126	608
Dieldrin	ug/L	< 0.020		3/15/11 15:17	A103126	608
Endosulfan I	ug/L	< 0.010		3/15/11 15:17	A103126	608
Endosulfan II	ug/L	< 0.020		3/15/11 15:17	A103126	608
Endosulfan sulfate	ug/L	< 0.100		3/15/11 15:17	A103126	608

24 March 2011



Keith Byerly
 Ash Grove Cement Company
 4343 Hwy. 108 W
 Foreman, AR 71836
 Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103090-01
 Sample Name: Outfall 002
 Date/Time Collected: 3/7/11 14:20
 Sample Matrix: Water

<u>Pesticides/PCBs</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Endrin	ug/L	< 0.020		3/15/11 15:17	A103126	608
Endrin aldehyde	ug/L	< 0.100		3/15/11 15:17	A103126	608
Heptachlor	ug/L	< 0.010		3/15/11 15:17	A103126	608
Heptachlor epoxide	ug/L	< 0.010		3/15/11 15:17	A103126	608
Chlorpyrifos	ug/L	< 0.070		3/15/11 15:17	A103126	608
Aroclor-1242	ug/L	< 0.200		3/15/11 15:17	A103126	608
Aroclor-1254	ug/L	< 0.200		3/15/11 15:17	A103126	608
Aroclor-1221	ug/L	< 0.200		3/15/11 15:17	A103126	608
Aroclor-1232	ug/L	< 0.200		3/15/11 15:17	A103126	608
Aroclor-1248	ug/L	< 0.200		3/15/11 15:17	A103126	608
Aroclor-1260	ug/L	< 0.200		3/15/11 15:17	A103126	608
Aroclor-1016	ug/L	< 0.200		3/15/11 15:17	A103126	608
Toxaphene	ug/L	< 0.300		3/15/11 15:17	A103126	608
TCMX [surr]	%	52.8		3/15/11 15:17	A103126	608
DCBP [surr]	%	39.9		3/15/11 15:17	A103126	608

<u>PPS Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Antimony	ug/L	< 60.0		3/8/11 22:35	A103117	200.7
Arsenic	ug/L	< 10.0		3/8/11 22:35	A103117	200.7
Copper	ug/L	< 20.0		3/8/11 22:35	A103117	200.7
Lead	ug/L	< 0.500		3/10/11 13:18	A103121	3113B
Nickel	ug/L	< 10.0		3/8/11 22:35	A103117	200.7
Selenium	ug/L	< 5.00		3/9/11 16:52	A103121	3113B
Silver	ug/L	< 0.500		3/9/11 17:02	A103121	3113B
Thallium	ug/L	< 0.500		3/11/11 10:19	A103121	279.2
Beryllium	ug/L	< 0.500		3/8/11 22:35	A103117	200.7
Cadmium	ug/L	< 0.500		3/8/11 22:35	A103117	200.7
Chromium	ug/L	< 10.0		3/8/11 22:35	A103117	200.7
Zinc	ug/L	< 20.0		3/8/11 22:35	A103117	200.7

<u>Total Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Aluminum	mg/L	0.124		3/8/11 22:35	A103117	200.7
Barium	mg/L	0.057		3/8/11 22:35	A103117	200.7
Boron	mg/L	< 0.100		3/8/11 22:35	A103117	200.7
Cobalt	mg/L	< 0.010		3/8/11 22:35	A103117	200.7
Hexavalent Chromium	mg/L	< 0.010		3/8/11 11:30	A103118	7196A/3500-Cr B
Iron	mg/L	0.202		3/8/11 22:35	A103117	200.7
Magnesium	mg/L	7.38		3/8/11 22:35	A103117	200.7
Manganese	mg/L	0.279		3/8/11 22:35	A103117	200.7
Molybdenum	mg/L	< 0.030		3/8/11 22:35	A103117	200.7
Tin	mg/L	< 0.0400		3/8/11 22:35	A103117	200.7
Titanium	mg/L	< 0.0500		3/8/11 22:35	A103117	200.7

<u>Volatiles</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
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24 March 2011



Keith Byerly
 Ash Grove Cement Company
 4343 Hwy. 108 W
 Foreman, AR 71836
 Project: Permit Renewal Sample; Outfall 002

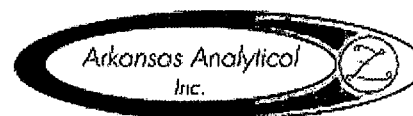
Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103090-01
 Sample Name: Outfall 002
 Date/Time Collected: 3/7/11 14:20
 Sample Matrix: Water

<u>Volatiles</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
1,1,1-Trichloroethane	ug/L	< 10.0		3/11/11 11:29	A103162	624
1,1,2,2-Tetrachloroethane	ug/L	< 10.0		3/11/11 11:29	A103162	624
1,1,2-Trichloroethane	ug/L	< 10.0		3/11/11 11:29	A103162	624
1,1-Dichloroethane	ug/L	< 10.0		3/11/11 11:29	A103162	624
1,1-Dichloroethene	ug/L	< 10.0		3/11/11 11:29	A103162	624
1,2-Dichloroethane	ug/L	< 10.0		3/11/11 11:29	A103162	624
1,2-Dichloropropane	ug/L	< 10.0		3/11/11 11:29	A103162	624
2-Chloroethyl vinyl ether	ug/L	< 10.0		3/11/11 11:29	A103162	624
Acrolein	ug/L	< 50.0	E20, E5	3/11/11 11:29	A103162	624
Acrylonitrile	ug/L	< 20.0		3/11/11 11:29	A103162	624
Benzene	ug/L	< 10.0		3/11/11 11:29	A103162	624
Bromodichloromethane	ug/L	< 10.0		3/11/11 11:29	A103162	624
Bromoform	ug/L	< 10.0		3/11/11 11:29	A103162	624
Bromomethane	ug/L	< 50.0		3/11/11 11:29	A103162	624
Carbon tetrachloride	ug/L	< 2.00		3/11/11 11:29	A103162	624
Chlorobenzene	ug/L	< 10.0		3/11/11 11:29	A103162	624
Chlorodibromomethane	ug/L	< 10.0		3/11/11 11:29	A103162	624
Chloroethane	ug/L	< 50.0		3/11/11 11:29	A103162	624
Chloroform	ug/L	< 10.0		3/11/11 11:29	A103162	624
Chloromethane	ug/L	< 50.0		3/11/11 11:29	A103162	624
cis-1,3-Dichloropropene	ug/L	< 10.0		3/11/11 11:29	A103162	624
Ethylbenzene	ug/L	< 10.0		3/11/11 11:29	A103162	624
Methylene chloride	ug/L	< 20.0		3/11/11 11:29	A103162	624
Tetrachloroethene	ug/L	< 10.0		3/11/11 11:29	A103162	624
Toluene	ug/L	< 10.0		3/11/11 11:29	A103162	624
trans-1,2-Dichloroethene	ug/L	< 10.0		3/11/11 11:29	A103162	624
Trichloroethene	ug/L	< 10.0		3/11/11 11:29	A103162	624
Vinyl chloride	ug/L	< 10.0		3/11/11 11:29	A103162	624
Trichlorofluoromethane	ug/L	< 50.0		3/11/11 11:29	A103162	624
Bis Chloromethyl ether	ug/L	Not Recoverable	NR-1	3/11/11 11:29	A103162	624
Dichlorodifluoromethane	ug/L	< 50.0		3/11/11 11:29	A103162	624
4-Bromofluorobenzene [surr]	%	101		3/11/11 11:29	A103162	624
Dibromofluoromethane [surr]	%	95.7		3/11/11 11:29	A103162	624
Toluene-d8 [surr]	%	108		3/11/11 11:29	A103162	624
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrogen, Total Organic	mg/L	< 1.00		3/14/11 12:17	[CALC]	4500-Norg
Ammonia as N	mg/L	< 0.50		3/14/11 12:17	A103187	4500-NH3D
BOD-5	mg/L	2.50	B-01	3/9/11 9:00	A103119	5210B
Chlorine Residual	mg/L	0.19		3/7/11 13:35	A103240	4500-Cl G
COD	mg/L	25.2		3/15/11 9:17	A103208	410.4
Color	Color Units	10.0		3/8/11 11:40	A103203	2120 B
Cyanide (total)	mg/L	< 0.010		3/9/11 13:26	A103128	4500-CN E/9014

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103090-01
Sample Name: Outfall 002
Date/Time Collected: 3/7/11 14:20
Sample Matrix: Water

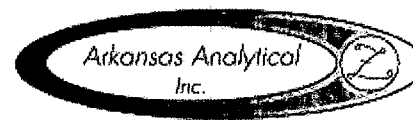
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Oil and Grease	mg/L	< 2.5		3/8/11 9:00	A103105	1664A
pH	S.U.	7.99		3/7/11 13:45	A103238	150.2
Phenolics	mg/L	< 0.005		3/8/11 14:00	A103135	420.1/9065
Sulfide	mg/L	< 0.100		3/11/11 9:52	A103159	4500S2-D
Sulfite	mg/L	< 4.00		3/8/11 10:45	A103182	4500-SO3 B
Surfactants	mg/L	0.113		3/9/11 10:00	A103202	5540C
TDS	mg/L	460		3/10/11 17:00	A103169	2540C
Temperature	°C	13.7		3/7/11 13:45	A103239	2550B
TOC	mg/L	5.35		3/15/11 7:26	A103180	5310/9060A
Total Phosphorus	mg/L	0.020		3/21/11 8:57	A103292	4500-P B5,E
TSS	mg/L	6.8		3/8/11 15:00	A103107	2540D
Fecal Coliforms	CFU/100 ml	12		3/7/11 17:37	A103173	9222D

ANALYTICAL RESULTS

Lab Number: 1103090-02
Sample Name: Outfall 002 Duplicate
Date/Time Collected: 3/7/11 14:20
Sample Matrix: Water

<u>PPS Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Antimony	ug/L	< 60.0		3/8/11 22:52	A103117	200.7
Arsenic	ug/L	10.2		3/8/11 22:52	A103117	200.7
Copper	ug/L	< 20.0		3/8/11 22:52	A103117	200.7
Lead	ug/L	< 0.500		3/10/11 13:18	A103121	3113B
Nickel	ug/L	< 10.0		3/8/11 22:52	A103117	200.7
Selenium	ug/L	< 5.00		3/9/11 16:52	A103121	3113B
Silver	ug/L	< 0.500		3/9/11 17:02	A103121	3113B
Thallium	ug/L	< 0.500		3/11/11 10:19	A103121	279.2
Beryllium	ug/L	< 0.500		3/8/11 22:52	A103117	200.7
Cadmium	ug/L	< 0.500		3/8/11 22:52	A103117	200.7
Chromium	ug/L	< 10.0		3/8/11 22:52	A103117	200.7
Zinc	ug/L	< 20.0		3/8/11 22:52	A103117	200.7
<u>Total Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Hexavalent Chromium	mg/L	< 0.010		3/8/11 11:30	A103118	7186A/3500-Cr B

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103090-03
Sample Name: Outfall 002 Field Blank
Date/Time Collected: 3/7/11 14:20
Sample Matrix: Water

<u>PPS Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Antimony	ug/L	< 60.0		3/8/11 23:14	A103117	200.7
Arsenic	ug/L	< 10.0		3/8/11 23:14	A103117	200.7
Copper	ug/L	77.8		3/8/11 23:14	A103117	200.7
Lead	ug/L	< 0.500		3/10/11 13:18	A103121	3113B
Nickel	ug/L	< 10.0		3/8/11 23:14	A103117	200.7
Selenium	ug/L	< 5.00		3/9/11 16:52	A103121	3113B
Silver	ug/L	< 0.500		3/9/11 17:02	A103121	3113B
Thallium	ug/L	< 0.500		3/11/11 10:19	A103121	279.2
Beryllium	ug/L	< 0.500		3/8/11 23:14	A103117	200.7
Cadmium	ug/L	< 0.500		3/8/11 23:14	A103117	200.7
Chromium	ug/L	< 10.0		3/8/11 23:14	A103117	200.7
Zinc	ug/L	63.5		3/8/11 23:14	A103117	200.7
<u>Total Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Hexavalent Chromium	mg/L	< 0.010		3/8/11 11:30	A103118	7196A/3500-Cr B

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Anions -- Batch: A103102 (Water)

Prepared: 08-Mar-11 08:38 By: MG -- Analyzed: 08-Mar-11 11:41 By: MG

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Bromide	<0.500 mg/L	95.7% / NA	92.7% / 95.0%		2.43%	
Fluoride	<0.500 mg/L	96.0% / NA	139% / 166%		17.5%	%D1
Nitrate as N	<0.500 mg/L	94.0% / NA	92.4% / 95.6%		3.18%	
Nitrite as N	<0.500 mg/L	93.7% / NA	37.8% / 41.3%		8.72%	%D1
Sulfate as SO4	<0.500 mg/L	96.4% / NA	MBA / MBA		9.92%	MBA

Wet Chemistry -- Batch: A103105 (Water)

Prepared: 08-Mar-11 09:00 By: AT -- Analyzed: 08-Mar-11 09:00 By: SB

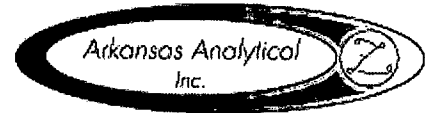
<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Oil and Grease	<2.5 mg/L	93.3% / 89.6%	93.1% / NA		4.05%	

Wet Chemistry -- Batch: A103107 (Water)

Prepared: 08-Mar-11 15:00 By: AP -- Analyzed: 08-Mar-11 15:00 By: AP

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
TSS	<1.0 mg/L	92.0% / 85.0%	NA / NA		7.91%	

24 March 2011



Keith Byerly
 Ash Grove Cement Company
 4343 Hwy. 108 W
 Foreman, AR 71836
 Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

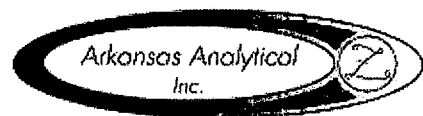
QUALITY CONTROL RESULTS

Base/Neutral Compounds -- Batch: A103110 (Water)

Prepared: 08-Mar-11 14:01 By: MG -- Analyzed: 10-Mar-11 18:42 By: tb/

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
1,2,4-Trichlorobenzene	<10.0 ug/L	53.1% / NA	76.5% / 76.3%		0.268%	E1
1,2-Dichlorobenzene	<10.0 ug/L	48.4% / NA	70.3% / 72.9%		3.66%	E1
1,2-Diphenyl Hydrazine	<20.0 ug/L	80.7% / NA	95.6% / 98.3%		2.78%	E1
1,3-Dichlorobenzene	<10.0 ug/L	46.6% / NA	71.4% / 70.5%		1.34%	E1
1,4-Dichlorobenzene	<10.0 ug/L	51.2% / NA	71.2% / 72.1%		1.31%	E1
2,4,6-Trichlorophenol	<10.0 ug/L	78.0% / NA	95.0% / 93.7%		1.41%	
2,4-Dichlorophenol	<10.0 ug/L	70.4% / NA	104% / 94.4%		9.56%	
2,4-Dimethylphenol	<10.0 ug/L	68.3% / NA	87.9% / 90.2%		2.52%	
2,4-Dinitrophenol	<50.0 ug/L	40.8% / NA	70.5% / 72.7%		2.79%	
2,4-Dinitrotoluene	<10.0 ug/L	81.9% / NA	89.9% / 89.5%		0.524%	E1
2,6-Dinitrotoluene	<10.0 ug/L	79.0% / NA	96.5% / 84.9%		12.8%	E1
2-Chloronaphthalene	<10.0 ug/L	72.9% / NA	98.5% / 86.5%		13.0%	E1
2-Chlorophenol	<10.0 ug/L	60.9% / NA	75.3% / 81.4%		7.70%	
2-Methyl-4,6-dinitrophenol	<50.0 ug/L	70.2% / NA	87.2% / 93.1%		6.52%	
2-Nitrophenol	<20.0 ug/L	61.8% / NA	86.4% / 89.2%		3.21%	
3,3'-Dichlorobenzidine	<5.00 ug/L	99.8% / NA	125% / 119%		4.74%	E1
4-Bromophenyl-phenylether	<10.0 ug/L	71.0% / NA	85.0% / 92.3%		8.30%	E1
4-Chloro-3-methylphenol	<10.0 ug/L	77.4% / NA	100% / 102%		1.39%	
4-Chlorophenyl-phenylether	<10.0 ug/L	72.4% / NA	98.0% / 86.6%		12.4%	E1
4-Nitrophenol	<50.0 ug/L	61.9% / NA	63.9% / 61.4%		3.78%	
Acenaphthene	<10.0 ug/L	73.7% / NA	94.4% / 85.7%		9.66%	E1
Acenaphthylene	<10.0 ug/L	75.1% / NA	90.7% / 85.7%		5.64%	E1
Anthracene	<10.0 ug/L	77.8% / NA	91.6% / 92.2%		0.555%	E1
Benzidine	<50.0 ug/L	110% / NA	125% / 112%		11.2%	%D1, E1
Benzo (a) anthracene	<5.00 ug/L	79.7% / NA	97.3% / 97.1%		0.175%	E1
Benzo[a]pyrene	<5.00 ug/L	79.7% / NA	96.6% / 93.4%		3.39%	E1
Benzo[b]fluoranthene	<10.0 ug/L	80.6% / NA	99.4% / 92.0%		7.73%	E1
Benzo[g,h,i]perylene	<20.0 ug/L	70.8% / NA	93.4% / 90.1%		3.64%	E1
Benzo[k]fluoranthene	<5.00 ug/L	80.8% / NA	95.5% / 89.6%		6.40%	E1
Bis(2-chloroethoxy)methane	<10.0 ug/L	61.1% / NA	89.1% / 86.6%		2.85%	E1
Bis(2-chloroethyl)ether	<10.0 ug/L	60.6% / NA	76.9% / 87.3%		12.6%	E1
Bis(2-chloroisopropyl)ether	<10.0 ug/L	58.3% / NA	81.2% / 86.8%		6.67%	E1
Bis(2-ethylhexyl)phthalate	<10.0 ug/L	82.7% / NA	101% / 107%		5.86%	E1
Butylbenzylphthalate	<10.0 ug/L	75.7% / NA	99.5% / 94.3%		5.37%	E1
Chrysene	<5.00 ug/L	70.7% / NA	77.6% / 80.0%		3.09%	E1
Dibenz[a,h]anthracene	<5.00 ug/L	75.7% / NA	91.1% / 81.7%		10.9%	E1
Diethylphthalate	<10.0 ug/L	81.3% / NA	88.9% / 86.5%		2.68%	E1
Dimethylphthalate	<10.0 ug/L	73.8% / NA	87.0% / 83.9%		3.62%	E1
Di-n-butylphthalate	<10.0 ug/L	80.8% / NA	93.6% / 95.7%		2.20%	E1
Di-n-octylphthalate	<10.0 ug/L	84.5% / NA	98.9% / 97.9%		0.981%	E1
Fluoranthene	<10.0 ug/L	NA / NA	NA / NA		NA	
Fluoranthene	<10.0 ug/L	79.2% / NA	96.8% / 98.6%		1.83%	E1
Fluorene	<10.0 ug/L	72.7% / NA	91.7% / 86.6%		5.74%	E1
Hexachlorobenzene	<5.00 ug/L	76.6% / NA	99.6% / 94.5%		5.31%	E1
Hexachlorobutadiene	<10.0 ug/L	54.3% / NA	77.0% / 80.2%		4.09%	E1
Hexachlorocyclopentadiene	<10.0 ug/L	67.6% / NA	88.2% / 81.5%		7.86%	E1
Hexachloroethane	<20.0 ug/L	52.2% / NA	72.8% / 77.7%		6.61%	E1
Indeno[1,2,3-cd]pyrene	<5.00 ug/L	90.5% / NA	108% / 99.7%		8.26%	E1

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: A103119 (Water)

Prepared: 09-Mar-11 09:00 By: KP -- Analyzed: 09-Mar-11 09:00 By: KP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
BOD-5	<2.00 mg/L	87.9% / 86.9%	NA / NA		1.16%	

PPS Metals -- Batch: A103121 (Water)

Prepared: 09-Mar-11 08:26 By: RH -- Analyzed: 10-Mar-11 13:18 By: RH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Lead	<0.500 ug/L	107% / NA	111% / 114%		2.67%	
Selenium	<5.00 ug/L	85.0% / NA	104% / 89.6%		15.3%	
Silver	<0.500 ug/L	97.0% / NA	89.5% / 88.5%		1.06%	
Thallium	<0.500 ug/L	104% / NA	102% / 100%		1.41%	

Pesticides/PCBs -- Batch: A103126 (Water)

Prepared: 09-Mar-11 10:52 By: MG -- Analyzed: 15-Mar-11 11:15 By: MG

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
4,4'-DDD	<0.100 ug/L	71.1% / NA	71.2% / 73.6%		3.30%	
4,4'-DDE	<0.100 ug/L	71.9% / NA	74.8% / 73.3%		2.08%	
4,4'-DDT	<0.020 ug/L	91.0% / NA	91.6% / 95.7%		4.29%	
Aldrin	<0.010 ug/L	71.9% / NA	80.9% / 84.3%		4.13%	
alpha-BHC	<0.050 ug/L	75.6% / NA	76.0% / 72.0%		5.25%	
beta-BHC	<0.050 ug/L	88.8% / NA	103% / 81.3%		23.9%	
delta-BHC	<0.050 ug/L	75.5% / NA	77.3% / 72.5%		6.30%	
Dieldrin	<0.020 ug/L	80.5% / NA	82.9% / 82.1%		0.916%	
Endosulfan I	<0.010 ug/L	114% / NA	117% / 115%		2.23%	
Endosulfan II	<0.020 ug/L	69.1% / NA	68.5% / 69.8%		1.92%	
Endosulfan sulfate	<0.100 ug/L	66.0% / NA	64.9% / 68.4%		5.33%	
Endrin	<0.020 ug/L	81.7% / NA	85.4% / 85.1%		0.339%	
Endrin aldehyde	<0.100 ug/L	62.9% / NA	60.7% / 64.3%		5.78%	
gamma-BHC (Lindane)	<0.050 ug/L	74.6% / NA	78.4% / 73.4%		6.30%	
Heptachlor	<0.010 ug/L	77.8% / NA	87.5% / 80.6%		8.19%	
Heptachlor epoxide	<0.010 ug/L	88.0% / NA	90.5% / 88.4%		2.40%	
DCBP [surr]	24.5 %	35.3% / NA	32.3% / 37.6%		NA	
TCMX [surr]	32.0 %	39.5% / NA	43.5% / 38.7%		NA	

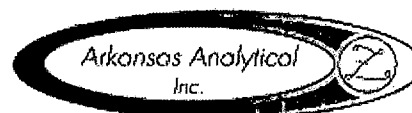
Wet Chemistry -- Batch: A103128 (Water)

Prepared: 09-Mar-11 13:26 By: SB -- Analyzed: 09-Mar-11 13:26 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Cyanide (total)	<0.010 mg/L	96.3% / NA	92.3% / 92.0%		0.362%	

24 March 2011

Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002



Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: A103135 (Water)

Prepared: 08-Mar-11 14:00 By: AP -- Analyzed: 08-Mar-11 14:00 By: AP

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Phenolics	<0.005 mg/L	90.2% / NA	68.8% / 66.0%		4.23%	

Wet Chemistry -- Batch: A103148 (Water)

Prepared: 10-Mar-11 09:10 By: SB -- Analyzed: 10-Mar-11 09:10 By: SB

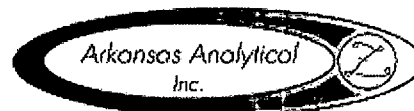
<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
TKN	<0.50 mg/L	98.8% / NA	85.5% / 99.0%		14.4%	

Wet Chemistry -- Batch: A103159 (Water)

Prepared: 11-Mar-11 09:51 By: SB -- Analyzed: 11-Mar-11 09:52 By: SB

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Sulfide	<0.100 mg/L	111% / NA	109% / 110%		1.10%	

24 March 2011



Keith Byerly
 Ash Grove Cement Company
 4343 Hwy. 108 W
 Foreman, AR 71836
 Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Volatiles -- Batch: A103162 (Water)

Prepared: 11-Mar-11 10:52 By: KR -- Analyzed: 11-Mar-11 13:19 By: KR

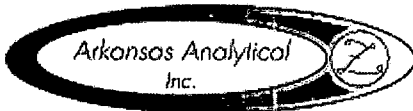
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
1,1,1-Trichloroethane	<10.0 ug/L	102% / NA	93.1% / 95.0%		2.06%	
1,1,2,2-Tetrachloroethane	<10.0 ug/L	103% / NA	115% / 122%		5.87%	
1,1,2-Trichloroethane	<10.0 ug/L	97.4% / NA	97.5% / 107%		9.67%	
1,1-Dichloroethane	<10.0 ug/L	98.4% / NA	93.4% / 94.1%		0.706%	
1,1-Dichloroethene	<10.0 ug/L	95.3% / NA	86.3% / 83.7%		3.07%	
1,2-Dibromoethane	<2.00 ug/L	99.6% / NA	100% / 109%		8.50%	
1,2-Dichlorobenzene	<5.00 ug/L	107% / NA	103% / 113%		9.63%	
1,2-Dichloroethane	<10.0 ug/L	91.2% / NA	87.4% / 93.5%		6.82%	
1,2-Dichloropropane	<10.0 ug/L	112% / NA	106% / 99.8%		6.44%	
1,3-Dichlorobenzene	<5.00 ug/L	106% / NA	102% / 107%		4.87%	
1,4-Dichlorobenzene	<5.00 ug/L	106% / NA	99.5% / 101%		1.90%	
2-Butanone	<50.0 ug/L	86.0% / NA	95.9% / 98.6%		2.74%	
2-Chloroethyl vinyl ether	<10.0 ug/L	23.6% / NA	25.2% / 23.1%		8.65%	
Acrolein	<50.0 ug/L	80.0% / NA	58.0% / 39.1%		38.9%	%D1, D
Acrylonitrile	<20.0 ug/L	85.4% / NA	90.1% / 91.4%		1.44%	
Benzene	<10.0 ug/L	97.8% / NA	92.5% / 93.7%		1.26%	
Bromodichloromethane	<10.0 ug/L	102% / NA	103% / 103%		0.250%	
Bromoform	<10.0 ug/L	93.5% / NA	99.6% / 99.6%		0.0608%	
Bromomethane	<50.0 ug/L	105% / NA	96.4% / 98.8%		2.44%	
Carbon tetrachloride	<2.00 ug/L	94.8% / NA	91.0% / 84.7%		7.17%	
Chlorobenzene	<10.0 ug/L	107% / NA	105% / 109%		2.94%	
Chlorodibromomethane	<10.0 ug/L	96.1% / NA	96.9% / 99.2%		2.28%	
Chloroethane	<50.0 ug/L	106% / NA	95.1% / 96.8%		1.69%	
Chloroform	<10.0 ug/L	97.4% / NA	95.2% / 91.4%		4.12%	
Chloromethane	<50.0 ug/L	109% / NA	95.5% / 96.2%		0.735%	
cis-1,3-Dichloropropene	<10.0 ug/L	99.1% / NA	101% / 97.3%		3.32%	
Dichlorodifluoromethane	<50.0 ug/L	94.2% / NA	87.9% / 87.3%		0.629%	
Ethylbenzene	<10.0 ug/L	105% / NA	110% / 109%		0.850%	
Methylene chloride	<20.0 ug/L	104% / NA	91.2% / 88.6%		2.86%	
Tetrachloroethene	<10.0 ug/L	103% / NA	96.2% / 102%		5.81%	
Toluene	<10.0 ug/L	108% / NA	97.1% / 108%		10.5%	D
trans-1,2-Dichloroethene	<10.0 ug/L	104% / NA	93.9% / 94.3%		0.468%	
trans-1,3-Dichloropropene	<10.0 ug/L	108% / NA	104% / 106%		1.44%	
Trichloroethene	<10.0 ug/L	90.5% / NA	89.8% / 91.6%		1.97%	
Trichlorofluoromethane	<50.0 ug/L	100% / NA	98.3% / 93.4%		5.05%	
Vinyl chloride	<10.0 ug/L	92.2% / NA	88.2% / 89.8%		1.84%	
4-Bromofluorobenzene [surr]	102 %	104% / NA	104% / 110%		NA	
Dibromofluoromethane [surr]	93.2 %	99.1% / NA	98.2% / 95.7%		NA	
Toluene-d8 [surr]	99.7 %	102% / NA	95.9% / 104%		NA	

Wet Chemistry -- Batch: A103169 (Water)

Prepared: 10-Mar-11 17:00 By: AP -- Analyzed: 10-Mar-11 17:00 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TDS	<1.0 mg/L	89.5% / 99.0%	NA / NA		10.1%	

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002

Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: A103173 (Water)

Prepared: 07-Mar-11 14:15 By: AP -- Analyzed: 07-Mar-11 14:15 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Fecal Coliforms	<1 CFU/100 ml	Pass / NA	NA / NA		NA	

Wet Chemistry -- Batch: A103180 (Water)

Prepared: 14-Mar-11 10:11 By: SB -- Analyzed: 15-Mar-11 07:26 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TOC	<1.00 mg/L	109% / NA	103% / 102%		0.705%	

Wet Chemistry -- Batch: A103182 (Water)

Prepared: 14-Mar-11 10:26 By: AP -- Analyzed: 14-Mar-11 10:26 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Sulfite	<4.00 mg/L	101% / 99.0%	NA / NA		2.00%	

Wet Chemistry -- Batch: A103187 (Water)

Prepared: 14-Mar-11 12:17 By: SB -- Analyzed: 14-Mar-11 12:17 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.50 mg/L	104% / NA	105% / 104%		0.403%	

Wet Chemistry -- Batch: A103202 (Water)

Prepared: 09-Mar-11 10:00 By: AP -- Analyzed: 09-Mar-11 10:00 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Surfactants	<0.100 mg/L	86.0% / 83.3%	62.7% / NA		3.15%	

Wet Chemistry -- Batch: A103203 (Water)

Prepared: 14-Mar-11 11:40 By: AP -- Analyzed: 14-Mar-11 11:40 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Color	<5.00 Color Units	NA / NA	NA / NA	10.0 Color Units	0.00%	

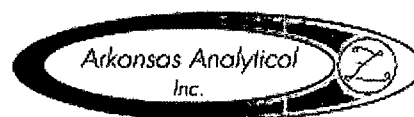
Wet Chemistry -- Batch: A103204 (Water)

Prepared: 14-Mar-11 11:40 By: AP -- Analyzed: 14-Mar-11 11:40 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH	NA	101% / 101%	NA / NA		0.00%	

24 March 2011

Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002



Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: A103208 (Water)

Prepared: 14-Mar-11 10:30 By: SB -- Analyzed: 15-Mar-11 09:17 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
COD	<10.0 mg/L	94.0% / NA	110% / 102%		6.26%	

Wet Chemistry -- Batch: A103238 (Water)

Prepared: 07-Mar-11 12:40 By: AP -- Analyzed: 07-Mar-11 12:40 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH (Field)	NA	101% / 100%	NA / NA		0.284%	

Wet Chemistry -- Batch: A103239 (Water)

Prepared: 07-Mar-11 13:45 By: AP -- Analyzed: 07-Mar-11 13:45 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	13.7 °C	0.00%	

Wet Chemistry -- Batch: A103240 (Water)

Prepared: 07-Mar-11 13:35 By: AP -- Analyzed: 07-Mar-11 13:35 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Chlorine Residual (Field)	NA	NA / NA	NA / NA	0.19 mg/L	0.00%	

Wet Chemistry -- Batch: A103292 (Water)

Prepared: 20-Mar-11 10:45 By: KP -- Analyzed: 21-Mar-11 08:57 By: KP

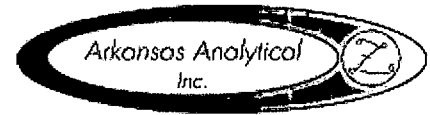
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Total Phosphorus	<0.020 mg/L	99.2% / NA	99.2% / 99.6%		0.298%	

QUALIFIER(S)

- *%D1: Matrix Spike and/or Matrix Spike Duplicate Percent Recovery Does Not Meet Laboratory Acceptance Criteria
- *%D3: Surrogate Percent Recovery Does Not Meet Laboratory Acceptance Criteria
- *B-01: The sample dilutions set-up for the BOD analysis did not meet the oxygen depletion criteria of at least 2 mg/l dissolved oxygen depletion. Therefore the reported result is an estimated value only.
- *D: RPD Value Does Not Meet Laboratory Acceptance Criteria
- *E1: Estimated Result Due to Surrogate Failure
- *E20: Estimated Result Due to Matrix Spike and/or Matrix Spike Duplicate Failure; This sample was used as "parent sample" in MS/MSD prep.
- *E21: Estimated Result Due to Continuing Calibration Verification (CCV) Sample Failed to Meet Method Specified Criteria
- *E5: Estimated Result Due to Quality Control Failure
- *MBA: Masked By Analyte
- *NR-1: Analyte Was Not Recoverable
- *Pass: Exhibits Positive Growth

24 March 2011

Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; Outfall 002



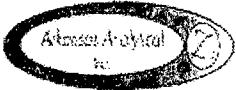
Date Received: 07-Mar-11 17:30

All Analysis performed according to EPA approved methodology when available:
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods, 20th Edition.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

A handwritten signature in cursive script that reads "Norma James".

Reviewed by: _____

Norma James
President



11701 Interstate 30, Bldg. 1, Ste. 115
 Little Rock, AR 72209
 PHONE: 501-455-3233
 FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

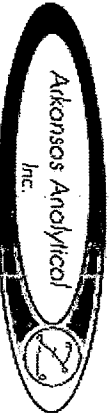
CHAIN OF CUSTODY FORM(S)

Date Received: 07-Mar-11 17:30

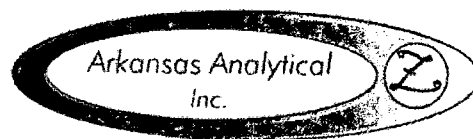
24 March 2011
 Keith Byerly
 Ash Grove Cement Company
 4343 Hwy. 108 W
 Foreman, AR 71836
 Project: Permit Renewal Sample; Outfall 002

CLIENT INFORMATION		Project Description		Turnaround Time	Preservation Codes:																		
Ash Grove Cement Company		Permit Renewal Sample		24 Hour	1. Cool & Seep Certificate								4. Absorbent for Hydrocarbons										
4545 Hwy. 108 W		Outfall 002		48 Hour	2. Surface Acid (H2SO4), pH < 1								5. Hydrochloric Acid (HCl)										
Foreman, AR 71836		Reporting Information		72 Hour	3. Nitric Acid (HNO3), pH < 2								6. Sulfuric Acid (H2SO4), pH < 3										
Attn: Keith Byerly		Telephone: 501-542-2017		Sealant (S) (S)	TEST PARAMETERS																		
Fax: 501-542-2126		E-Mail: KByerly@ashgrove.com		Preparation Code	1	1.2	1.6	1.4	1.2	1.2	1.2	1.2	1.5	1.3	1.3	1	1	1	1	1			
				Order Type	P	P	P	P	GA	GA	GA	SV	S	P	P	S	GA	GA	GV				
Sample(s) Signature: <i>Sharon Rouds</i>		Sample(s) Printed: Sharon Rouds		Retention (Days)	Arkansas Analytical Work Order Number: 1103090																		
Field Number	SAMPLE COLLECTION		SAMPLE IDENTIFICATION DESCRIPTION		Retention (Days)	Aspirate	Acid	Alkaline	Ammonia	Ammonium	Barium	Bismuth	Cadmium	Copper	Lead	Mercury	Manganese	Nickel	Selenium	Silver	Sulfate	Titanium	Zinc
	Date(s)	Time(s)	Qty	Notes																			
	3/7/2011	1420	X	20	Water Outfall 002	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	3/7/2011	1420	X	5	Water Outfall 002 Cool Cert														X	X	X		
	3/7/2011	1420	X	3	Water Outfall 002 Field Blank														X	X	X		
					ON-SITE MEASUREMENTS																		
					Sample	Outfall	% Variance	Average	QC	QC Pass	Recovery												
					pH	7.99	7.95		7.05	7.03													
					Time	1345	1345		1240	1240													
					Dissolved Oxygen	0.19	0.19		0.25	0.25													
					Total	1335	1335		1332	1332													
					Temperature	13.7°C	13.7°C		17.6	17.6													
					Time	1345	1345		1240	1240													
1. Requested by (Signature)	Date/Time	2. Received by (Signature)	SAMPLE CONDITION UPON RECEIPT IN LAB				REMARKS / SAMPLE COMMENTS																
<i>Sharon Rouds</i>	3/7/11 17:30	<i>Sydney James</i>	1. CUSTODY SEALS <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				FPS Hg to be sub-sampled to Mercury Co.																
			2. CONTAINERS CORRECT <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
			3. COOLASISLY ASKED <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
			4. PRESERVATION CONFIRMED <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
			5. RECEIPT ON FILE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
			6. TEMPERATURE ON RECEIPT <input checked="" type="checkbox"/> 20																				
			FOR COMPLETION BY LAB ONLY																				

Form 1
 12/1/02



3/24/2011



11701 I-30 Bldg 1, Ste 115 • Little Rock, AR 72209
501-455-3233 • Fax 501-455-6118

**PLEASE FIND ATTACHED RESULTS FOR
SUBCONTRACTED ANALYSIS.**

SUBCONTRACTED ANALYSIS:	PPS Mercury
SUBCONTRACT LAB:	Mercury One
AR ANALYTICAL SDG NUMBER:	1103090 - 01-03

002

Mercury One LTD

Analytical Research and Data Validation

Florida
NELAP Cert # E871043

New York
NELAP Cert # 11876

Louisiana
NELAP Cert # 04150

Analytical Report
EPA Method 1631E & 245.7

Report #: 11-0356
Page 1 of 1

Customer Name: Arkansas Analytical Inc.
11701 Interstate 30 Bldg 1 Ste 115
Little Rock AR 72209

Date: 3/16/11

Attention: Norma James
Project/PO# 1103090

Lab / (Field ID) or (Customer ID)	Results ng/L	Results ng/L	Results ng/L	Results ng/L	Mercury One ID
1103090-01	1.05				110311-04
1103090-02		1.68			110311-05
1103090-03 (Field Blank)			<0.5		110311-06
Sample Type	Water	Water	Field Blank		
Date Sampled:	3/7/11	3/7/11	3/7/11		
Date Received:	3/11/11	3/11/11	3/11/11		
Date Prepared:	3/12/11	3/12/11	3/12/11	3/12/11	
Date Analyzed:	3/15/11	3/15/11	3/15/11		
Time Analyzed:	8:45:53 AM	8:47:18 AM	8:55:08 AM		
Method Qualifier	M 1	M 1	M 1	M 1	QCS Acceptable Range 80-120%
Dilution Factor					
Method Blank	<0.2	-	-	-	
Quality Control Sample (QCS)	6.07	101.2%	-	-	

M= Modified: See Below for Explanation M1= Method 1631E used for analysis.

M2= Method 245.7 used for analysis.

The Matrix Spike and Matrix Spike reported are for samples identified below.

Acceptable Acceptable Range
RPD <20% 71-129%

Mercury One ID % Recovery MS MSD

The results are related only the samples presented on this report.
The test results are certified to meet all requirements of NELAC.
Other Codes

Other Comments: J = Estimated result , R = Rejected,

Reason for J or R flag:

Detection	Water*		Sludges		Arkansas Cert# 88-0911 West Virginia Cert # 348
	Method 1631E	Method 245.7	Method 245.7		
Limit ng/L	0.2	1.8	Detection Limit		
Reporting Limit ng/L	0.5	5.0	ng/Kg		
			10		

* A value found between the Reporting Limit and the Method Detection Limit is considered estimated

William W. Purves



Little Rock, AR 72209
 PHONE: 501-455-3233
 FAX: 501-455-6118

CHAIN OF CUSTODY

CLIENT INFORMATION		Project Description		Turnaround Time	Preserv												
Arkansas Analytical, Inc.		1103090		24 Hour	1. Cool, 4 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2												
11701 Interstate 30, Bldg. 1, Ste. 115		PPS Hg Sample		48 Hour													
Little Rock, AR 72209		Reporting Information		72 Hour													
Attn: Norma James		Telephone 501-455-3233		Routine	<table border="1"> <thead> <tr> <th colspan="4">TEST PARAM</th> </tr> </thead> <tbody> <tr> <td>Preservative Code</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>Bottle Type</td> <td>G</td> <td></td> <td></td> </tr> </tbody> </table>	TEST PARAM				Preservative Code	1			Bottle Type	G		
TEST PARAM																	
Preservative Code	1																
Bottle Type	G																
		Fax 501-455-6118															

Sampler(s) Signature		Sampler(s) Printed						PPS Hg				
Field Number	SAMPLE COLLECTION Date/s Time/s		Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION					
	3/7/2011	1420	X		1	Water	1103090-01	X				
	3/7/2011	1420	X		1	Water	1103090-02	X				
	3/7/2011	1420	X		1	Water	1103090-03	X				

1. Relinquished by: (Signature)		Date/Time	2. Received by: (Signature)		SAMPLE CONDITION UPON RECEIPT IN LAB		REM.
Sydney James		3/9/11 1350	FedEx		1 CUSTODY SEALS Yes No 2 CONTAINERS CORRECT Yes No 3 COC/LAB FLS AGREE Yes No 4 PRESERVATION CONFIRMED Yes No 5 RECEIVED ON ICE Yes No 6 TEMPERATURE ON RECEIPT 10°C		Please Email F njames@arkar sjames@arkar
3. Relinquished by: (Signature)		Date/Time	4. Received by lab: (Signature)		FOR COMPLETION BY LAB ONLY		
FedEx		3/11/11 1405	Y.M. Edwards				

Revision 1
12/1/10

ARKANSAS Department of Environmental Quality
PPS REQUIREMENTS

1. Name of facility: Ash Grove Cement Company
2. Name, address and telephone number of laboratory:
Arkansas Analytical Inc. 11701 I-30, Bldg 1, Ste 115, Little Rock, AR 72209
(501) 455-3233
3. Is the lab certified by the State of Arkansas? Yes No
4. What are the certification dates?
Issued data _____ Expire date _____
5. Is the laboratory certified for all the parameters?
YES No (Explain)

6. Date and time of samples collected:
3/7/2011 1200 to 1430 hrs

7. Date and time samples were received in the laboratory:
3/11/2011 17:30 hrs

8. Sample location (Outfall No.): 03B

9. Samples collected by:
Name Shon Rondles
Title Field Technician
Telephone (501) 455-3233

10. I certify under penalty of law that this document and all attachments were prepared under my direction of 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 submitted is, to the best of my knowledge and belief, 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.

<u>Carey Austell</u>	<u>Plant Manager</u>
Printed Name of person signing	Title
<u>Carey Austell</u>	<u>5/20/11</u>
Signature	Date signed

List all attachments to this form:
Laboratory Reports SDG No. 1103091, Outfall 002 and PPS Mercury One SDG No. 1103091-01,03,04

METALS AND CYANIDE	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
1. Antimony (Total), Recoverable	ND	200.7	<60.0	60
2. Arsenic (Total), Recoverable		200.7	<10	0.5
3. Beryllium (Total), Recoverable	ND	200.7	<0.5	0.5
4. Cadmium (Total), Recoverable	ND	200.7	<0.5	0.5
5. Chromium (Total), Recoverable	ND	200.7	<10	10
7. Chromium (6+), Dissolved	ND	7196A/350 0-Cr B	<0.010	10
8. Copper (Total), Recoverable	36.0	200.7	<20.0	0.5
9. Lead (Total), Recoverable	0.790	3113B	<0.5	0.5
10. Mercury (Total), Recoverable	0.0021	1631E	0.0018	0.005
12. Nickel (Total), Recoverable	<10	200.7	<10	0.5
13. Selenium (Total), Recoverable	ND	3113B	<5.0	5
14. Silver (Total), Recoverable	ND	3113B	<0.50	0.5
15. Thallium (Total), Recoverable	ND	279.2	<0.50	0.5
16. Zinc (Total), Recoverable	ND	200.7	<20.0	20
129. Phenols, Total Recoverable	ND	420.1/906 5	<5.0	5
17. Cyanide (Total), Recoverable	ND	4500-CN E/9014	<10.0	10
DIOXIN	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
18. 2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)	ND	625	<10.0	0.00001

METALS AND CYANIDE	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
1. Antimony (Total), Recoverable	ND	200.7	<60.0	60
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7. Chromium (6+), Dissolved	ND	7196A/350 0-Cr B	<0.010	10
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10. Mercury (Total), Recoverable	0.0021	1631E	0.0018	0.005
12. Nickel (Total), Recoverable	<10	200.7	<10	0.5
13. Selenium (Total), Recoverable	ND	3113B	<5.0	5
14. Silver (Total), Recoverable	ND	3113B	<0.50	0.5
15. Thallium (Total), Recoverable	ND	279.2	<0.50	0.5
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	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
18. 2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)	ND	625	<10.0	0.00001

VOLATILE COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
19. Acrolein	ND (Est)	624	<50.0	50
20. Acrylonitrile	ND	624	<20.0	20
21. Benzene	ND	624	<10.0	10
22. Bromoform	ND	624	<10.0	10
23. Carbon Tetrachloride	ND	624	<2.0	2
24. Chlorobenzene	ND	624	<10.0	10
25. chlorodibromomethane	ND	624	<10.0	10
26. chloroethane	ND	624	<50.0	50
27. 2-chloroethyl vinyl ether	ND	624	<10.0	10
28. chloroform	ND	624	<10.0	10
29. Dichlorobromomethane	ND	624	<10.0	10
30. 1,1-Dichloroethane	ND	624	<10.0	10
31. 1,2-Dichloroethane	ND	624	<10.0	10
32. 1,1-Dichloroethylene	ND	624	<10.0	10
33. 1,2-Dichloropropane	ND	624	<10.0	10
34. 1,3-Dichloropropylene	ND	624	<10.0	10
35. Ethylbenzene	ND	624	<10.0	10
36. Methyl Bromide [Bromomethane]	ND	624	<50.0	50
37. Methyl Chloride [Chloromethane]	ND	624	<50.0	50
38. Methylene chloride	ND	624	<20.0	20
39. 1,1,2,2-Tetrachloroethane	ND	624	<10.0	10
40. Tetrachloroethylene	ND	624	<10.0	10
41. Toluene	ND	624	<10.0	10
42. 1,2-trans-Dichloroethylene	ND	624	<10.0	10
43. 1,1,1-Trichloroethane	ND	624	<10.0	10
44. 1,1,2-Trichloroethane	ND	624	<10.0	10
45. Trichloroethylene	ND	624	<10.0	10
46. Vinyl chloride	ND	624	<10.0	10

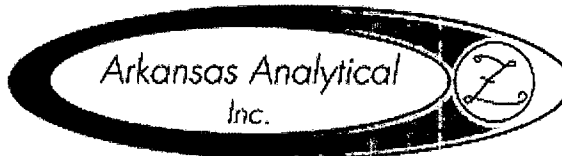
ACID COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
47. 2-Chlorophenol	ND	625	<10.0	10
48. 2,4-Dichlorophenol	ND	625	<10.0	10
49. 2,4-Dimethylphenol	ND	625	<10.0	10
50. 4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol]	ND	625	<50.0	50
51. 2,4-Dinitrophenol	ND	625	<50.0	50
52. 2-Nitrophenol	ND	625	<20.0	20
53. 4-Nitrophenol	ND	625	<50.0	50
54. P-Chloro-m-Cresol [4 chloro-3-methylphenol]	ND	625	<10.0	10
55. Pentachlorophenol	ND	625	<5.0	5
56. Phenol	74	625	<10.0	10
57. 2,4,6-Trichlorophenol	ND	625	<10.0	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
58. Acenaphthene	ND	625	<10.0	10
59. Acenaphthylene	ND	625	<10.0	10
60. Anthracene	ND	625	<10.0	10
61. Benzidine	ND (Est)	625	<50.0	50
62. Benzo(a)anthracene	ND	625	<5.0	5
63. Benzo(a)pyrene	ND	625	<5.0	5
64. 3,4-Benzofluoranthene	ND	625	<10.0	10
65. Benzo(ghi)perylene	ND	625	<20.0	20
66. Benzo(k)fluoranthene	ND	625	<5.0	5
67. Bis(2-chloroethoxy) methane	ND	625	<10.0	10
68. Bis(2-chloroethyl) ether	ND	625	<10.0	10
69. Bis(2-chloroisopropyl) ether	ND	625	<10.0	10
70. Bis(2-ethylhexyl) phthalate	ND	625	<10.0	10
71. 4-Bromophenyl phenyl ether	ND	625	<10.0	10
72. Butyl benzyl phthalate	ND	625	<10.0	10
73. 2-chloronaphthalene	ND	625	<10.0	10
74. 4-chlorophenyl phenyl ether	ND	625	<10.0	10
75. Chrysene	ND	625	<5.0	5
76. Dibenzo (a,h) anthracene	ND	625	<5.0	5
77. 1,2-Dichlorobenzene	ND	625	<10.0	10
78. 1,3-Dichlorobenzene	ND	625	<10.0	10
79. 1,4-Dichlorobenzene	ND	625	<10.0	10
80. 3,3'-Dichlorobenzidine	ND	625	<5.0	5
81. Diethyl Phthalate	ND	625	<10.0	10
82. Dimethyl Phthalate	ND	625	<10.0	10

83.	<i>Di-n-Butyl Phthalate</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>
84.	<i>2,4-Dinitrotoluene</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>
85.	<i>2,6-Dinitrotoluene</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>
86.	<i>Di-n-octyl Phthalate</i>	<i>ND</i>	<i>625</i>	<i><10.0</i>	<i>10</i>

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
87. 1,2-Diphenylhydrazine	ND	625	<20.0	20
89. Fluorene	ND	625	<10.0	10
90. Hexachlorobenzene	ND	625	<5.0	5
91. Hexachlorobutadiene	ND	625	<10.0	10
92. Hexachlorocyclopentadiene	ND	625	<10.0	10
93. Hexachloroethane	ND	625	<20.0	20
94. Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)	ND	625	<5.0	5
95. Isophorone	ND	625	<10.0	10
96. Naphthalene	ND	625	<10.0	10
97. Nitrobenzene	ND	625	<10.0	10
98. N-nitrosodimethylamine	ND	625	<50.0	50
99. N-nitrosodi-n-propylamine	ND	625	<20.0	20
100. N-nitrosodiphenylamine	ND	625	<20.0	20
101. Phenanthrene	ND	625	<10.0	10
102. Pyrene	ND	625	<10.0	10
103. 1,2,4-Trichlorobenzene	ND	625	<10.0	10

PESTICIDES	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
104. Aldrin	Believed Absent	608	<0.010	0.01
105. Alpha-BHC	Believed Absent	608	<0.050	0.05
106. Beta-BHC	Believed Absent	608	<0.050	0.05
107. Gamma-BHC	Believed Absent	608	<0.050	0.05
108. Delta-BHC	Believed Absent	608	<0.050	0.05
109. Chlordane	Believed Absent	608	<0.20	0.2
110. 4,4'-DDT	Believed Absent	608	<0.020	0.02
111. 4,4'-DDE (p,p-DDX)	Believed Absent	608	<0.10	0.1
112. 4,4'-DDD 9(p,p-TDE)	Believed Absent	608	<0.10	0.1
113. Dieldrin	Believed Absent	608	<0.020	0.02
114. Alpha-endosulfan	Believed Absent	608	<0.010	0.01
115. Beta-endosulfan	Believed Absent	608	<0.020	0.02
116. Endosulfan sulfate	Believed Absent	608	<0.10	0.1
117. Endrin	Believed Absent	608	<0.020	0.02
118. Endrin aldehyde	Believed Absent	608	<0.10	0.1
119. Heptachlor	Believed Absent	608	<0.010	0.01
120. Heptachlor epoxide (BHC-hexachlorocyclohexane)	Believed Absent	608	<0.010	0.01
130. Chlorpyrifos	Believed Absent	608	<0.070	0.07
121. PCB-1242	Believed Absent	608	<0.20	0.2
122. PCB-1254	Believed Absent	608	<0.20	0.2
123. PCB-1221	Believed Absent	608	<0.20	0.2
124. PCB-1232	Believed Absent	608	<0.20	0.2
125. PCB-1248	Believed Absent	608	<0.20	0.2
126. PCB-1260	Believed Absent	608	<0.20	0.2
127. PCB-1016	Believed Absent	608	<0.20	0.2
128. Toxaphene	Believed Absent	608	<0.30	0.3



11701 I-30 Bldg 1, Ste 115 - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

24 March 2011

Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836

RE: Permit Renewal Sample WWTP 03B

SDG Number: 1103091

Enclosed are the results of analyses for samples received by the laboratory on 07-Mar-11 17:30. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

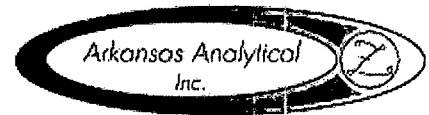
Custody Seals	✓
Containers Correct	✓
COC/Labels Agree	✓
Preservation Confirmed	✓
Received On Ice	✓
Temperature on Receipt	4.0°C

Sincerely,

Norma James
President

This document is intended only for the use of the person(s) to whom it is expressly addressed. This document may contain information that is confidential and legally privileged. If you are not the intended recipient, you are notified that any disclosure, distribution, or copying of this document is strictly prohibited. If you have received this document in error, please destroy.

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; WWTP

Date Received: 07-Mar-11 17:30

CASE NARRATIVE

SAMPLE DELIVERY GROUP 1103091:

Quality control excursions resulting in data qualification are discussed below.

Acid and Base/Neutral Compounds Analysis:

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Failure: Benzidine failed to recovery within laboratory acceptability criteria in the MS and/or MSD. The out of control QC data was flagged as %D1 and data in the parent sample, which was NOT part of this sample delivery group, was qualified as estimated (E20).

Continuing Calibration Verification (CCV) Failure: Benzidine failed to meet method specified criteria in the CCV. This compound was qualified as "estimated" (E21) in sample 1103091-01 (Grab #1).

Surrogate Failure: The surrogate, 2-Fluorobiphenyl failed to meet acceptability criteria in the MS. The QC data was flagged as %D3 and the base/neutral compounds in the MS were qualified as "estimated" (E1) due to this failure.

BOD Analysis:

Method requires a depletion of at least 2 mg/L and a residual of at least 1 mg/L dissolved oxygen in any given sample dilution tested. No dilution met these requirements; thus the BOD result for sample 1103091-01 (Grab #1) is "estimated" (B-02).

Anions notes: The MS and MSD recoveries for NO₂, SO₄, and F all failed. These analytes were qualified as "estimated" in the parent sample which was NOT part of this sample delivery group.

Volatiles Analysis:

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Failure: Acrolein failed to recovery within laboratory acceptability criteria in the MS and/or MSD. The out of control QC data was flagged as %D1 and Acrolein in the parent sample, which was NOT part of this sample delivery group, was qualified as "estimated".

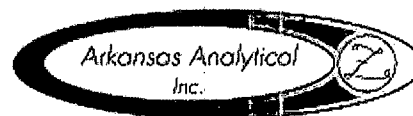
Other: The second source verification of the calibration curve failed to meet method specified requirements for Acrolein. This compound was qualified as "estimated" (E5) in sample 1103091-01.

NOTE: The Form 2C analyte, Bis Chloromethyl Ether was not recoverable. The analyte was qualified by "NR-1" on the final report.

Color Analysis:

Method requires the pH at which the color of the sample was determined be reported. In order to reduce confusion with the FIELD pH, the pH at the time the color was determined is given in the narrative. The pH of the Color sample was 7.99 SU.

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; WWTP

Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

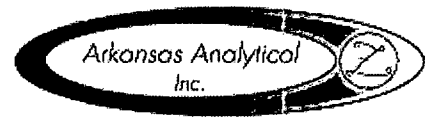
outfall

Lab Number: 1103091-01
Sample Name: WWTP (Grab #1)
Date/Time Collected: 3/7/11 12:47
Sample Matrix: Water

038

Acid Compounds	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
2,4,6-Trichlorophenol	ug/L	< 10.0		3/10/11 21:48	A103110	625
2,4-Dichlorophenol	ug/L	< 10.0		3/10/11 21:48	A103110	625
2,4-Dimethylphenol	ug/L	< 10.0		3/10/11 21:48	A103110	625
2,4-Dinitrophenol	ug/L	< 50.0		3/10/11 21:48	A103110	625
2-Chlorophenol	ug/L	< 10.0		3/10/11 21:48	A103110	625
2-Nitrophenol	ug/L	< 20.0		3/10/11 21:48	A103110	625
4-Chloro-3-methylphenol	ug/L	< 10.0		3/10/11 21:48	A103110	625
4-Nitrophenol	ug/L	< 50.0		3/10/11 21:48	A103110	625
Fluoranthene	ug/L	< 10.0		3/10/11 21:48	A103110	625
Pentachlorophenol	ug/L	< 5.00		3/10/11 21:48	A103110	625
Phenol	ug/L	74.0		3/10/11 21:48	A103110	625
2-Methyl-4,6-dinitrophenol	ug/L	< 50.0		3/10/11 21:48	A103110	625
2,4,6-Tribromophenol [surr]	%	43.7		3/10/11 21:48	A103110	625
2-Fluorophenol [surr]	%	27.1		3/10/11 21:48	A103110	625
Phenol-d5 [surr]	%	16.7		3/10/11 21:48	A103110	625
Base/Neutral Compounds	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
1,2,4-Trichlorobenzene	ug/L	< 10.0		3/11/11 14:03	A103110	625
1,2-Dichlorobenzene	ug/L	< 10.0		3/11/11 14:03	A103110	625
1,2-Diphenyl Hydrazine	ug/L	< 20.0		3/11/11 14:03	A103110	625
1,3-Dichlorobenzene	ug/L	< 10.0		3/11/11 14:03	A103110	625
1,4-Dichlorobenzene	ug/L	< 10.0		3/11/11 14:03	A103110	625
2,3,7,8-TCDD Screen	ug/L	< 10.0		3/11/11 14:03	A103110	625
2,4-Dinitrotoluene	ug/L	< 10.0		3/11/11 14:03	A103110	625
2,6-Dinitrotoluene	ug/L	< 10.0		3/11/11 14:03	A103110	625
2-Chloronaphthalene	ug/L	< 10.0		3/11/11 14:03	A103110	625
3,3'-Dichlorobenzidine	ug/L	< 5.00		3/11/11 14:03	A103110	625
4-Bromophenyl-phenylether	ug/L	< 10.0		3/11/11 14:03	A103110	625
4-Chlorophenyl-phenylether	ug/L	< 10.0		3/11/11 14:03	A103110	625
Acenaphthene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Acenaphthylene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Anthracene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Benzydine	ug/L	< 50.0	E21	3/11/11 14:03	A103110	625
Benzo[a]pyrene	ug/L	< 5.00		3/11/11 14:03	A103110	625
Benzo[b]fluoranthene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Benzo[g,h,i]perylene	ug/L	< 20.0		3/11/11 14:03	A103110	625
Benzo[k]fluoranthene	ug/L	< 5.00		3/11/11 14:03	A103110	625
Benzo (a) anthracene	ug/L	< 5.00		3/11/11 14:03	A103110	625
Bis(2-chloroethoxy)methane	ug/L	< 10.0		3/11/11 14:03	A103110	625
Bis(2-chloroethyl)ether	ug/L	< 10.0		3/11/11 14:03	A103110	625
Bis(2-chloroisopropyl)ether	ug/L	< 10.0		3/11/11 14:03	A103110	625
Bis(2-ethylhexyl)phthalate	ug/L	< 10.0		3/11/11 14:03	A103110	625
Butylbenzylphthalate	ug/L	< 10.0		3/11/11 14:03	A103110	625
Chrysene	ug/L	< 5.00		3/11/11 14:03	A103110	625

24 March 2011



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4343 Hwy. 108 W
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Project: Permit Renewal Sample; WWTP

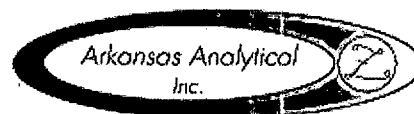
Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103091-01
Sample Name: WWTP (Grab #1)
Date/Time Collected: 3/7/11 12:47
Sample Matrix: Water

<u>Base/Neutral Compounds</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Dibenz[a,h]anthracene	ug/L	< 5.00		3/11/11 14:03	A103110	625
Diethylphthalate	ug/L	< 10.0		3/11/11 14:03	A103110	625
Dimethylphthalate	ug/L	< 10.0		3/11/11 14:03	A103110	625
Di-n-butylphthalate	ug/L	< 10.0		3/11/11 14:03	A103110	625
Di-n-octylphthalate	ug/L	< 10.0		3/11/11 14:03	A103110	625
Fluoranthene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Fluorene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Hexachlorobenzene	ug/L	< 5.00		3/11/11 14:03	A103110	625
Hexachlorobutadiene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Hexachlorocyclopentadiene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Hexachloroethane	ug/L	< 20.0		3/11/11 14:03	A103110	625
Indeno[1,2,3-cd]pyrene	ug/L	< 5.00		3/11/11 14:03	A103110	625
Isophorone	ug/L	< 10.0		3/11/11 14:03	A103110	625
Naphthalene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Nitrobenzene	ug/L	< 10.0		3/11/11 14:03	A103110	625
N-Nitrosodimethylamine	ug/L	< 50.0		3/11/11 14:03	A103110	625
N-Nitroso-di-n-propylamine	ug/L	< 20.0		3/11/11 14:03	A103110	625
N-Nitrosodiphenylamine	ug/L	< 20.0		3/11/11 14:03	A103110	625
Phenanthrene	ug/L	< 10.0		3/11/11 14:03	A103110	625
Pyrene	ug/L	< 10.0		3/11/11 14:03	A103110	625
2-Fluorobiphenyl [surr]	%	41.7		3/11/11 14:03	A103110	625
Nitrobenzene-d5 [surr]	%	44.6		3/11/11 14:03	A103110	625
Terphenyl-d14 [surr]	%	23.9		3/11/11 14:03	A103110	625
<u>Anions</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrate + Nitrite	mg/L	< 1.00		3/8/11 10:33	[CALC]	300.0/9056A
Bromide	mg/L	1.80		3/8/11 10:33	A103102	300.0/9056A
Fluoride	mg/L	< 0.500		3/8/11 10:33	A103102	300.0/9056A
Sulfate as SO4	mg/L	9.34		3/8/11 10:33	A103102	300.0/9056A
Nitrate as N	mg/L	< 0.500		3/8/11 10:33	A103102	300.0/9056A
Nitrite as N	mg/L	< 0.500		3/8/11 10:33	A103102	300.0/9056A
<u>PPS Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Antimony	ug/L	< 60.0		3/8/11 23:24	A103117	200.7
Arsenic	ug/L	< 10.0		3/8/11 23:24	A103117	200.7
Copper	ug/L	36.0		3/8/11 23:24	A103117	200.7
Lead	ug/L	0.790		3/10/11 13:18	A103121	3113B
Nickel	ug/L	< 10.0		3/8/11 23:24	A103117	200.7
Selenium	ug/L	< 5.00		3/9/11 16:52	A103121	3113B
Silver	ug/L	< 0.500		3/9/11 17:02	A103121	3113B
Thallium	ug/L	< 0.500		3/11/11 10:19	A103121	279.2
Beryllium	ug/L	< 0.500		3/8/11 23:24	A103117	200.7
Cadmium	ug/L	< 0.500		3/8/11 23:24	A103117	200.7
Chromium	ug/L	< 10.0		3/8/11 23:24	A103117	200.7

24 March 2011



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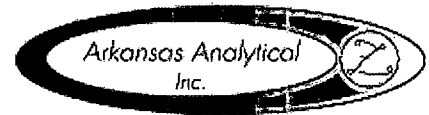
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ANALYTICAL RESULTS

Lab Number: 1103091-01
Sample Name: WWTP (Grab #1)
Date/Time Collected: 3/7/11 12:47
Sample Matrix: Water

<u>PPS Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Zinc	ug/L	133		3/8/11 23:24	A103117	200.7
<u>Total Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Aluminum	mg/L	0.152		3/8/11 23:24	A103117	200.7
Barium	mg/L	0.088		3/8/11 23:24	A103117	200.7
Boron	mg/L	< 0.100		3/8/11 23:24	A103117	200.7
Cobalt	mg/L	< 0.010		3/8/11 23:24	A103117	200.7
Hexavalent Chromium	mg/L	< 0.010		3/8/11 11:30	A103118	7196A/3500-Cr B
Iron	mg/L	0.245		3/8/11 23:24	A103117	200.7
Magnesium	mg/L	4.53		3/8/11 23:24	A103117	200.7
Manganese	mg/L	0.033		3/8/11 23:24	A103117	200.7
Molybdenum	mg/L	< 0.030		3/8/11 23:24	A103117	200.7
Tin	mg/L	< 0.0400		3/8/11 23:24	A103117	200.7
Titanium	mg/L	< 0.0500		3/8/11 23:24	A103117	200.7
<u>Volatiles</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
1,1,1-Trichloroethane	ug/L	< 10.0		3/11/11 14:09	A103162	624
1,1,2,2-Tetrachloroethane	ug/L	< 10.0		3/11/11 14:09	A103162	624
1,1,2-Trichloroethane	ug/L	< 10.0		3/11/11 14:09	A103162	624
1,1-Dichloroethane	ug/L	< 10.0		3/11/11 14:09	A103162	624
1,1-Dichloroethene	ug/L	< 10.0		3/11/11 14:09	A103162	624
1,2-Dichloroethane	ug/L	< 10.0		3/11/11 14:09	A103162	624
1,2-Dichloropropane	ug/L	< 10.0		3/11/11 14:09	A103162	624
2-Chloroethyl vinyl ether	ug/L	< 10.0		3/11/11 14:09	A103162	624
Acrolein	ug/L	< 50.0	E5	3/11/11 14:09	A103162	624
Acrylonitrile	ug/L	< 20.0		3/11/11 14:09	A103162	624
Benzene	ug/L	< 10.0		3/11/11 14:09	A103162	624
Bromodichloromethane	ug/L	< 10.0		3/11/11 14:09	A103162	624
Bromoform	ug/L	< 10.0		3/11/11 14:09	A103162	624
Bromomethane	ug/L	< 50.0		3/11/11 14:09	A103162	624
Carbon tetrachloride	ug/L	< 2.00		3/11/11 14:09	A103162	624
Chlorobenzene	ug/L	< 10.0		3/11/11 14:09	A103162	624
Chlorodibromomethane	ug/L	< 10.0		3/11/11 14:09	A103162	624
Chloroethane	ug/L	< 50.0		3/11/11 14:09	A103162	624
Chloroform	ug/L	< 10.0		3/11/11 14:09	A103162	624
Chloromethane	ug/L	< 50.0		3/11/11 14:09	A103162	624
cis-1,3-Dichloropropene	ug/L	< 10.0		3/11/11 14:09	A103162	624
Ethylbenzene	ug/L	< 10.0		3/11/11 14:09	A103162	624
Methylene chloride	ug/L	< 20.0		3/11/11 14:09	A103162	624
Tetrachloroethene	ug/L	< 10.0		3/11/11 14:09	A103162	624
Toluene	ug/L	< 10.0		3/11/11 14:09	A103162	624
trans-1,2-Dichloroethene	ug/L	< 10.0		3/11/11 14:09	A103162	624
Trichloroethene	ug/L	< 10.0		3/11/11 14:09	A103162	624
Vinyl chloride	ug/L	< 10.0		3/11/11 14:09	A103162	624

24 March 2011



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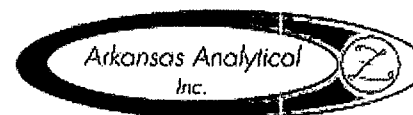
Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103091-01
Sample Name: WWTP (Grab #1)
Date/Time Collected: 3/7/11 12:47
Sample Matrix: Water

<u>Volatiles</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Trichlorofluoromethane	ug/L	< 50.0		3/11/11 14:09	A103162	624
Bis Chloromethyl ether	ug/L	Not Recoverable	NR-1	3/11/11 14:09	A103162	624
Dichlorodifluoromethane	ug/L	< 50.0		3/11/11 14:09	A103162	624
4-Bromofluorobenzene [surr]	%	108		3/11/11 14:09	A103162	624
Dibromofluoromethane [surr]	%	103		3/11/11 14:09	A103162	624
Toluene-d8 [surr]	%	99.7		3/11/11 14:09	A103162	624
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Nitrogen, Total Organic	mg/L	< 2.00		3/14/11 12:17	[CALC]	4500-Norg
Ammonia as N	mg/L	148		3/14/11 12:17	A103187	4500-NH3D
BOD-5	mg/L	85.5	B-02	3/9/11 9:00	A103119	5210B
Chlorine Residual	mg/L	< 0.02		3/7/11 12:35	A103241	4500-Cl G
COD	mg/L	374		3/10/11 10:19	A103157	410.4
Color	Color Units	> 100		3/8/11 11:40	A103203	2120 B
Cyanide (total)	mg/L	< 0.010		3/9/11 13:26	A103128	4500-CN E/9014
Oil and Grease	mg/L	5.6		3/8/11 9:00	A103105	1664A
pH	S.U.	7.84		3/7/11 12:45	A103243	150.2
Phenolics	mg/L	0.318		3/15/11 10:00	A103136	420.1/9065
Sulfide	mg/L	0.487		3/11/11 9:52	A103159	4500S2-D
Sulfite	mg/L	< 4.00		3/8/11 10:45	A103182	4500-SO3 B
Surfactants	mg/L	2.06		3/9/11 10:00	A103202	5540C
TDS	mg/L	380		3/10/11 17:00	A103169	2540C
Temperature	°C	12.3		3/7/11 12:45	A103242	2550B
TKN	mg/L	121		3/10/11 9:10	A103148	4500-Norg C
TOC	mg/L	75.4		3/15/11 7:26	A103180	5310/9060A
Total Phosphorus	mg/L	1.32		3/18/11 14:33	A103171	4500-P B5,E
TSS	mg/L	59		3/8/11 15:00	A103107	2540D

24 March 2011



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Date Received: 07-Mar-11 17:30

ANALYTICAL RESULTS

Lab Number: 1103091-02
Sample Name: WWTP Grab #2 & Field Blank
Date/Time Collected: 3/7/11 14:51
Sample Matrix: Water

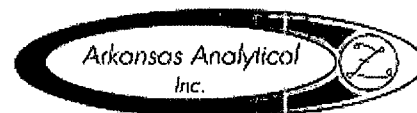
<u>PPS Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Antimony	ug/L	< 60.0		3/8/11 23:28	A103117	200.7
Arsenic	ug/L	< 10.0		3/8/11 23:28	A103117	200.7
Copper	ug/L	< 20.0		3/8/11 23:28	A103117	200.7
Lead	ug/L	< 0.500		3/10/11 13:18	A103121	3113B
Nickel	ug/L	< 10.0		3/8/11 23:28	A103117	200.7
Selenium	ug/L	< 5.00		3/9/11 16:52	A103121	3113B
Silver	ug/L	< 0.500		3/9/11 17:02	A103121	3113B
Thallium	ug/L	< 0.500		3/11/11 10:19	A103121	279.2
Beryllium	ug/L	< 0.500		3/8/11 23:28	A103117	200.7
Cadmium	ug/L	< 0.500		3/8/11 23:28	A103117	200.7
Chromium	ug/L	< 10.0		3/8/11 23:28	A103117	200.7
Zinc	ug/L	< 20.0		3/8/11 23:28	A103117	200.7
<u>Total Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Hexavalent Chromium	mg/L	< 0.010		3/8/11 11:30	A103118	7196A/3500-Cr B
<u>Wet Chemistry</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Fecal Coliforms	CFU/100 ml	TNTC	TNTC	3/7/11 17:37	A103173	9222D

ANALYTICAL RESULTS

Lab Number: 1103091-03
Sample Name: WWTP Duplicate
Date/Time Collected: 3/7/11 12:47
Sample Matrix: Water

<u>PPS Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Antimony	ug/L	< 60.0		3/8/11 23:38	A103117	200.7
Arsenic	ug/L	< 10.0		3/8/11 23:38	A103117	200.7
Copper	ug/L	34.5		3/8/11 23:38	A103117	200.7
Lead	ug/L	0.560		3/10/11 13:18	A103121	3113B
Nickel	ug/L	< 10.0		3/8/11 23:38	A103117	200.7
Selenium	ug/L	< 5.00		3/9/11 16:52	A103121	3113B
Silver	ug/L	< 0.500		3/9/11 17:02	A103121	3113B
Thallium	ug/L	< 0.500		3/11/11 10:19	A103121	279.2
Beryllium	ug/L	< 0.500		3/8/11 23:38	A103117	200.7
Cadmium	ug/L	< 0.500		3/8/11 23:38	A103117	200.7
Chromium	ug/L	< 10.0		3/8/11 23:38	A103117	200.7
Zinc	ug/L	128		3/8/11 23:38	A103117	200.7
<u>Total Metals</u>	<u>Units</u>	<u>Result</u>	<u>Qualifier(s)</u>	<u>Date/Time Analyzed</u>	<u>Batch</u>	<u>Method</u>
Hexavalent Chromium	mg/L	< 0.010		3/8/11 11:30	A103118	7196A/3500-Cr B

24 March 2011



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Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Anions -- Batch: A103102 (Water)

Prepared: 08-Mar-11 08:38 By: MG -- Analyzed: 08-Mar-11 11:41 By: MG

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Bromide	<0.500 mg/L	95.7% / NA	92.7% / 95.0%		2.43%	
Fluoride	<0.500 mg/L	96.0% / NA	139% / 166%		17.5%	%D1
Nitrate as N	<0.500 mg/L	94.0% / NA	92.4% / 95.6%		3.18%	
Nitrite as N	<0.500 mg/L	93.7% / NA	37.8% / 41.3%		8.72%	%D1
Sulfate as SO4	<0.500 mg/L	96.4% / NA	MBA / MBA		9.92%	MBA

Wet Chemistry -- Batch: A103105 (Water)

Prepared: 08-Mar-11 09:00 By: AT -- Analyzed: 08-Mar-11 09:00 By: SB

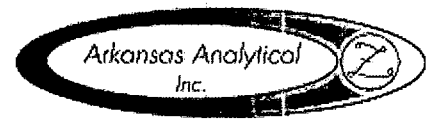
<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
Oil and Grease	<2.5 mg/L	93.3% / 89.6%	93.1% / NA		4.05%	

Wet Chemistry -- Batch: A103107 (Water)

Prepared: 08-Mar-11 15:00 By: AP -- Analyzed: 08-Mar-11 15:00 By: AP

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
TSS	<1.0 mg/L	92.0% / 85.0%	NA / NA		7.91%	

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Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

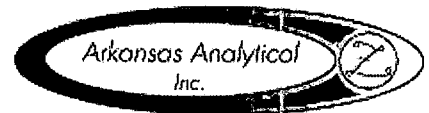
Base/Neutral Compounds -- Batch: A103110 (Water)

Prepared: 08-Mar-11 14:01 By: MG -- Analyzed: 10-Mar-11 18:42 By: tb/

<u>Analyte</u>	<u>BLK</u>	<u>LCS / LCSD</u>	<u>MS / MSD</u>	<u>Dup</u>	<u>RPD</u>	<u>Qualifiers</u>
1,2,4-Trichlorobenzene	<10.0 ug/L	53.1% / NA	76.5% / 76.3%		0.268%	E1
1,2-Dichlorobenzene	<10.0 ug/L	48.4% / NA	70.3% / 72.9%		3.66%	E1
1,2-Diphenyl Hydrazine	<20.0 ug/L	80.7% / NA	95.6% / 98.3%		2.78%	E1
1,3-Dichlorobenzene	<10.0 ug/L	46.6% / NA	71.4% / 70.5%		1.34%	E1
1,4-Dichlorobenzene	<10.0 ug/L	51.2% / NA	71.2% / 72.1%		1.31%	E1
2,4,6-Trichlorophenol	<10.0 ug/L	78.0% / NA	95.0% / 93.7%		1.41%	
2,4-Dichlorophenol	<10.0 ug/L	70.4% / NA	104% / 94.4%		9.56%	
2,4-Dimethylphenol	<10.0 ug/L	68.3% / NA	87.9% / 90.2%		2.52%	
2,4-Dinitrophenol	<50.0 ug/L	40.8% / NA	70.5% / 72.7%		2.79%	
2,4-Dinitrotoluene	<10.0 ug/L	81.9% / NA	89.9% / 89.5%		0.524%	E1
2,6-Dinitrotoluene	<10.0 ug/L	79.0% / NA	96.5% / 84.9%		12.8%	E1
2-Chloronaphthalene	<10.0 ug/L	72.9% / NA	98.5% / 86.5%		13.0%	E1
2-Chlorophenol	<10.0 ug/L	60.9% / NA	75.3% / 81.4%		7.70%	
2-Methyl-4,6-dinitrophenol	<50.0 ug/L	70.2% / NA	87.2% / 93.1%		6.52%	
2-Nitrophenol	<20.0 ug/L	61.8% / NA	86.4% / 89.2%		3.21%	
3,3'-Dichlorobenzidine	<5.00 ug/L	99.8% / NA	125% / 119%		4.74%	E1
4-Bromophenyl-phenylether	<10.0 ug/L	71.0% / NA	85.0% / 92.3%		8.30%	E1
4-Chloro-3-methylphenol	<10.0 ug/L	77.4% / NA	100% / 102%		1.39%	
4-Chlorophenyl-phenylether	<10.0 ug/L	72.4% / NA	98.0% / 86.6%		12.4%	E1
4-Nitrophenol	<50.0 ug/L	61.9% / NA	63.9% / 61.4%		3.78%	
Acenaphthene	<10.0 ug/L	73.7% / NA	94.4% / 85.7%		9.66%	E1
Acenaphthylene	<10.0 ug/L	75.1% / NA	90.7% / 85.7%		5.64%	E1
Anthracene	<10.0 ug/L	77.8% / NA	91.6% / 92.2%		0.555%	E1
Benzidine	<50.0 ug/L	110% / NA	125% / 112%		11.2%	%D1, E1
Benzo (a) anthracene	<5.00 ug/L	79.7% / NA	97.3% / 97.1%		0.175%	E1
Benzo[a]pyrene	<5.00 ug/L	79.7% / NA	96.6% / 93.4%		3.39%	E1
Benzo[b]fluoranthene	<10.0 ug/L	80.6% / NA	99.4% / 92.0%		7.73%	E1
Benzo[g,h,i]perylene	<20.0 ug/L	70.8% / NA	93.4% / 90.1%		3.64%	E1
Benzo[k]fluoranthene	<5.00 ug/L	80.8% / NA	95.5% / 89.6%		6.40%	E1
Bis(2-chloroethoxy)methane	<10.0 ug/L	61.1% / NA	89.1% / 86.6%		2.85%	E1
Bis(2-chloroethyl)ether	<10.0 ug/L	60.6% / NA	76.9% / 87.3%		12.6%	E1
Bis(2-chloroisopropyl)ether	<10.0 ug/L	58.3% / NA	81.2% / 86.8%		6.67%	E1
Bis(2-ethylhexyl)phthalate	<10.0 ug/L	82.7% / NA	101% / 107%		5.86%	E1
Butylbenzylphthalate	<10.0 ug/L	75.7% / NA	99.5% / 94.3%		5.37%	E1
Chrysene	<5.00 ug/L	70.7% / NA	77.6% / 80.0%		3.09%	E1
Dibenz[a,h]anthracene	<5.00 ug/L	75.7% / NA	91.1% / 81.7%		10.9%	E1
Diethylphthalate	<10.0 ug/L	81.3% / NA	88.9% / 86.5%		2.68%	E1
Dimethylphthalate	<10.0 ug/L	73.8% / NA	87.0% / 83.9%		3.62%	E1
Di-n-butylphthalate	<10.0 ug/L	80.8% / NA	93.6% / 95.7%		2.20%	E1
Di-n-octylphthalate	<10.0 ug/L	84.5% / NA	98.9% / 97.9%		0.981%	E1
Fluoranthene	<10.0 ug/L	NA / NA	NA / NA		NA	
Fluoranthene	<10.0 ug/L	79.2% / NA	96.8% / 98.6%		1.83%	E1
Fluorene	<10.0 ug/L	72.7% / NA	91.7% / 86.6%		5.74%	E1
Hexachlorobenzene	<5.00 ug/L	76.6% / NA	99.6% / 94.5%		5.31%	E1
Hexachlorobutadiene	<10.0 ug/L	54.3% / NA	77.0% / 80.2%		4.09%	E1
Hexachlorocyclopentadiene	<10.0 ug/L	67.6% / NA	88.2% / 81.5%		7.86%	E1
Hexachloroethane	<20.0 ug/L	52.2% / NA	72.8% / 77.7%		6.61%	E1
Indeno[1,2,3-cd]pyrene	<5.00 ug/L	90.5% / NA	108% / 99.7%		8.26%	E1

24 March 2011

Keith Byerly
 Ash Grove Cement Company
 4343 Hwy. 108 W
 Foreman, AR 71836
 Project: Permit Renewel Sample; WWTP



Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Base/Neutral Compounds -- Batch: A103110 (Water)

Prepared: 08-Mar-11 14:01 By: MG -- Analyzed: 10-Mar-11 18:42 By: tb/

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Isophorone	<10.0 ug/L	65.1% / NA	86.8% / 88.9%		2.38%	E1
Naphthalene	<10.0 ug/L	56.7% / NA	81.3% / 79.1%		2.77%	E1
Nitrobenzene	<10.0 ug/L	68.1% / NA	89.0% / 93.6%		5.08%	E1
N-Nitrosodimethylamine	<50.0 ug/L	37.0% / NA	47.5% / 49.9%		4.85%	E1
N-Nitroso-di-n-propylamine	<20.0 ug/L	61.8% / NA	84.3% / 92.1%		8.84%	E1
N-Nitrosodiphenylamine	<20.0 ug/L	77.9% / NA	90.2% / 98.2%		8.52%	E1
Pentachlorophenol	<5.00 ug/L	65.8% / NA	83.2% / 92.1%		9.81%	
Phenanthrene	<10.0 ug/L	77.5% / NA	90.8% / 87.2%		4.05%	E1
Phenol	<10.0 ug/L	35.8% / NA	44.6% / 46.7%		4.50%	
Pyrene	<10.0 ug/L	76.6% / NA	101% / 95.2%		6.15%	E1
2,4,6-Tribromophenol [surr]	95.2 %	79.1% / NA	104% / 99.3%		NA	
2-Fluorobiphenyl [surr]	83.8 %	72.9% / NA	102% / 91.2%		NA	%D3
2-Fluorophenol [surr]	47.7 %	40.9% / NA	49.5% / 54.9%		NA	
Nitrobenzene-d5 [surr]	83.7 %	66.4% / NA	89.2% / 88.6%		NA	
Phenol-d5 [surr]	34.2 %	28.9% / NA	45.9% / 42.5%		NA	
Terphenyl-d14 [surr]	85.8 %	88.2% / NA	102% / 102%		NA	

Total Metals -- Batch: A103117 (Water)

Prepared: 08-Mar-11 13:55 By: TC -- Analyzed: 08-Mar-11 22:03 By: TC

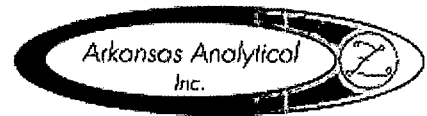
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Aluminum	<0.030 mg/L	97.5% / NA	136% / 166%		3.71%	%D1
Antimony	<60.0 ug/L	93.2% / NA	89.6% / 89.6%		0.0136%	
Arsenic	<10.0 ug/L	99.5% / NA	96.8% / 97.1%		0.264%	
Barium	<0.005 mg/L	102% / NA	97.4% / 97.9%		0.481%	
Beryllium	<0.500 ug/L	103% / NA	99.7% / 101%		1.63%	
Boron	<0.100 mg/L	101% / NA	98.2% / 99.8%		1.58%	
Cadmium	<0.500 ug/L	98.9% / NA	95.6% / 96.0%		0.460%	
Chromium	<10.0 ug/L	98.4% / NA	95.5% / 96.0%		0.481%	
Cobalt	<0.010 mg/L	101% / NA	97.1% / 97.3%		0.273%	
Copper	<20.0 ug/L	109% / NA	108% / 109%		1.55%	
Iron	<0.035 mg/L	102% / NA	125% / 155%		6.61%	%D1
Magnesium	<0.100 mg/L	111% / NA	103% / 106%		2.05%	
Manganese	<0.010 mg/L	102% / NA	97.4% / 97.9%		0.529%	
Molybdenum	<0.030 mg/L	102% / NA	98.5% / 100%		1.54%	
Nickel	<10.0 ug/L	102% / NA	98.3% / 98.6%		0.233%	
Tin	<0.0400 mg/L	115% / NA	103% / 104%		0.496%	
Titanium	<0.0500 mg/L	105% / NA	105% / 109%		3.41%	
Zinc	<20.0 ug/L	105% / NA	99.9% / 101%		1.36%	

Total Metals -- Batch: A103118 (Water)

Prepared: 08-Mar-11 11:30 By: TC -- Analyzed: 08-Mar-11 11:30 By: TC

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Hexavalent Chromium	<0.010 mg/L	NA / NA	NA / NA		9.30%	

24 March 2011



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Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: A103119 (Water)

Prepared: 09-Mar-11 09:00 By: KP -- Analyzed: 09-Mar-11 09:00 By: KP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
BOD-5	<2.00 mg/L	87.9% / 86.9%	NA / NA		1.16%	

PPS Metals -- Batch: A103121 (Water)

Prepared: 09-Mar-11 08:26 By: RH -- Analyzed: 10-Mar-11 13:18 By: RH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Lead	<0.500 ug/L	107% / NA	111% / 114%		2.67%	
Selenium	<5.00 ug/L	85.0% / NA	104% / 89.6%		15.3%	
Silver	<0.500 ug/L	97.0% / NA	89.5% / 88.5%		1.06%	
Thallium	<0.500 ug/L	104% / NA	102% / 100%		1.41%	

Wet Chemistry -- Batch: A103128 (Water)

Prepared: 09-Mar-11 13:26 By: SB -- Analyzed: 09-Mar-11 13:26 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Cyanide (total)	<0.010 mg/L	96.3% / NA	92.3% / 92.0%		0.362%	

Wet Chemistry -- Batch: A103136 (Water)

Prepared: 15-Mar-11 10:00 By: AP -- Analyzed: 15-Mar-11 10:00 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Phenolics	<0.005 mg/L	90.0% / NA	109% / 99.8%		3.50%	

Wet Chemistry -- Batch: A103148 (Water)

Prepared: 10-Mar-11 09:10 By: SB -- Analyzed: 10-Mar-11 09:10 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TKN	<0.50 mg/L	98.8% / NA	85.5% / 99.0%		14.4%	

Wet Chemistry -- Batch: A103157 (Water)

Prepared: 10-Mar-11 10:20 By: SB -- Analyzed: 10-Mar-11 10:20 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
COD	<10.0 mg/L	101% / NA	99.8% / 102%		1.18%	

Wet Chemistry -- Batch: A103159 (Water)

Prepared: 11-Mar-11 09:51 By: SB -- Analyzed: 11-Mar-11 09:52 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Sulfide	<0.100 mg/L	111% / NA	109% / 110%		1.10%	

24 March 2011



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QUALITY CONTROL RESULTS

Volatiles -- Batch: A103162 (Water)

Prepared: 11-Mar-11 10:52 By: KR -- Analyzed: 11-Mar-11 13:19 By: KR

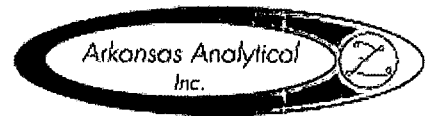
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
1,1,1-Trichloroethane	<10.0 ug/L	102% / NA	93.1% / 95.0%		2.06%	
1,1,2,2-Tetrachloroethane	<10.0 ug/L	103% / NA	115% / 122%		5.87%	
1,1,2-Trichloroethane	<10.0 ug/L	97.4% / NA	97.5% / 107%		9.67%	
1,1-Dichloroethane	<10.0 ug/L	98.4% / NA	93.4% / 94.1%		0.706%	
1,1-Dichloroethene	<10.0 ug/L	95.3% / NA	86.3% / 83.7%		3.07%	
1,2-Dibromoethane	<2.00 ug/L	99.6% / NA	100% / 109%		8.50%	
1,2-Dichlorobenzene	<5.00 ug/L	107% / NA	103% / 113%		9.63%	
1,2-Dichloroethane	<10.0 ug/L	91.2% / NA	87.4% / 93.5%		6.82%	
1,2-Dichloropropane	<10.0 ug/L	112% / NA	106% / 99.8%		6.44%	
1,3-Dichlorobenzene	<5.00 ug/L	106% / NA	102% / 107%		4.87%	
1,4-Dichlorobenzene	<5.00 ug/L	106% / NA	99.5% / 101%		1.90%	
2-Butanone	<50.0 ug/L	86.0% / NA	95.9% / 98.6%		2.74%	
2-Chloroethyl vinyl ether	<10.0 ug/L	23.6% / NA	25.2% / 23.1%		8.65%	
Acrolein	<50.0 ug/L	80.0% / NA	58.0% / 39.1%		38.9%	%D1, D
Acrylonitrile	<20.0 ug/L	85.4% / NA	90.1% / 91.4%		1.44%	
Benzene	<10.0 ug/L	97.8% / NA	92.5% / 93.7%		1.26%	
Bromodichloromethane	<10.0 ug/L	102% / NA	103% / 103%		0.250%	
Bromoform	<10.0 ug/L	93.5% / NA	99.6% / 99.6%		0.0608%	
Bromomethane	<50.0 ug/L	105% / NA	96.4% / 98.8%		2.44%	
Carbon tetrachloride	<2.00 ug/L	94.8% / NA	91.0% / 84.7%		7.17%	
Chlorobenzene	<10.0 ug/L	107% / NA	105% / 109%		2.94%	
Chlorodibromomethane	<10.0 ug/L	96.1% / NA	96.9% / 99.2%		2.28%	
Chloroethane	<50.0 ug/L	106% / NA	95.1% / 96.8%		1.69%	
Chloroform	<10.0 ug/L	97.4% / NA	95.2% / 91.4%		4.12%	
Chloromethane	<50.0 ug/L	109% / NA	95.5% / 96.2%		0.735%	
cis-1,3-Dichloropropene	<10.0 ug/L	99.1% / NA	101% / 97.3%		3.32%	
Dichlorodifluoromethane	<50.0 ug/L	94.2% / NA	87.9% / 87.3%		0.629%	
Ethylbenzene	<10.0 ug/L	105% / NA	110% / 109%		0.850%	
Methylene chloride	<20.0 ug/L	104% / NA	91.2% / 88.6%		2.86%	
Tetrachloroethene	<10.0 ug/L	103% / NA	96.2% / 102%		5.81%	
Toluene	<10.0 ug/L	108% / NA	97.1% / 108%		10.5%	D
trans-1,2-Dichloroethene	<10.0 ug/L	104% / NA	93.9% / 94.3%		0.468%	
trans-1,3-Dichloropropene	<10.0 ug/L	108% / NA	104% / 106%		1.44%	
Trichloroethene	<10.0 ug/L	90.5% / NA	89.8% / 91.6%		1.97%	
Trichlorofluoromethane	<50.0 ug/L	100% / NA	98.3% / 93.4%		5.05%	
Vinyl chloride	<10.0 ug/L	92.2% / NA	88.2% / 89.8%		1.84%	
4-Bromofluorobenzene [surr]	102 %	104% / NA	104% / 110%		NA	
Dibromofluoromethane [surr]	93.2 %	99.1% / NA	98.2% / 95.7%		NA	
Toluene-d8 [surr]	99.7 %	102% / NA	95.9% / 104%		NA	

Wet Chemistry -- Batch: A103169 (Water)

Prepared: 10-Mar-11 17:00 By: AP -- Analyzed: 10-Mar-11 17:00 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TDS	<1.0 mg/L	89.5% / 99.0%	NA / NA		10.1%	

24 March 2011



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QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: A103171 (Water)

Prepared: 18-Mar-11 10:40 By: KP -- Analyzed: 18-Mar-11 14:33 By: KP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Total Phosphorus	<0.020 mg/L	99.2% / NA	96.8% / 97.2%		0.216%	

Wet Chemistry -- Batch: A103173 (Water)

Prepared: 07-Mar-11 14:15 By: AP -- Analyzed: 07-Mar-11 14:15 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Fecal Coliforms	<1 CFU/100 ml	Pass / NA	NA / NA		NA	

Wet Chemistry -- Batch: A103180 (Water)

Prepared: 14-Mar-11 10:11 By: SB -- Analyzed: 15-Mar-11 07:26 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TOC	<1.00 mg/L	109% / NA	103% / 102%		0.705%	

Wet Chemistry -- Batch: A103182 (Water)

Prepared: 14-Mar-11 10:26 By: AP -- Analyzed: 14-Mar-11 10:26 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Sulfite	<4.00 mg/L	101% / 99.0%	NA / NA		2.00%	

Wet Chemistry -- Batch: A103187 (Water)

Prepared: 14-Mar-11 12:17 By: SB -- Analyzed: 14-Mar-11 12:17 By: SB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.50 mg/L	104% / NA	105% / 104%		0.403%	

Wet Chemistry -- Batch: A103202 (Water)

Prepared: 09-Mar-11 10:00 By: AP -- Analyzed: 09-Mar-11 10:00 By: AP

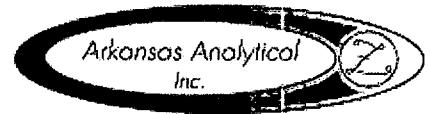
Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Surfactants	<0.100 mg/L	86.0% / 83.3%	62.7% / NA		3.15%	

Wet Chemistry -- Batch: A103203 (Water)

Prepared: 14-Mar-11 11:40 By: AP -- Analyzed: 14-Mar-11 11:40 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Color	<5.00 Color Units	NA / NA	NA / NA	10.0 Color Units	0.00%	

24 March 2011



Keith Byerly
Ash Grove Cement Company
4343 Hwy. 108 W
Foreman, AR 71836
Project: Permit Renewal Sample; WWTP

Date Received: 07-Mar-11 17:30

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: A103204 (Water)

Prepared: 14-Mar-11 11:40 By: AP -- Analyzed: 14-Mar-11 11:40 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH	NA	101% / 101%	NA / NA		0.00%	

Wet Chemistry -- Batch: A103241 (Water)

Prepared: 07-Mar-11 12:35 By: AP -- Analyzed: 07-Mar-11 12:35 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Chlorine Residual (Field)	NA	NA / NA	NA / NA	66.7%	66.7%	D

Wet Chemistry -- Batch: A103242 (Water)

Prepared: 07-Mar-11 12:45 By: AP -- Analyzed: 07-Mar-11 12:45 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Temperature (Field)	NA	NA / NA	NA / NA	12.3 °C	0.00%	

Wet Chemistry -- Batch: A103243 (Water)

Prepared: 07-Mar-11 12:40 By: AP -- Analyzed: 07-Mar-11 12:40 By: AP

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
pH (Field)	NA	101% / 100%	NA / NA		0.284%	

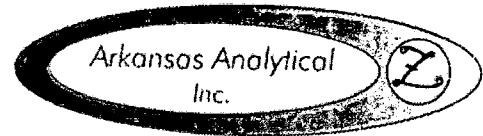
QUALIFIER(S)

- *%D1: Matrix Spike and/or Matrix Spike Duplicate Percent Recovery Does Not Meet Laboratory Acceptance Criteria
- *%D3: Surrogate Percent Recovery Does Not Meet Laboratory Acceptance Criteria
- * > 100: > 100
- *B-02: The sample dilutions set up for the BOD analysis failed to meet the criteria of a residual dissolved oxygen of at least 1 mg/l. Therefore the reported result is an estimated value only.
- *D: RPD Value Does Not Meet Laboratory Acceptance Criteria
- *E1: Estimated Result Due to Surrogate Failure
- *E21: Estimated Result Due to Continuing Calibration Verification (CCV) Sample Failed to Meet Method Specified Criteria
- *E5: Estimated Result Due to Quality Control Failure
- *MBA: Masked By Analyte
- *NR-1: Analyte Was Not Recoverable
- *Pass: Exhibits Positive Growth
- *TNTC: Too Numerous To Count

All Analysis performed according to EPA approved methodology when available:
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods, 20th Edition.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by: _____
Norma James
President

3/24/2011



11701 I-30 Bldg 1, Ste 115 • Little Rock, AR 72209
501-455-3233 • Fax 501-455-6118

**PLEASE FIND ATTACHED RESULTS FOR
SUBCONTRACTED ANALYSIS.**

SUBCONTRACTED ANALYSIS:

PPS Mercury

SUBCONTRACT LAB:

Mercury One

AR ANALYTICAL SDG NUMBER:

1103091 - 01,03,04

03B

WWTDP

Mercury One LTD

Florida

New York

Louisiana

Analytical Research and Data Validation

NELAP Cert # E871043

NELAP Cert # 11976

NELAP Cert # 04150

Analytical Report
EPA Method 1631E & 245.7

Report #: 11-0357

Page 1 of 1

Customer Name:

Arkansas Analytical Inc.
 11701 Interstate 30 Bldg 1 Ste 115
 Little Rock AR 72209

Date: 3/16/11

Attention:

Norma James

Project/PO#

1103091

Lab / (Field ID) or (Customer ID)	Results ng/L	Results ng/L	Results ng/L	Results ng/L	Mercury One ID:
1103091-01	21.14				110311-07
1103091-02		16.89			110311-08
1103091-03 (Field Blank)			<0.5		110311-09
Sample Type	Water	Water	Field Blank		
Date Sampled:	3/7/11	3/7/11	3/7/11		
Date Received:	3/11/11	3/11/11	3/11/11		
Date Prepared:	3/12/11	3/12/11	3/12/11	3/12/11	
Date Analyzed:	3/15/11	3/15/11	3/15/11		
Time Analyzed:	8:49:58 AM	8:52:35 AM	8:55:46 AM		
Method Qualifier	M 1	M 1	M 1	M 1	QCS Acceptable Range 80-120%
Dilution Factor					
Method Blank	<0.2	-	-	-	
Quality Control Sample (QCS)	6.07	101.2%	-	-	

M= Modified: See Below for Explanation

M1= Method 1631E used for analysis.

M2= Method 245.7 used for analysis.

The Matrix Spike and Matrix Spike reported are for samples identified below.

Acceptable

Acceptable Range

Mercury One ID

% Recovery

MS

MSD

RPD <20%

71-129%

The results are related only the samples presented on this report.

The test results are certified to meet all requirements of NELAC.

Other Codes

Other Comments: J = Estimated result , R = Rejected.

Reason for J or R flag:

	Water*		Soils	
	Method 1631E	Method 245.7	Sludges	Method 245.7
Detection				
Limit ng/L	0.2	1.8		
Reporting				
Limit ng/L	0.6	6.0		

Arkansas Cert# 88-0911

West Virginia Cert # 348

* A value found between the Reporting Limit and the Method Detection Limit is considered estimated

William W. Purves

Phone: 330-963-0843

2241 Pinnacle Parkway, Suite B, Twinsburg, OH 44087

Fax: 330-963-1016



CHAIN OF CUSTODY

CLIENT INFORMATION				Project Description				Turnaround Time		Preservation			
Arkansas Analytical, Inc. 11701 Interstate 30, Bldg. 1, Ste. 115 Little Rock, AR 72209				1103091 PPS Hg Sample				24 Hour 48 Hour 72 Hour Routine		1. Cool, 4 Degrees Centigrade 2. Sulfuric Acid (H ₂ SO ₄), pH < 2 3. Nitric Acid (HNO ₃), pH < 2			
Attn: Norma James				Reporting Information Telephone: 501-455-3233 Fax: 501-455-6118				Preservative Code: 1 Bottle Type: G		TEST PARAM			
Sampler(s) Signature				Sampler(s) Printed									
Field Number	SAMPLE COLLECTION		Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION	PPS Hg					
	Date/s	Time/s											
	3/7/2011	1247	X		1	Water	1103091-01	X					
	3/7/2011	1247	X		1	Water	1103091-03	X					
	3/7/2011	1247	X		1	Water	1103091-04	X					
1. Relinquished by: (Signature) <i>Sydney James</i>		Date/Time 3/9/11 1350		2. Received by: (Signature) <i>FedEx</i>		SAMPLE CONDITION UPON RECEIPT IN LAB				REM			
3. Relinquished by: (Signature) <i>FedEx</i>		Date/Time 3/11/11 1400		4. Received by lab: (Signature) <i>Ym. Eberstole</i>		1 CUSTODY SEALS: Yes No 2 CONTAINERS CORRECT: Yes No 3 COC/LABELS AGREE: Yes No 4 PRESERVATION CONFIRMED: Yes No 5 RECEIVED ON ICE: Yes No 6 TEMPERATURE ON RECEIPT: 10°C				Please Email I njames@arka sjames@arka			
FOR COMPLETION BY LAB ONLY													

Tab 7

Request for Alternative pH Limit for Outfall 03A

Request for Alternative pH Limit for Internal Outfall 03A

Ash Grove Letter dated November 11, 2010 requested permission to add dry ice (carbon dioxide) to adjust pH in the Cement Kiln Dust (CKD) landfill sedimentation pond. ADEQ approved the request by letter dated December 15, 2010 (attached).

As restated in the above referenced letter, the 2010 switch to a pre-calcining kiln from a "wet-process kiln" has resulted in a higher free lime content of the CKD which causes higher pH values in the runoff captured in the landfill sedimentation pond. CKD is transferred pneumatically to a pug mill located near the CKD landfill. Water from the CKD landfill sedimentation pond is added to the CKD to raise the moisture content to around 20% to obtain optimum moisture for compaction in the CKD landfill. It is also used for dust control on the landfill.

The CKD landfill sedimentation pond discharges through internal outfall 03A into the Process Water Pond (See Water Flow Diagram in Tab 4). During periods of dry weather there is no discharge from the sedimentation pond into the process water pond. The process water pond discharges through outfall 003 into a tributary of French Creek.

Ash Grove is requesting an alternative pH limit for Outfall 03A of 10.5 S.U. In order to demonstrate that the infrequent discharge of the sedimentation pond will have no impact on the discharge of outfall 003, the relative volumes of the two water bodies and associated calculations are provided below:

Volume of the CKD Landfill Sedimentation Pond¹ = 531,000 ft³

Surface area of Process Water Pond (Aerial Survey) = +/- 54 acres

Depth of adjacent active quarry = +/- 100 feet

Allowing for surface water elevation and sedimentation in Process Water Pond the estimated average depth is 45 ft. Then 54 acres X 43,560 ft²/acre X 45 ft = 105,850,800 ft³

CKD Sedimentation Pond: Process Water Pond dilution ration = 105,850,800:531,000 = 199:1

Since only about 0.5 to 1.0 feet of water from the CKD pond would drain into the process pond at any one time, unless the dam failed, the estimate is considered conservative which demonstrates that a pH variance on Outfall 03A will not have an effect on the receiving waters in French Creek as monitored at Outfall 003.

¹ Source: Operations Plan, CKD Landfill, CH2M HILL, July 2002, Revised September 2008

ADEQ

ARKANSAS
Department of Environmental Quality

December 15, 2010

Keith Byerly, Environmental Manager
Ash Grove Cement Company
4343 Highway 108 West
Foreman, AR 71836

RE: pH adjustment proposal at Internal Outfall 03A
NPDES Permit No. AR0042846; AFIN: 41-00001

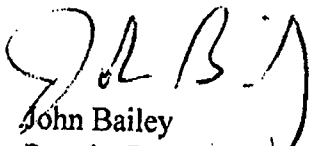
Dear Mr. Byerly:

This letter is in response to your letter dated 11/15/2010, concerning your proposal to control pH levels in the landfill sedimentation pond which captures runoff from the cement kiln dust (CKD) landfill. This pond discharges through Internal Outfall 03A to the process water pond. The current permit contains pH limits of 6.0-9.0 s.u. applicable to the discharge from Internal Outfall 03A. As stated in your letter, the CKD generated from the new pre-calcining kiln has a higher free lime content than the old wet process CKD, which causes higher pH values in the runoff from the CKD landfill collected by the landfill sedimentation pond. You have proposed to lower the pH in this pond to comply with the permitted pH limits by the addition of dry ice (carbon dioxide) during times when it becomes apparent that a discharge from the landfill sedimentation pond is imminent. The amount of carbon dioxide to be added would be dependent on the amount of pH adjustment needed.

The Department has reviewed your proposal and has determined that a permit modification is not necessary for the addition of carbon dioxide to the landfill sedimentation pond. This approval letter is issued in reliance upon the statements and representations made in your letter and does not guarantee satisfactory operation of the treatment system.

Should you have any further questions, please contact Shane Byrum at (501) 682-0618 or by email at byrum@adeq.state.ar.us.

Sincerely,



John Bailey
Permits Branch Manager
Water Division

Eric Fleming, Inspection Branch Manager

Tab 8

ADEQ Disclosure Form

ADEQ has removed the submitted disclosure statement, to protect confidential information.

It has been scanned into a secure location.

A redacted copy will be added as a separate document by Legal Division.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Chanute, KS	11/19/93	EPA - Region VII	40 CFR §§265, 266	A Consent Order was filed October 23, 1995 with the Regional Hearing Clerk, USEPA, Region VII, under which Ash Grove paid a penalty and fully resolved the matter.
Chanute, KS	3/16/95 12/15/95	KDHE	Alleged violations of K.A.R. 28-29-23(q) and K.A.R. 28-29-23(o) involving blowing dust creating a nuisance.	Ash Grove submitted and KDHE approved an Interim Remedial Measures Control Plan and a Cement Kiln Dust Management Plan and Closure Plan.
Chanute, KS	9/25/98	EPA - Region VII EPA - Region VII	Violations of Sections 102 and 103 of CERCLA and Sections 304 and 328 of EPCRA at Ash Grove's Chanute, Kansas cement plant, including failure to immediately notify the National Response Center of a release of hazardous waste mix from its facility in excess of the reportable quantity	This matter was settled by Consent Agreement and Consent Order dated March 9, 1999.
Chanute, KS	4/1/04	FRA	Alleged violations of 49 CFR §173.31 for a railcar's top operated bottom control valve being worn and allowing product vapor to escape.	Resolved through consent agreement with FRA on 8/12/2004.
Chanute, KS	9/28/04 and 9/29/04	KDHE	Non-Compliance of 40 CFR 62.1206(b)(1)(ii). Not complying with MACT standards while hazardous waste fuel in combustion chamber	Resolved by KDHE letter dated January 12, 2005.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Chanute, KS	9/13/05, 9/14/05 and 9/15/04	KDHE	Deficiency pursuant to 40 CFR 61.1206(c)(3)(vi). Exceedance report not submitted within five calendar days of 10 th emission exceedance within 60-day block.	Resolved by KDHE letter dated 10/25/05.
Chanute, KS	6/29/06	USEPA Region 7	Information Request. Section 114 of Clean Air Act	Pending
Chanute, KS	9/06/07	KDHE	Alleged violations of K.A.R. 28-31-4, K.A.R. 28-31-8, and K.S.A. 65-3441 regarding hazardous waste management requirements.	Ash Grove provided a response to KDHE dated 10/10/2007, with no further action required.
Denver, CO	9/29/95	EPA	Ash Grove was among entities identified by the EPA as a potentially responsible party under CERCLA for response costs at the facility formerly operated by Chemical Handling Corporation at 11811 Upham Street, Denver, CO.	On March 28, 1996, Ash Grove entered into a <i>de minimis</i> settlement order relating to this matter.
Durkee, OR	1/17/03	ODEQ	Notice of noncompliance for failing to report excess CO emissions as required by permit conditions.	Resolved by agreement with DEQ in January 2006
Durkee, OR	3/20/03	ODEQ	Notice of noncompliance for failure to perform a Relative Accuracy Test Audit on continuous emissions monitoring system in 2002.	Performed corrective action including successful RATAs and internal CEM audit completed in July 2003.
Durkee, OR	2/3/04	ODEQ	Notice of noncompliance with reporting of CO emissions in 2002.	Resolved by agreement with DEQ in January 2006

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Durkee, OR	3/12/04	ODEQ	Notice of noncompliance for failure to notify ODEQ of non-excess emissions permit deviations.	Resolved by agreement with DEQ in January 2006
Durkee, OR	5/3/04	ODEQ	Notice of Violation – Alleged 23 hourly emission exceedances for CO in 2001, 105 in 2002 and 7 in 2003. In addition, alleged for not reporting accurately on certifications for those years and not reporting exceedances within one hour those years ODEQ alleged for not reporting Non ee omissions in 2001 - 2003 associated with the above, failure to inspect water spray systems in the quarry during 2003. ODEQ also alleged that AGC was late completing the 2004 annual particulate emissions test on the kiln.	Title V NOV was settled under a consent agreement in January 2006 for \$164,400.
Durkee, OR	3/3/05	ODSL	Alleged violation of affecting more stream bank than permitted under Permit No. 31028-RF	3/25/05 DSL received the Consent Agreement that included a \$1,200 fine.
Durkee, OR	12/12/05	ODEQ	Warning Letter for Late DMR submittal and failed conducting inspections	Closed
Durkee, OR	5/31/06	ODEQ	Hazardous Waste Inspection – labeling deficiencies	Resolved without penalty
Durkee, OR	10/25/07	USEPA Region X	Section 114 Information Request	In Process

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Foreman, AR	9/27/97	ADEQ	Operation not in compliance	A consent order, LIS 01-100 was entered on June 5, 2001. The terms of the consent order have been fulfilled.
Foreman, AR	10/20/97	Arkansas Department of Pollution Control & Ecology (ADEQ)	Alleged violation of Reg. 23 for not noting the name, quantity and disposition of material recovered from spill incident on 10/11/97.	Filed written supplementary report of incident on 11/12/97 to ADEQ satisfaction.
Foreman, AR	10/20/97	ADEQ	On May 26, 1998, a consent administrative order was entered in settlement of allegations contained in a report from a Compliance Evaluation Inspection conducted by ADPC&E under the Arkansas Hazardous Waste Management Act on October 20, 1997 respecting Ash Grove's Foreman, Arkansas facility.	A consent agreement was entered 5/26/98. All terms of the consent order have been fulfilled.
Foreman, AR	6/12/98	ADEQ	Alleged that an excess emission and monitoring system performance report for the first quarter of 1998 showed Ash Grove exceeded its limit of SO ₂ emissions for the first quarter of 1998.	A consent order LIS 99-031 was entered February 8, 1999, by the Director of ADEQ. The terms of the consent order have been fulfilled.
Foreman, AR	10/27/98	D.O.T -- Fed. Railway Administration (FRA)	Alleged violation of 49 CFR 172.03 for loose manway bolts on an empty railcar containing hazardous waste.	Resolved by consent order with FRA on 3/26/2004

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Foreman, AR	12/23/98	FRA	Alleged violation of 49 CFR 172.031 for loose manway hatch bolts on empty railcar containing hazardous waste fumes.	Resolved by consent order with FRA on 3/26/2004
Foreman, AR	8/23/01	FRA	Alleged violation of 49 CFR §173.031(d) for an air plug valve not too tight.	Resolved by consent order with FRA on 9/20/2001
Foreman, AR	1/14/02	ADEQ	Alleged violations of 75-AQP-RO, Specific Conditions 70, 80 and 82.	Consent Order, LIS 03-087 entered into on July 9, 2003
Foreman, AR	1/7/03	ADEQ	Alleged Violation of Reg 23 264.17 & Permit 21-H, Prevention of ignition/reaction of ignitable/reactive waste, failure to design, construct, operate facility as to minimize possibility of fire, explosion or any unplanned release of hazardous waste.	A consent order, LIS 03-070 was entered June 6, 2003
Foreman, AR	7/1/04	ADEQ	Alleged violations of ADEQ Regulation 23	A consent order, LIS 04-177 was entered November 23, 2004 The terms of the consent order have been fulfilled
Foreman, AR	8/4/04 8/12/04	FRA	Alleged violations of 49 CFR §173.029 and §173.031 for loose manway hatch bolts and loose packing around a relief valve	Resolved by consent order with FRA on 11/22/2004.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Foreman, AR	1/31/05	ADEQ	Alleged secondary violations of ADPC&EC Regulation 23 and Permit 21-H	Alleged violations corrected and accepted by ADEQ letter dated June 9, 2005.
Foreman, AR	6/24/05	ADEQ	Deviations of Permit 75-AOP-R2	Consent Order , LIS 06-75 was entered on May 25, 2006.
Foreman, AR	3/13/06	ADEQ	Alleged violations of Permit 21-H	Alleged violations corrected and accepted by ADEQ letter dated June 20, 2006
Foreman, AR	10/2/07	ADEQ	Inquiry regarding storage of mercury nitrate solution	Pending
Inkom, ID	11/10/98	EPA, Idaho DEQ (IDEQ)	PSD enforcement alleging violations associated with burning used oil and tires in connection with hazardous waste disposal operations	Resolved through Consent Order
Inkom, ID	6/21/99	Idaho DEQ (IDEQ)	Multi-Media Inspection	Resolved through Consent Order
Inkom	9/16/05		Self-Disclosed violation of CO and NOx emission limits	Resolved in January 2007, penalty assessment of \$28K
Inkom, ID	12/15/05	IDEQ	Notice alleging violation of PC MACT temperature standards.	A Consent Order was signed and resolved on August 18, 2006

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Inkom, ID	10/25/07	USEPA Region X	Section 114 Information Request	In Process
Leamington, UT	2/23/03	UDEQ	Compliance test not completed	UDEQ issued Compliance Advisory. Resolved by payment of penalty.
Louisville, NE	9/27/93	EPA - Region VII	Violations of regulations set forth in 40 CFR 265 and 40 CFR 266 at Ash Grove's Louisville, Nebraska cement plant, including failure to follow manifest requirements; operation of a storage area without a permit or interim status; failure to analyze waste-derived fuel prior to burning; failure to develop an adequate waste analysis plan; illegal on-site waste pile; failure to maintain operating records; and failure to have functioning automatic waste feed-cutoff.	This matter was settled by Consent Agreement and Consent Order dated September 26, 1996.
Louisville, NE	11/20/96	NDEQ	Alleged violation of particulate emissions standards in excess of applicable regulations.	Consent decree settling the matter without adjudication of issues or determination of violation was entered on August 27, 1997.
Louisville, NE	11/26/96	NDEQ	Alleged failure to comply with Nebraska Air Quality Regulations in connection with monitor down time for Humboldt kiln cooler vent for third quarter of 1996.	Ash Grove responded to the letter of warning and there has been no further communication from the State on this matter.
Louisville, NE	2/29/00	NDEQ	Alleged Violations of NDEQ Title 129, Chapter 20	Consent Decree entered September 25, 2000. Terms of the Consent Decree have been fulfilled.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Louisville, NE	8/4/06	USEPA Region 7	Information Request. Section 114 of Clean Air Act	Pending
Louisville, NE	9/26/06	USEPA Region 7	SPCC notice of non-compliance letter regarding necessary updates to the plan to include oil fill transformers per the latest revisions of the rule.	Ash Grove completed modifications to the SPCC plan and submitted to EPA on 5/18/2007. No further action taken by EPA.
Louisville, NE	7/25/07	USEPA Region 7	Comments resulting from stormwater program inspection. No violations noted, but minor findings.	Ash Grove completed modifications to the Stormwater Pollution Prevention Plan (SWPPP) and submitted to EPA on 9/11/2007. No further action taken by EPA.
Louisville, NE	9/12/07	NDEQ	Air inspection finding of a deviation related to the raw material feedrate limit for one hour on 9/6/07. NOV not issued.	Ash Grove implemented a new control alarm to prevent recurrence. No further action taken by NDEQ.
Midlothian, TX	12/1/98	TX. Commission on Environmental Quality (TCEQ)	Notice of violation for operating parts washer w/ maintenance shop door open	Negotiated consent order with TCEQ 12/1998.
Midlothian, TX	5/1/00	TCEQ	Alleged violation for miscalculation of emission rates on emission inventory	Consent agreement with TCEQ included recalculated emission rates and unpaid emission fees based on new calculations.
Midlothian TX	11/21/03	TCEQ	Failure to maintain opacity limits as documented in reports to TCEQ due partly to faulty equipment and human error.	Resolved in a letter dated January 8, 2004. No penalties assessed.
Midlothian, TX	12/22/03	TCEQ	Failure to submit opacity reports within 24 hours of discovery and not properly reporting one event.	Resolved by letter on 8/21/03. No penalties assessed.
Midlothian TX	10/4/04	TCEQ	Failure to comply with 20% opacity limit on Kiln #3 due to human error.	Resolved with a letter Nov 2, 2004. No penalties assessed.
Midlothian TX	10/28/04	TCEQ	Failure to submit opacity reports within 24 hours of discovery.	Resolved with in a letter Nov 18, 2004. No penalties assessed.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Midlothian TX	11/18/04	TCEQ	Failure to submit opacity reports within 24 hours of discovery and typographical errors in one report.	Resolved with a letter November 18, 2004. No penalties assessed.
Midlothian TX	12/17/04	TCEQ	Failure to report within 24 hours certain emissions events.	Addressed findings and documented in a letter dated July 14, 2005. No penalties assessed.
Midlothian TX	2/14/05	TCEQ	Deviation reports and Quarterly reports did not match 100% and maintain up to date records of opacity reports.	Addressed findings and documented in a letter dated March 21, 2005. No penalties assessed.
Midlothian TX	7/11/05	TCEQ	Failure to submit final notification reports within two weeks of initial opacity exceedance report.	Challenged interpretation of rule and resolved with a letter on 10/30/05. No penalties assessed.
Midlothian TX	11/23/05	TCEQ	Annual report submitted 17 days after due date.	Resolved January 6, 2006 by letter.. No penalties assessed.
Midlothian TX	11/30/05	TCEQ	Failure to provide suitable sampling tap on potable water well and keep monthly operator reports.	Addressed findings and document in a letter dated Jan 10, 2006. No penalties assessed.
Midlothian TX	3/3/2006	TCEQ	Operator typed wrong set point on fan, causing an opacity exceedance for 6 minutes.	Programmed the computer to ask for confirmation of changes when the step change entered by the operator exceeds a certain number and resolved by letter on 4/5/2006. No penalties assessed.
Midlothian, TX	3/3/06	TCEQ	Title V and Quarterly reports did not match in duration regarding an opacity event on cooler #3.	Submitted corrected reports and resolved on June 25, 2003. No penalties assessed.
Midlothian TX	5/31/06	TCEQ	Failure to comply with 20% opacity limit on Kiln #3 due to human error.	Addressed findings and documented in a letter dated Aug, 24 2006. No penalties assessed.
Midlothian TX	6/29/06	USEPA Region 6	Information Request. Section 114 of Clean Air Act	Pending
Midlothian TX	7/25/06	TCEQ	Failure to comply with 30% opacity limit due to human error.	Addressed findings and documented in a letter dated Oct., 26, 2006. No penalties assessed.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Midlothian TX	3/1/07	TCEQ	Failure to submit final notification reports within two weeks of initial opacity exceedance report.	Challenged interpretation of rule and resolved with a letter on May 8, 2007. No penalties assessed.
Midlothian TX	7/20/07	TCEQ	Failure to submit end-user with green copy of tire-manifest within 60 days.	Resolved with a letter on August 2, 2007. No penalties assessed.
Montana City, MT	9/3/96	MTDEQ	Air Inspection by MDEQ. No violations.	No violations.
Montana City, MT	11/5/96	MTDEQ	Notice of possible violation of air quality regulations.	Resolved by administrative order entered March 23, 2000.
Montana City, MT	2/5/04	MTDEQ	Notice of possible violation for failure to complete annual underground storage tank leak detection testing as required.	Resolved by consent agreement with MTDEQ on April 2004.
Montana City, MT	7/20/06	MTDEQ	Violation regarding inadequate cathodic protection reading	Resolution Pending
Montana City, MT	10/5/06	MTDEQ	Exceedence of dioxin/furan emission limit during performance test	Administrative Order signed October 14, 2007
Murray, UT	3/28/96	EPA	Ash Grove received a request for information from the EPA for the Murray Smelter Proposed NPL site in Murray, UT.	Ash Grove responded on April 23, 1996, to EPA's Request for Information. Ash Grove leases a cement terminal on property where ASARCO formerly operated a smelter. Ash Grove is participating with ASARCO, the City of Murray, other property owners and the EPA to devise an acceptable remediation plan for the site.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Portland, OR	11/25/96	ODEQ	Notice of noncompliance alleging violation of Condition 13 and Condition 24 of Air Permit AQ-NWR-96-157.	Resolved by consent agreement.
Portland, OR	9/9/00	ODEQ	Notice of Noncompliance alleging failure to report excess emissions	Resolved without citation.
Seattle, WA	8/13/96	PSAPCA	Notice of Violation for alleged violation of Order of Approval No. 5730, Condition 5 for continuous visible emissions at 5% opacity from the exhaust stack of the mill sweep #2 baghouse.	On November 11, 1996 PSAPCA decided to cancel this penalty without further action.
Seattle, WA	1/27/95	Puget Sound Air Pollution Control Agency (PSAPCA)	Alleged violation of Section 9.11(a), 9.15(c) and 9.20 of Regulation I of PSAPCA for emissions of air contaminants in excess of applicable standards, emissions of fugitive dust and failure to maintain control equipment in good working order.	By its letter dated May 16, 1995, PSAPCA notified Ash Grove that PSAPCA agreed to remove Section 9.20 from the Notice and Order of Civil Penalty No. 8180, but declined to remit or mitigate Sections 9.11(a) and 9.15(c). Ash Grove paid the fine specified in PSAPCA's May 16 letter.
Seattle, WA	1/8/96	PSAPCA	Notice of Violation for an alleged SO ₂ exceedance in November 1995.	In March 1996, PSAPCA issued a penalty relating to this NOV. Matter resolved by agreement with PSAPCA
Seattle, WA	1/9/96	PSAPCA	Notice of Violation for an alleged NOx exceedance in November 1995.	In March 1996 PSAPCA issued a Penalty relating to this NOV. Matter resolved by agreement with PSAPCA.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Seattle, WA	1/24/96	PSAPCA	Notice and Order of Civil Penalty No. 8290 alleging violation of Section 9.15(c) of Regulation I of the PSAPCA pertaining to alleged emissions of fugitive dust on June 23, 1995.	ash Grove paid the fine within the period specified in PSAPCA's January 24 Notice.
Seattle, WA	2/2/96	PSAPCA	Notice and Order of Civil Penalty No. 8257 for nine Notices of Violation alleging violation of Section 9.09(b)(2) of Regulation I of the PSAPCA and Special Conditions #4, 6A and 6B on Notice of Construction #5730 pertaining to alleged emissions of air contaminants exceeding the standards as reported in CEM monitoring reports for the period November 1993 through January 1995.	Ash Grove paid a penalty to PSAPCA in settlement of the nine notices of violation as specified in PSAPCA's February 2 notice.
Seattle, WA	5/24/96 6/27/96 7/11/96	PSAPCA	On May 24 and July 11, 1996, PSAPCA issued Notice of Violations regarding emissions of fugitive dust (cement clinker). On June 27, 1996, the Port of Seattle, Hasbro, Inc., and Griffin Envelope, Inc. requested that the EPA take action with regard to alleged emissions from the Ash Grove Seattle plant onto Terminal 106 in the Port and nearby areas.	On August 30, 1996, USEPA informed the Port of Seattle, Hasbro, Inc., and Griffin Envelope, Inc. that USEPA remained confident of PSAPCA's ability to ensure that necessary actions are taken to resolve issues at Terminal 106 and surrounding areas. On April 3, 1997, Ash Grove and PSAPCA entered into a Consent Order and Assurance of Discontinuance in resolution of Notice of Violation Nos. 36854, 36902 and 36939.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Seattle, WA	10/5/96	PSAPCA	Notice of Violation for an alleged violation of Order of Approval No. 5730, Condition 6 for allowing emissions from the main baghouse stack to exceed the most stringent PSD limits or CO 1049 ppm corrected to 10% O ₂ 8 hour average.	January 15, 1997 letter from PSAPCA stated that based on information provided in October 1996 CEM report, the Agency considers this NOV closed and will take no further enforcement action.
Seattle, WA	10/25/96	PSAPCA	Notice of Violation for an alleged violation of Order of Approval No. 5730, Condition 7 for allowing SO ₂ emissions from the main baghouse stack to exceed 200 ppm during start up, shut down and scheduled maintenance of the kiln. Corrected to 10% O ₂ for a 1 hour average.	Resolved by consent order and penalty.
Seattle, WA	10/29/96 #36939	PSAPCA	Notice of Violation for an alleged violation of Regulation I, Section 9.11(a) for causing or allowing the deposition of portland cement clinker that unreasonably interfered with the enjoyment of life or property of three vehicle owners at 48 S. Nevada Street, P.O.S. Terminal 106 in Seattle, Washington.	In a letter to PSAPCA dated January 31, 1997, Ash Grove stated it does not agree that a violation occurred as set out in the October 29, 1996 NOV.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Seattle, WA	11/8/96 #36946	PSAPCA	Notice of Violation for an alleged violation of Order of Approval No. 5730, Condition 7 for allowing SO ₂ emissions to exceed 200 ppm during kiln start up. Corrected to 10% O ₂ for a 1 hour average.	Resolved by consent order and penalty.
Seattle, WA	11/15/96 #36947	PSAPCA	Notice of Violation for an alleged violation of Order of Approval No. 5730, Condition 7 for allowing SO ₂ emissions to exceed 200 ppm during kiln start up. Corrected to 10% O ₂ for a 1 hour average.	Resolved by consent order and penalty.
Seattle, WA	12/14/96 #36209	PSAPCA	Notice of Violation for an alleged violation of Order of Approval No. 5730, Condition 6(B) for allowing emissions from the main baghouse stack to exceed 501 ppm 10% O ₂ 24 hour average.	March 3, 1997 letter from PSAPCA stated that the Agency considers this NOV closed and will take no further enforcement action.
Seattle, WA	12/15/96 #36207	PSAPCA	Notice of Violation for an alleged violation of Order of Approval No. 5730, Condition 6(B) for allowing NO _x emissions from the main baghouse stack to exceed 700 ppm 10% O ₂ 1 hour average.	Resolved by consent order and penalty.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Seattle, WA	12/23/96 #36208	PSAPCA	Notice of Violation for an alleged violation of Order of Approval No. 5730, Condition 6(B) for allowing NOx emissions from the main baghouse stack to exceed 700 ppm 10% O ₂ 1 hour average.	March 3, 1997 letter from PSAPCA stated that based on information provided in December 1996 CEM report and January 29, 1997 corrective action letter, the Agency considers this NOV closed and will take no further enforcement action. The Agency concurs that this event meets the criterion of the WAC 173-400-107(6) excess emissions due to upsets.
Seattle, WA	7/16/97 8/7/97 4/27/98 4/29/98 8/14/98	PSAPCA	Notices of violation issued for observed fugitive dust emissions or fallout complaints of nuisance dust by adjacent property owners.	Ash Grove and PSAPCA entered an assurance of discontinuance agreement on 12/9/98, which required Ash Grove to hire experts to analyze fugitive dust sources at the plant and to recommend and implement solutions to reduce fugitive dust emissions. The study was completed 11/2/99.
Seattle, WA	7/10/97 7/11/97 7/26/97 8/25/97 10/2/97 10/3/97 10/10/97 11/11/97 11/26/97 11/27/97 11/28/97 1/29/98 3/8/98	PSAPCA	Before September 1998, PSAPCA issued violation notices for every self reported exceedance recorded by Ash Grove's continuous emissions monitoring system (CEMS). After September 1998, PSAPCA adopted a policy of high priority violations as suggested by EPA. These reported exceedances for SO ₂ related to emissions at start up. The Agency then issued an order of approval for work practice standards to control SO ₂ emissions at start up.	The listed violations were reviewed against the high priority violations policy and were found not to be significant threshold violations. The violation notices were resolved by closure letters dated 7/21/1998 and 12/18/1998 issued by PSAPCA.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Seattle, WA	5/25/98 6/7/98 6/10/98 6/11/98 6/12/98 6/13/98 6/27/98 10/15/98 10/30/98 11/3/98 11/12/98 11/27/98 12/98 1/99 3/5/99 3/6/99 3/8/99 3/12/99 11/25/99 11/26/99 2/15/00 3/19/00 3/20/00 3/25/00 3/28/00	PSAPCA	Between June 1998 and March 2000, the Agency issued violation notices to Ash Grove when it self-reported NOx emissions about its permit limit. It was determined that burning natural gas at extremely high temperatures was causing the formation of thermal NOx. Ash Grove requested and was granted a permit modification and increase for its NOx emissions as Ash Grove was continuing to meet BACT, even with the increase.	As a result, all the pending violation notices were resolved either through the interim CEM civil penalty policy of September 10, 1998, or were closed once the increased NOx emission limit was implemented.
Seattle, WA	12/22/04	PSAPCA	Failure to complete Method 9 opacity reading during NSPS testing of coal system	Resolved by consent order and penalty.
Seattle, WA	10/25/2007	USEPA Region X	Section 114 Request	In Process

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Location of Facility	Date Issued (Start)	Issuing Agency	Violations Alleged	Disposition
Springfield, MO	12/5/95	City of Springfield, MO	Alleged violation of City Code 2A-41 in connection with alleged escape of particulate matter.	The matter was concluded at a hearing held January 4, 1996 at which Ash Grove paid a fine.
Springfield, MO	8/5/96	City of Springfield, MO	Alleged violation of City Code 2A-41 in connection with alleged escape of particulate matter (lime dust).	The matter was concluded at a hearing held September 6, 1996 at which Ash Grove paid a fine.
Springfield, MO	11/5/96	City of Springfield, MO	Alleged violation of City Code §2A-41 in connection with alleged escape of particulate matter (lime dust).	The matter was concluded at a hearing held December 16, 1996 at which Ash Grove paid a fine.
Springfield, MO	5/14/99	USEPA Region 7	Notice of Violation issued related to PCB documentation from 1990 thru 1992.	Ash Grove responded to the NOV, with no further action from EPA.
Springfield, MO	5/19/03 8/18/03	MDNR	Notice of Violation related to exceedance of a total suspended solids limitation on the NPDES permit.	Ash Grove provided a written response on 6/6/2003 and 8/29/03. Corrective actions resolved TSS issues. No further action taken by MDNR. This permit was transferred to the new facility operator in 2006.

ADEQ DISCLOSURE STATEMENT
Ash Grove Cement Company

Page 35 of 35

- L. List all federal environmental agencies and any other environmental agencies outside this state that has or has had regulatory responsibility over the applicant.

United States Environmental Protection Agency

Kansas Department of Health and Environment

Nebraska Department of Environmental Quality

Utah Department of Environmental Quality

Oregon Department of Environmental Quality

Nevada Department of Conservation and Natural Resources; division of
Environmental Protection

Idaho Department of Environmental Quality

Montana Department of Environmental Quality

Missouri Department of Natural Resources

Washington State Department of Ecology

Puget Sound Clean Air Agency

Polk County, Iowa Air Pollution Control Division

Iowa Department of Natural Resources

Oklahoma Department of Environmental Quality

Province of British Columbia
Ministry of Environmental, Lands and Parks

Springfield -- Greene County Public Health Department

Mississippi Department of Environmental Quality

Wyandotte County Health Department

Texas Commission on Environmental Quality

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Company Arkansas Dept. of Environmental Quality
Address 5301 Northshore Drive
City North Little Rock State AR ZIP 72118

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