

Alabama Department of Environmental Management adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 FAX (334) 271-7950

Randall E. Crawford Managing Member Cahaba Resources, LLC PO Box 122 Vance, AL 35490

March 28,2019

RE:

Draft Permit

Deerlick West Mine

NPDES Permit No. AL0083551 Tuscaloosa County (125)

Dear Mr. Crawford:

Transmitted herein is a draft of the above referenced permit. Please review the enclosed draft permit carefully. If previously permitted, the draft may contain additions/revisions to the language in your current permit. Please submit any comments on the draft permit to the Department within 30 days from the date of receipt of this letter.

Since the Department has made a tentative decision to issue the above referenced permit, ADEM Admin. Code r. 335-6-6-21 requires a public notice of the draft permit followed by a period of at least 30 days for public comment before the permit can be issued. The United States Environmental Protection Agency will also receive the draft permit for review during the 30-day public comment period.

Any mining, processing, construction, land disturbance, or other regulated activity proposed to be authorized by this draft permit is prohibited prior to the effective date of the formal permit. Any mining or processing activity within the drainage basin associated with each permitted outfall which is conducted prior to Departmental receipt of certification from a professional engineer licensed to practice in the State of Alabama, that the Pollution Abatement/Prevention Plan was implemented according to the design plan, or notification from the Alabama Surface Mining Commission that the sediment control structures have been certified, is prohibited.

The Department utilizes a web-based electronic environmental (E2) reporting system for electronic DMR submittal. Please read Part I.D of the permit carefully and visit https://e2.adem.alabama.gov/npdes.

Should you have any questions concerning this matter, please contact Jasmine White by email at jasmine.white@adem.alabama.gov or by phone at (334) 270-5622.

Sincerely

Catherine A. McNeill, Chief Mining and Natural Resource Section Stormwater Management Branch Water Division

CAM/jlw

File: DPER/50144

Enclosure

cc: Jasmine White, ADEM
Environmental Protection Agency Region IV
Alabama Department of Conservation and Natural Resources
U.S. Fish and Wildlife Service

Alabama Historical Commission Advisory Council on Historic Preservation Alabama Surface Mining Commission

Birmingham Branch 110 Vulcan Road Birmingham, AL 35209-4702 (205) 942-6168 (205) 941-1603 (FAX) Decatur Branch 2715 Sandlin Road, S.W. Decatur, AL 35603-1333 (256) 353-1713 (256) 340-9359 (FAX)







NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDIVIDUAL PERMIT

PERMITTEE: Cahaba Resources, LLC

PO Box 122 Vance, AL 35490

FACILITY LOCATION: Deerlick West Mine

13413 Lake Harris Rd Tuscaloosa, AL 35406 Tuscaloosa County

T20S, R9W, Sections 22, 23, 26, 27, & 34

PERMIT NUMBER: AL0083551

DSI	N RECEIVING STREAM	<u>DSN</u>	RECEIVING STREAM	<u>DSN</u>	RECEIVING STREAM
001	-I Unnamed Tributary to Yellow Creek	002-1	Unnamed Tributary to Yellow Creek	003-1	Unnamed Tributary to Yellow Creek
004	-I Unnamed Tributary to Yellow Creek	005-1	Unnamed Tributary to Yellow Creek	006-1	Unnamed Tributary to Yellow Creek
007	-1 Unnamed Tributary to Yellow Creek	008-1	Unnamed Tributary to Yellow Creek	009-1	Unnamed Tributary to Yellow Creek
010	- I Unnamed Tributary to Yellow Creek	011-1	Unnamed Tributary to Yellow Creek	012-1	Unnamed Tributary to Yellow Creek
013	-1 Unnamed Tributary to Yellow Creek	014-1	Unnamed Tributary to Yellow Creek	015-1	Unnamed Tributary to Yellow Creek
016	-1 Unnamed Tributary to Yellow Creek	017-1	Unnamed Tributary to Yellow Creek	018-1	Unnamed Tributary to Yellow Creek
019	-1 Unnamed Tributary to Yellow Creek	020-1	Cypress Creek	021-1	Cypress Creek
022	-1 Cypress Creek	023-1	Cypress Creek	024-1	Cypress Creek
025	-1 Cypress Creek	026-1	Cypress Creek	027-1	Cypress Creek
028	-1 Cypress Creek	029-1	Cypress Creek	030-1	Cypress Creek
031	-1 Cypress Creek	032-I	Cypress Creek	033-1	Cypress Creek
034	-1 Cypress Creek	035-1	Cypress Creek	036-1	Cypress Creek
037	-1 Yellow Creek	038-1	Yellow Creek	039-1	Yellow Creek
040	-I Cypress Creek	041-1	Cypress Creek	042-1	Cypress Creek
043	-1 Unnamed Tributary to Yellow Creek				

In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1388 (the 'FWPCA'), the Alabama Water Pollution Control Act, as amended, Code of Alabama 1975, §§ 22-22-1 to 22-22-14 (the 'AWPCA'), the Alabama Environmental Management Act, as amended, Code of Alabama 1975, §§22-22A-1 to 22-22A-17, and rules and regulations adopted thereunder, and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-named receiving waters.

environmental Management Act, as amenaed, Code of Adabania 1973, 3322-2276-1 to 22-2276-17, and rates and regulations adopted thereand and subject further to the terms and conditions set forth in this permit, the Permittee is hereby authorized to discharge into the above-nam receiving waters.	
SSUANCE DATE:	

EXPIRATION DATE:

EFFECTIVE DATE:

** DRAFT **

MINING AND NATURAL RESOURCE SECTION NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

TABLE OF CONTENTS

PAKI I	DIS	CHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS	
	A.	DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS	
	В.	REQUIREMENTS TO ACTIVATE A PROPOSED MINING OUTFALL	6
	C.	DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS 1. Sampling Schedule and Frequency	
	D.	DISCHARGE REPORTING REQUIREMENTS 1. Requirements for Reporting of Monitoring 2. Requirements for Outfall Certification Summary Submittal 3. Noncompliance Notification 4. Reduction, Suspension, or Termination of Monitoring and/or Reporting Require 13	10 12 13
	E.	OTHER REPORTING AND NOTIFICATION REQUIREMENTS	15 15 15
	F.	SCHEDULE OF COMPLIANCE	15
PART II	OT	HER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES	
	A.	OPERATIONAL AND MANAGEMENT REQUIREMENTS. 1. Facilities Operation and Management	
	В.	BYPASS AND UPSET	18
	C.	PERMIT CONDITIONS AND RESTRICTIONS	

		2. Permit Modification, Suspension, Termination, and Revocation	
		3. Requirements for Metals, Cyanide, and Phenols Monitoring and Reporting	
		4. Automatic Expiration of Permits for New or Increased Discharges 5. Transfer of Permit	
		6. Groundwater	
		7. Property and Other Rights	
	D.	RESPONSIBILITIES	
	υ.	1. Duty to Comply	
		2. Change in Discharge	
		3. Compliance with Toxic or Other Pollutant Effluent Standard or Prohibition	
		4. Compliance with Water Quality Standards and Other Provisions	
		5. Compliance with Statutes and Rules	
		6. Right of Entry and Inspection7. Duty to Reapply or Notify of Intent to Cease Discharge	
		7. Duty to Reapply of Notiny of Intent to Cease Discharge	25
PART III	ADI	DITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS	
	A.	CIVIL AND CRIMINAL LIABILITY	
		1. Tampering	
		2. False Statements	
		Permit Enforcement Relief From Liability	
	_	•	
	В.	OIL AND HAZARDOUS SUBSTANCE LIABILITY	
	C.	AVAILABILITY OF REPORTS	
	D.	DEFINITIONS	26
	E.	SEVERABILITY	31
	F.	PROHIBITIONS AND ACTIVIES NOT AUTHORIZED	31
PART IV	SPE	CIAL REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS	
	A.	DISCHARGES TO IMPAIRED WATERS	33
	В.	PRECIPITATION EVENT DISCHARGE LIMITATIONS	33
		1. Monitoring for Claims of Precipitation Event Discharge Limitation Exemption	
	•	2. Precipitation Event Discharge Limitation Exemption Submittal	
		3. Applicable 24-Hour Precipitation Events	
		4. 24-Hour Precipitation Event Greater Than a 1-Year, 24-Hour Precipitation Event, but Less Than a 10-Year, 24-Hour Precipitation Events	
		5. 24-Hour Precipitation Event Less Than or Equal to a 2-Year,	34
		24-Hour Precipitation Event	34
		6. 24-Hour Precipitation Event Greater Than a 2-Year, 24-Hour Precipitation Event,	
		but Less Than a 10-Year, 24-Hour Precipitation Events	34
		7. 24-Hour Precipitation Event Less Than or Equal to a 10-Year,	
		24-Hour Precipitation Event	54
	C.	POST-MINING DISCHARGE LIMITATIONS	
	D.	pH EXEMPTION DISCHARGE LIMITATIONS	
	Е.	MANGANESE EXEMPTION DISCHARGE LIMITATIONS	
	F.	EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENT	
	•	FOR ACUTE TOXICITY	36
	G.		rs

PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

1. Active Mining Limitations and Monitoring Requirements

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfalls have been constructed and certified. Except as provided in Parts I.A.2. and 3., discharges shall be limited and monitored by the Permittee as specified below:

	Disc	charge Lim	itations	Monitoring Requirements	
Parameter	Daily	Monthly	Daily	Sample	Measurement
	Minimum	Average	Maximum	Туре	Frequency ¹
Specific Conductance		Report	Report	Grab	2/Month
00095		μS/cm	μS/cm	Glab	
Sulfate (As S)		Report	Report	Grab	2/Month
00154		mg/L	mg/L		2/1VIOIIII
pН	6.0		9.0	Grab	2/Month
00400	s.u.		s.u.	Glab	2/WOIth
pH ²	6.0		10.5	Grab	2/Month
00400	s.u.	0-5515	s.u.	Grao	
Solids, Total Suspended		35.0	70.0	Grab	2/Month
00530		mg/L	mg/L	Giao	ZiViontii
Iron, Total (As Fe)		3.0	6.0	Grab	2/Month
01045		mg/L	mg/L	Grab	Zitionin
Manganese, Total (As Mn) ³		2.0	4.0	Grab	2/Month
01055		mg/L	mg/L	Grab	Z/IVIORUI
Flow, In Conduit or Thru Treatment Plant4		Report	Report	Instantaneous	2/Month
50050		MGD	MGD	Instantaneous	2/World
Toxicity, Ceriodaphnia Acute ⁵			0	Grab	1/Quarter
61425			pass(0)/fail(1)	Glab	17Quarter
Toxicity, Pimephales Acute ⁵			0	Grab	1/Quarter
61427			pass(0)/fail(1)		
Solids, Total Dissolved (TDS)		Report	Report	Grab	1/Quarter
70296		mg/L	mg/L		17 Quarter

See Part I.C.2. for further measurement frequency requirements.

² See Part IV.D. for pH Exemption Discharge Limitations.

³ See Part IV.E. for Manganese Exemption Discharge Limitations.

⁴ Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.

⁵ See Part IV.F. for Effluent Toxicity Limitations and Biomonitoring Requirements for Acute Toxicity.

2. Precipitation Exemption Limitations and Monitoring Requirements⁶

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfalls have been constructed and certified. During periods of applicable 24-hour precipitation events for which the Permittee claims an exemption of standard mining limits as provided by Part IV.C., such discharge shall be limited and monitored by the Permittee as specified below:

	Discharge Limitations			Monitoring Requirements	
Parameter	Daily Minimum	Monthly Average	Daily Maximum	Sample Type	Measurement Frequency ⁷
Specific Conductance 00095		Report μS/cm	Report μS/cm	Grab	2/Month
Sulfate (As S) 00154		Report mg/L	Report mg/L	Grab	2/Month
pH 00400	6.0 s.u.		9.0 s.u.	Grab	2/Month
Solids, Settleable ⁸ 00545			0.5 mL/L	Grab	2/Month
Iron, Total (As Fe) ⁹ 01045			7.0 mg/L	Grab	2/Month
Flow, In Conduit or Thru Treatment Plant ¹⁰ 50050		Report MGD	Report MGD	Instantaneous	2/Month
Solids, Total Dissolved (TDS) 70296		Report mg/L	Report mg/L	Grab	1/Quarter

See Part IV.C. for Precipitation Event Discharge Limitations.

See Part I.C.2. for further measurement frequency requirements.

The discharge limitation for Settable Solids is not applicable for precipitation events greater than a 10-year, 24-hour precipitation event.

The discharge limitation for Total Iron (As Fe) is only applicable for precipitation events less than or equal to a 2-year, 24-hour precipitation event.

Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.

3. Post Mining Limitations and Monitoring Requirements¹¹

During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfalls have been constructed and certified. For those outfalls which the Department has granted written approval pursuant to Part IV.D., such discharge shall be limited and monitored by the Permittee as specified below:

	Discharge Limitations			Monitoring Requirements	
Parameter	Daily	Monthly	Daily	Sample	Measurement
	Minimum	Average	Maximum	Type	Frequency ¹²
Specific Conductance		Report	Report	Grab	1/Month
00095		μS/cm μS/cm		Grad	171VIOIIII1
Sulfate (As S)		Report	Report	Grab	1/Month
00154		mg/L mg/L		Grab	1/1VIOIIIII
pH	6.0		9.0	Grab	1/Month
00400	s.u.		s.u.	Grab	1/(VIOIIII)
Solids, Settleable			0.5	Grab	1/Month
00545			mL/L	Grao	
Flow, In Conduit or Thru Treatment Plant ¹³		Report	Report	Instantaneous	1/Month
50050		MGD	MGD		
Solids, Total Dissolved (TDS)		Report	Report	Cont	1/0
70296		mg/L mg/L	Grab	1/Quarter	

B. REQUIREMENTS TO ACTIVATE A PROPOSED MINING OUTFALL

- Discharge from any point source identified on Page 1 of this Permit which is a proposed outfall is not authorized by this Permit until the outfall has been constructed and certification received by the Department from a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed in accordance with plans and specifications approved by the ASMC, if applicable. This requirement shall not apply to pumped discharges from the underground works of underground coal mines where no surface structure is required by the ASMC, provided the Department is notified in writing of the completion or installation of such facilities, and the pumped discharges will meet permit effluent limits without treatment.
- 2. Certification required by Part I.B.1. shall be submitted on a completed ADEM Form 432. The certification shall include the latitude and longitude of the constructed and certified outfall.
- Discharge monitoring and Discharge Monitoring Report (DMR) reporting requirements described in Part I.C. of this Permit do not apply to point sources that have not been constructed and certified.
- 4. Upon submittal of the certification required by Part I.B.1. to the Department, all monitoring and DMR submittal requirements shall apply to the constructed and certified outfall.

¹¹ See Part IV.C. for Post-Mining Discharge Limitations.

¹² See Part I.C.2. for further measurement frequency requirements.

Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.

C. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Sampling Schedule and Frequency

- a. Except as provided in Parts IV.B. and C., the Permittee shall collect samples of the discharge from each constructed and certified point source identified on Page 1 of this Permit and described more fully in the Permittee's application, at the frequency specified in Part I.A. Analysis of the samples shall be conducted for the parameters specified in Part I.A.
- b. For each permitted, constructed, and certified point source which results from direct pumped drainage from the underground works of an underground coal mine or from surface drainage, if the final effluent is pumped in order to discharge (e.g. incised ponds, old highwall cuts, old pit areas or depressions), at least one grab sample from the permitted point source shall be obtained and analyzed each quarterly (three month) monitoring period if a discharge occurs at any time during the quarterly monitoring period.
- c. The Permittee may increase the frequency of sampling listed in Parts I.C.1.a and I.C.1.b; however, all sampling results must be reported to the Department and included in any calculated results submitted to the Department in accordance with this Permit.

2. Measurement Frequency

Measurement frequency requirements found in Part I.A. shall mean:

- a. A measurement frequency of one day per week shall mean sample collection on any day of discharge which occurs every calendar week.
- b. A measurement frequency of two days per month shall mean sample collection on any day of discharge which occurs every other week, but need not exceed two sample days per month.
- c. A measurement frequency of one day per month shall mean sample collection on any day of discharge which occurs during each calendar month.
- d. A measurement frequency of one day per quarter shall mean sample collection on any day of discharge which occurs during each calendar quarter.
- e. A measurement frequency of one day per six months shall mean sample collection on any day of discharge which occurs during the period of January through June and during the period of July through December.
- f. A measurement frequency of one day per year shall mean sample collection on any day of discharge which occurs during each calendar year.

3. Monitoring Schedule

The Permittee shall conduct the monitoring required by Part I.A. in accordance with the following schedule:

a. MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this Permit and every month thereafter. More frequently than monthly and monthly monitoring may be done anytime during the month, unless restricted elsewhere in this Permit, but the results should be reported on the last Discharge Monitoring Report (DMR) due for the quarter (i.e., with the March, June, September, and December DMRs).

- b. QUARTERLY MONITORING shall be conducted at least once during each calendar quarter. Calendar quarters are the periods of January through March, April through June, July through September, and October through December. The Permittee shall conduct the quarterly monitoring during the first complete calendar quarter following the effective date of this Permit and is then required to monitor once during each quarter thereafter. Quarterly monitoring may be done anytime during the quarter, unless restricted elsewhere in this Permit, but the results should be reported on the last DMR due for the quarter (i.e., with the March, June, September, and December DMRs).
- c. SEMIANNUAL MONITORING shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete semiannual calendar period following the effective date of this Permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this Permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., with the June and December DMRs).
- d. ANNUAL MONITORING shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this Permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this Permit, but it should be reported on the December DMR.

4. Sampling Location

Unless restricted elsewhere in this Permit, samples collected to comply with the monitoring requirements specified in Part I.A. shall be collected at the nearest accessible location just prior to discharge and after final treatment, or at an alternate location approved in writing by the Department.

5. Representative Sampling

Sample collection and measurement actions taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this Permit.

6. Test Procedures

For the purpose of reporting and compliance, Permittees shall use one of the following procedures:

a. For parameters with an EPA established Minimum Level (ML), report the measured value if the analytical result is at or above the ML and report "0" for values below the ML. Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136, guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h), and ADEM Standard Operating Procedures. If more than one method for analysis of a substance is approved for use, a method having a minimum level lower than the permit limit shall be used. If the minimum level of all methods is higher than the permit limit, the method having the lowest minimum level shall be used and a report of less than the minimum level shall be reported as zero and will constitute compliance, however should EPA approve a method with a lower minimum level during the term of this Permit the Permittee shall use the newly approved method.

b. For pollutant parameters without an established ML, an interim ML may be utilized. The interim ML shall be calculated as 3.18 times the Method Detection Level (MDL) calculated pursuant to 40 CFR Part 136, Appendix B.

Permittees may develop an effluent matrix-specific ML, where an effluent matrix prevents attainment of the established ML. However, a matrix specific ML shall be based upon proper laboratory method and technique. Matrix-specific MLs must be approved by the Department, and may be developed by the Permittee during permit issuance, reissuance, modification, or during compliance schedule.

In either case the measured value should be reported if the analytical result is at or above the ML and "0" reported for values below the ML.

c. For parameters without an EPA established ML, interim ML, or matrix-specific ML, a report of less than the detection limit shall constitute compliance if the detection limit of all analytical methods is higher than the Permit limit using the most sensitive EPA approved method. For the purpose of calculating a monthly average, "0" shall be used for values reported less than the detection limit.

The Minimum Level utilized for procedures identified in Parts I.C.6.a. and b. shall be reported on the Permittee's DMR. When an EPA approved test procedure for analysis of a pollutant does not exist, the Director shall approve the procedure to be used.

7. Recording of Results

For each measurement or sample taken pursuant to the requirements of this Permit, the Permittee shall record the following information:

- a. The facility name and location, point source number, date, time, and exact place of sampling or measurements;
- b. The name(s) of person(s) who obtained the samples or measurements;
- c. The dates and times the analyses were performed;
- d. The name(s) of the person(s) who performed the analyses;
- e. The analytical techniques or methods used including source of method and method number; and
- f. The results of all required analyses.

8. Routine Inspection by Permittee

- a. The Permittee shall inspect all point sources identified on Page 1 of this Permit and described more fully in the Permittee's application and all treatment or control facilities or systems used by the Permittee to achieve compliance with the terms and conditions of this Permit at least as often as the applicable sampling frequency specified in Part I.C.1 of this Permit.
- b. If required by the Director, the Permittee shall maintain a written log for each point source identified on Page 1 of this Permit and described more fully in the Permittee's application in which the Permittee shall record the following information:

- (1) The date and time the point source and any associated treatment or control facilities or systems were inspected by the Permittee;
- (2) Whether there was a discharge from the point source at the time of inspection by the Permittee;
- (3) Whether a sample of the discharge from the point source was collected at the time of inspection by the Permittee;
- (4) Whether all associated treatment or control facilities or systems appeared to be in good working order and operating as efficiently as possible, and if not, a description of the problems or deficiencies; and
- (5) The name and signature of the person performing the inspection of the point source and associated treatment or control facilities or systems.

9. Records Retention and Production

- a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the above reports or the application for this Permit, for a period of at least three (3) years from the date of the sample collection, measurement, report, or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA, AEMA, and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.
- b. All records required to be kept for a period of three (3) years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

10. Monitoring Equipment and Instrumentation

All equipment and instrumentation used to determine compliance with the requirements of this Permit shall be installed, maintained, and calibrated in accordance with the manufacturer's instructions or, in the absence of manufacturer's instructions, in accordance with accepted practices. The Permittee shall develop and maintain quality assurance procedures to ensure proper operation and maintenance of all equipment and instrumentation. The quality assurance procedures shall include the proper use, maintenance, and installation, when appropriate, of monitoring equipment at the plant site.

D. DISCHARGE REPORTING REQUIREMENTS

1. Requirements for Reporting of Monitoring

a. Monitoring results obtained during the previous three (3) months shall be summarized for each month on a Discharge Monitoring Report (DMR) Form approved by the Department, and submitted to the Department so that it is received by the Director no later than the 28th day of the month following the quarterly reporting period (i.e., on the 28th day of January, April, July, and October of each year).

- b. The Department utilizes a web-based electronic environmental (E2) reporting system for submittal of DMRs. Except as allowed by Part I.D.1.c. or d., the Permittee shall submit all DMRs required by Part I.D.1.a. by utilizing the E2 reporting system. The E2 reporting system Permittee Participation Package may be downloaded online at https://e2.adem.alabama.gov/npdes.
- c. If the electronic environmental (E2) reporting system is down (i.e. electronic submittal of DMR data is unable to be completed due to technical problems originating with the Department's system; this could include entry/submittal issues with an entire set of DMRs or individual parameters), permittees are not relieved of their obligation to submit DMR data to the Department by the required submittal date. However, if the E2 system is down on the 28th day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 system resuming operation, the Permittee shall enter the data into the E2 reporting system unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date).
- d. The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable. Permittees with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The Permittee shall submit the Department-approved DMR forms to the address listed in Part I.D.1.j.
- e. If the Permittee, using approved analytical methods as specified in Part I.C.6., monitors any discharge from a point source identified on Page 1 of this Permit and describe more fully in the Permittee's application more frequently than required by this Permit; the results of such monitoring shall be included in the calculation and reporting of values on the DMR Form, and the increased frequency shall be indicated on the DMR Form.
- f. In the event no discharge from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application occurs during a monitoring period, the Permittee shall report "No Discharge" for such period on the appropriate DMR Form.
- g. The Permittee shall report "No Discharge During Quarterly Monitoring Period" on the appropriate DMR Form for each point source receiving pumped discharges pursuant to Part I.C.1.b. provided that no discharge has occurred at <u>any</u> time during the entire quarterly (three month) monitoring period.
- h. Each DMR Form submitted by the Permittee to the Department in accordance with Part I.D.1. must be legible and bear an original signature or electronic signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this Permit.
- i. All reports and forms required to be submitted by this Permit, the AWPCA, and the Department's rules and regulations, shall be signed by a "responsible official" of the Permittee as defined in ADEM Admin. Code r. 335-6-6-.09 or a "duly authorized"

representative" of such official as defined in ADEM Admin. Code r. 335-6-6-.09 and shall bear the following certification:

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

j. All DMRs, reports, and forms required to be submitted by this Permit, the AWPCA and the Department's rules and regulations, shall be addressed to:

Alabama Department of Environmental Management Water Division, Mining and Natural Resource Section Post Office Box 301463 Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management Water Division, Mining and Natural Resource Section 1400 Coliseum Boulevard Montgomery, Alabama 36110-2059

- k. Unless authorized in writing by the Department, approved reporting forms required by this Permit or the Department are not to be altered, and if copied or reproduced, must be consistent in format and identical in content to the ADEM approved form. Unauthorized alteration, falsification, or use of incorrectly reproduced forms constitutes noncompliance with the requirements of this Permit and may significantly delay processing of any request, result in denial of the request, result in permit termination, revocation, suspension, modification, or denial of a permit renewal application, or result in other enforcement action.
- 1. If this Permit is a reissuance, then the Permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.D.1.

2. Requirements for Outfall Certification Summary Submittal

The Permittee shall submit as an attachment to the certification required by Part I.B.1, an Outfall Certification Summary in a format approved or provided by the Department. The Outfall Certification Summary shall indicate whether each outfall identified on Page 1 of this Permit has been certified and, if so, it shall include the date for each certification as well as the latitude and longitude of the certified outfall. If any outfall identified on Page 1 of this Permit has received written approval from the Department pursuant to Part IV.C. of this Permit stating that the Permittee may utilize the Post-Mining Discharge Limitations specified in Part I.A.3., then the list of outfalls shall include the date of the Post-Mining Discharge Limitations approval. If any outfall identified on Page 1 of this Permit has been released from monitoring requirements as provided in Part I.D.4. of this Permit, then the list of outfalls shall include the date of the monitoring requirement release.

3. Noncompliance Notification

- a. The Permittee must notify the Department if, for any reason, the Permittee's discharge:
 - (1) Potentially threatens human health or welfare;
 - (2) Potentially threatens fish or aquatic life;
 - (3) Causes an in-stream water quality criterion to be exceeded;
 - (4) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. §1317(a);
 - (5) Contains a quantity of a hazardous substance which has been determined may be harmful to the public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. §1321(b)(4); or
 - (6) Exceeds any discharge limitation for an effluent parameter as a result of an unanticipated bypass or upset.

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects of such discharge to the Director within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit to the Director a written report as provided in Part I.D.3.c., no later than five (5) days after becoming aware of the occurrence of such discharge.

- b. If for any reason, the Permittee's discharge does not comply with any limitation of this Permit, the Permittee shall submit a written report to the Director, as provided in Part I.D.3.c. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Part I.D.1. of this Permit after becoming aware of the occurrence of such noncompliance.
- c. Any written report required to be submitted to the Director in accordance with Parts I.D.3.a. and b. shall be submitted using a Noncompliance Notification Form (ADEM Form 421) available on the Department's website (http://adem.alabama.gov/DeptForms/Form421.pdf) include and the following information:
 - (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue; and
 - (3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

4. Reduction, Suspension, or Termination of Monitoring and/or Reporting Requirements

a. The Director may, with respect to any point source identified on Page 1 of this Permit and described more fully in the Permittee's application, authorize the Permittee to reduce, suspend, or terminate the monitoring and/or reporting required by this Permit upon the submission of a written request for such reduction, suspension, or termination by the Permittee provided:

- All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted or controlled to preclude unpermitted and unauthorized mining, processing, transportation, or associated operations/activity;
- (2) Unless waived in writing by the Department, the Permittee has been granted, in writing, a 100% Bond Release, by the Alabama Surface Mining Commission for all areas mined or disturbed in the drainage basin(s) associated with the discharge;
- (3) The Permittee has certified to the Director that the 100% Bond Release has been granted by the Alabama Surface Mining Commission for all areas disturbed in the drainage basin(s) associated with the discharge;
- (4) All surface effects of the mining activity such as fuel or chemical tanks, preparation plants or equipment, old tools or equipment, junk or debris, etc., must be removed and disposed of according to applicable state and federal regulations;
- (5) The Permittee's request for termination of monitoring and reporting requirements contained in this Permit has been supported by monitoring data covering a period of at least six consecutive months or such longer period as is necessary to assure that the data reflect discharges occurring during varying seasonal climatological conditions;
- (6) The Permittee has stated in its request that the samples collected and reported in the monitoring data submitted in support of the Permittee's request for monitoring termination or suspension are representative of the discharge and were collected in accordance with all Permit terms and conditions respecting sampling times (e.g., rainfall events) and methods and were analyzed in accordance with all Permit terms and conditions respecting analytical methods and procedures;
- (7) The Permittee has certified that during the entire period covered by the monitoring data submitted, no chemical treatment of the discharge was provided;
- (8) The Permittee's request has included the certification required by Part I.D.1.d. of this Permit; and
- (9) The Permittee has certified to the Director in writing as part of the request, its compliance with (1) through (8) above.
- b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this Permit until written authorization to reduce, suspend, or terminate such monitoring and/or reporting is received by the Permittee from the Director.
- c. If monitoring reductions or releases have been granted by the Department for requirements under a previous permit version, permit requirements shall remain reduced or released for the approved outfalls. However, should any changes occur at the site or discharge conditions upon which the monitoring reduction or release was based, the Permittee is required to notify the Department in writing and immediately resume the monitoring and reporting requirements.
- d. The Department may require the Permittee in writing to resume monitoring requirements for released outfalls pursuant to Part I.B of the NPDES Permit.

E. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

The Permittee shall give the Director written advance notice of any planned changes or other circumstances regarding a facility which may result in noncompliance with permit requirements.

2. Termination of Discharge

The Permittee shall notify the Director, in writing, when all discharges from any point source(s) identified on Page 1 of this Permit and described more fully in the Permittee's application have permanently ceased.

3. Updating Information

- a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or officer(s) having the authority and responsibility to prevent and abate violations of the AWPCA, the AEMA, the Department's rules and regulations, and the terms and conditions of this Permit, in writing, no later than ten (10) days after such change. Upon request of the Director, the Permittee shall furnish the Director with an update of any information provided in the permit application.
- b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

- a. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, terminating, or revoking and reissuing this Permit, in whole or in part, or to determine compliance with this Permit. The Permittee shall also furnish to the Director upon request, copies of records required to be maintained by this Permit.
- b. The Permittee shall furnish to the Director upon request, within a reasonable time, available information (name, phone number, address, and site location) which identifies offsite sources of material or natural resources (mineral, ore, or other material such as iron, coal, coke, dirt, chert, shale, clay, sand, gravel, bauxite, rock, stone, etc.) used in its operation or stored at the facility.

F. SCHEDULE OF COMPLIANCE

The Permittee shall achieve compliance with the discharge limitations specified in Part I.A. of this Permit in accordance with the following schedule:

Compliance must be achieved by the effective date of this Permit.

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Management

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities only when necessary to achieve compliance with the conditions of this Permit.

2. Best Management Practices (BMPs)

- a. Unless otherwise authorized in writing by the Director, the Permittee shall provide a means of subsurface withdrawal for any discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application. Notwithstanding the above provision, a means of subsurface withdrawal need not be provided for any discharge caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event.
- b. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director has granted prior written authorization for dilution to meet water quality requirements.
- c. The Permittee shall minimize the contact of water with overburden, including but not limited to stabilizing disturbed areas through grading, diverting runoff, achieving quick growing stands of temporary vegetation, sealing acid-forming and toxic-forming materials, and maximizing placement of waste materials in back-fill areas.
- d. The Permittee shall prepare, submit to the Department for approval, and implement a Best Management Practices (BMPs) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a potential for discharge, if so required by the Director. When submitted and approved, the BMP Plan shall become a part of this Permit and all requirements of the BMP Plan shall become requirements of this Permit.

e. Spill Prevention, Control, and Management

The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan acceptable to the Department that is prepared and certified by a Professional Engineer (PE), registered in the State of Alabama, for all onsite petroleum product or other pollutant storage tanks or containers as provided by ADEM Admin. Code r. 335-6-6-0.08(j)5. The Plan shall describe and the Permittee shall implement appropriate structural and/or non-structural spill prevention, control, and/or management pursuant to ADEM Admin. Code r. 335-6-6-1.12 (r) sufficient to prevent any spills of pollutants from entering a ground or surface water of the State or a publicly or privately owned treatment works. The Plan shall include at a minimum, the engineering requirements provided in 40 C.F.R. §§112.1. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and shall prevent the contamination of groundwater. Such containment systems shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided. The Plan shall list any

materials which the Permittee may utilize to contain and to absorb fuel and chemical spills and leaks. The Permittee shall maintain sufficient amounts of such materials onsite or have sufficient amounts of such materials readily available to contain and/or absorb fuel and chemical spills and leaks. Soil contaminated by chemical spills, oil spills, etc., must be immediately cleaned up or be removed and disposed of in a manner consistent with all State and federal regulations.

- f. All surface drainage and storm water runoff which originate within or enters the Permittee's premises and which contains any pollutants or other wastes shall be discharged, if at all, from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application.
- g. The Permittee shall take all reasonable precautions to prevent any surface drainage or storm water runoff which originates outside the Permittee's premises and which contains any pollutants or other wastes from entering the Permittee's premises. At no time shall the Permittee discharge any such surface drainage or storm water runoff which enters the Permittee's premises if, either alone or in combination with the Permittee's effluent, the discharge would exceed any applicable discharge limitation specified in Part I.A. of this Permit.

3. Biocide Additives

- a. The Permittee shall notify the Director in writing not later than sixty (60) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in any cooling or boiler system(s) regulated by this Permit. Notification is not required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the Permittee. Such notification shall include:
 - (1) Name and general composition of biocide or chemical;
 - (2) 96-hour median tolerance limit data for organisms representative of the biota of the water(s) which the discharge(s) enter(s);
 - (3) Quantities to be used;
 - (4) Frequencies of use;
 - (5) Proposed discharge concentrations; and
 - (6) EPA registration number, if applicable.
- b. The use of any biocide or chemical additive containing tributyl tin, tributyl tin oxide, zinc, chromium, or related compounds in any cooling or boiler system(s) regulated by the Permit is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this Permit or in the application for this Permit or not exempted from notification under this Permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

4. Facility Identification

The Permittee shall clearly display prior to commencement of any regulated activity and until permit coverage is properly terminated, the name of the Permittee, entire NPDES permit number, facility or site name, and other descriptive information deemed appropriate by the Permittee at an easily accessible location(s) to adequately identify the site, unless approved otherwise in writing by the Department. The Permittee shall repair or replace the sign(s) as necessary upon becoming aware that the identification is missing or is unreadable due to age, vandalism, theft, weather, or other reason(s).

5. Removed Substances

Solids, sludges, filter backwash, or any other pollutants or other wastes removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department rules and regulations.

6. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facility, including but not limited to the loss or failure of the primary source of power of the treatment facility, the Permittee shall, where necessary to maintain compliance with the discharge limitations specified in Part I.A. of this Permit or any other terms or conditions of this Permit, cease, reduce, or otherwise control production and/or discharges until treatment is restored.

7. Duty to Mitigate

The Permittee shall promptly take all reasonable steps to minimize or prevent any violation of this Permit or to mitigate and minimize any adverse impact to waters resulting from noncompliance with any discharge limitation specified in Part I.A. of this Permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as is necessary to determine the nature and impact of the noncomplying discharge.

B. BYPASS AND UPSET

1. Bypass

- a. Any bypass is prohibited except as provided in Parts II.B.1.b. and c.
- b. A bypass is not prohibited if:
 - (1) It does not cause any applicable discharge limitation specified in Part I.A. of this Permit to be exceeded;
 - (2) The discharge resulting from such bypass enters the same receiving water as the discharge from the permitted outfall;
 - (3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system; and
 - (4) The Permittee monitors the discharge resulting from such bypass at a frequency, at least daily, sufficient to prove compliance with the discharge limitations specified in Part I.A. of this Permit.
- c. A bypass is not prohibited and need not meet the discharge limitations specified in Part I.A. of this Permit if:

- (1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;
- (2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the Permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- (3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days, if possible, prior to the anticipated bypass or within 24 hours of an unanticipated bypass, the Permittee is granted such authorization, and Permittee complies with any conditions imposed by the Director to minimize any adverse impact to waters resulting from the bypass.
- d. The Permittee has the burden of establishing that each of the conditions of Parts II.B.1.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in Part II.B.1.a. and an exemption, where applicable, from the discharge limitations specified in Part I.A. of this Permit.

2. Upset

- a. Except as provided in Parts II.B.2.b. and c., a discharge which results from an upset need not meet the applicable discharge limitations specified in Part I.A. of this Permit if:
 - (1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director; and
 - (2) No later than five (5) days after becoming aware of the occurrence of the upset, the Permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, design drawings, construction certification, maintenance records, weir flow measurements, dated photographs, rain gauge measurements, or other relevant evidence, demonstrating that:
 - An upset occurred;
 - (ii) The Permittee can identify the specific cause(s) of the upset;
 - (iii) The Permittee's treatment facility was being properly operated at the time of the upset; and
 - (iv) The Permittee promptly took all reasonable steps to minimize any adverse impact to waters resulting from the upset.
- b. Notwithstanding the provisions of Part II.B.2.a., a discharge which is an overflow from a treatment facility or system, or an excess discharge from a point source associated with a treatment facility or system and which results from a 24-hour precipitation event larger than a 10-year, 24-hour precipitation event is not exempted from the discharge limitations specified in Part I.A. of this Permit unless:
 - (1) The treatment facility or system is designed, constructed, and maintained to contain the maximum volume of wastewater which would be generated by the facility during a 24-hour period without an increase in volume from

precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event or to treat the maximum flow associated with these volumes.

In computing the maximum volume of wastewater which would result from a 10-year, 24-hour precipitation event, the volume which would result from all areas contributing runoff to the individual treatment facility must be included (i.e., all runoff that is not diverted from the mining area and runoff which is not diverted from the preparation plant area); and

- (2) The Permittee takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow or excess discharge.
- c. The Permittee has the burden of establishing that each of the conditions of Parts II.B.2.a. and b. have been met to qualify for an exemption from the discharge limitations specified in Part I.A. of this Permit.

C. PERMIT CONDITIONS AND RESTRICTIONS

1. Prohibition against Discharge from Facilities Not Certified

- a. Notwithstanding any other provisions of this Permit, if the permitted facility has not obtained or is not required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which was not certified to the Department on a form approved by the Department by a professional engineer, registered in the State of Alabama, as being designed, constructed, and in accordance with plans and specifications reviewed by the Department is prohibited; or
- b. Notwithstanding any other provisions of this Permit, if the permitted facility has obtained or is required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which is associated with a treatment facility which was not constructed and certified to the Alabama Surface Mining Commission pursuant to applicable provisions of said Commission's regulations, is prohibited until the Permittee submits to the Alabama Surface Mining Commission, certification by a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed in accordance with plans and specifications approved by the Alabama Surface Mining Commission. This requirement shall not apply to pumped discharges from the underground works of underground coal mines where no surface structure is required by the Alabama Surface Mining Commission, provided the Department is notified in writing of the completion or installation of such facilities, and the pumped discharges will meet permit effluent limits without treatment.

2. Permit Modification, Suspension, Termination, and Revocation

- a. This Permit may be modified, suspended, terminated, or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:
 - (1) The violation of any term or condition of this Permit;
 - (2) The obtaining of this Permit by misrepresentation or the failure to disclose fully all relevant facts;

- (3) The submission of materially false or inaccurate statements or information in the permit application or reports required by the Permit;
- (4) The need for a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
- (5) The existence of any typographical or clerical errors or of any errors in the calculation of discharge limitations;
- (6) The existence of material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;
- (7) The threat of the Permittee's discharge on human health or welfare; or
- (8) Any other cause allowed by ADEM Admin. Code ch. 335-6-6.
- b. The filing of a request by the Permittee for modification, suspension, termination, or revocation and reissuance of this Permit, in whole or in part, does not stay any Permit term or condition of this Permit.

3. Requirements for Metals, Cyanide, and Phenols Monitoring and Reporting

- a. For all outfalls, the Permittee shall collect a sample of the discharge to be analyzed for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc, cyanide, and phenols no later six months following the effective date of the Permit. The analyses shall be submitted on EPA Form 2C and received by the Department no later than 28 days following six months after the effective date of the Permit.
- b. For all outfalls, should a discharge not occur within the first six months following the effective date of this Permit, the Permittee shall collect a sample of the discharge to be analyzed for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc, cyanide, and phenols no later than six months following the date of the first discharge. The analyses shall be submitted on EPA Form 2C and received by the Department no later than 28 days following six months after the first discharge.
- c. Parts II.C.3.a. and b. do not apply for any outfall that is represented by analyses conducted at a substantially similar outfall as indicated on EPA Form 2C or 2D.
- d. The Permit shall be reopened, if required, to address any new information resulting from the completion and submittal of the data referenced in Parts II.C.3.a. and b.

4. Automatic Expiration of Permits for New or Increased Discharges

- a. Except as provided by ADEM Admin. Code r. 335-6-6-.02(h) and 335-6-6-.05, if this Permit was issued for a new discharger or new source, it shall expire eighteen months after the issuance date if construction has not begun during that eighteen month period.
- b. Except as provided by ADEM Admin. Code r. 335-6-6-.02(h) and 335-6-6-.05, if any portion of this Permit was issued or modified to authorize the discharge of increased quantities of pollutants to accommodate the modification of an existing facility, that portion of this Permit shall expire eighteen months after this Permit's issuance if construction of the modification has not begun within eighteen month period.

- c. Construction has begun when the owner or operator has:
 - (1) Begun, or caused to begin as part of a continuous on-site construction program:
 - (i) Any placement, assembly, or installation of facilities or equipment; or
 - (ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - (2) Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.
- d. The automatic expiration of this Permit for new or increased discharges if construction has not begun within the eighteen month period after the issuance of this Permit may be tolled by administrative or judicial stay.
- e. If this permit was issued for a "new discharger" or "new source" associated with a "surface coal mine" it shall expire eighteen months after issuance if "construction" has not begun during that eighteen-month period, unless the Permittee has not started "construction" pending issuance of a permit by the "ASMC" and at the time the NPDES permit was issued had complied with the application requirements of the "ASMC" Administrative Code Title 880. In such cases, the NPDES permit shall expire 18 months after issuance of the "ASMC" permit if "construction" has not begun during that eighteen-month period. This period shall be tolled by any administrative request for hearing or an administrative or judicial stay.

5. Transfer of Permit

This Permit may not be transferred or the name of the Permittee changed without notice to the Director and subsequent modification or revocation and reissuance of this Permit to identify the new Permittee and to incorporate any other changes as may be required under the FWPCA or AWPCA. In the case of a change in name, ownership, or control of the Permittee's premises only, a request for permit modification in a format acceptable to the Director is required at least 30 days prior to the change. In the case of a change in name, ownership, or control of the Permittee's premises accompanied by a change or proposed change in effluent characteristics, a complete permit application is required to be submitted to the Director at least 180 days prior to the change. Whenever the Director is notified of a change in name, ownership, or control, he may decide not to modify the existing Permit and require the submission of a new permit application.

6. Groundwater

Unless authorized on page 1 of this Permit, this Permit does not authorize any discharge to groundwater. Should a threat of groundwater contamination occur, the Director may require groundwater monitoring to properly assess the degree of the problem, and the Director may require that the Permittee undertake measures to abate any such discharge and/or contamination.

7. Property and Other Rights

This Permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, trespass, or any infringement of Federal, State, or local laws or regulations, nor does it authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the State or of the United States.

D. RESPONSIBILITIES

1. Duty to Comply

- a. The Permittee must comply with all terms and conditions of this Permit. Any permit noncompliance constitutes a violation of the AWPCA, AEMA, and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
- b. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the FWPCA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the effluent standard, prohibition or requirement.
- c. For any violation(s) of this Permit, the Permittee is subject to a civil penalty as authorized by the AWPCA, the AEMA, the FWPCA, and <u>Code of Alabama</u> 1975, §§22-22A-1 et. seq., as amended, and/or a criminal penalty as authorized by <u>Code of Alabama</u> 1975, §22-22-1 et. seq., as amended.
- d. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of this Permit shall not be a defense for a Permittee in an enforcement action.
- e. Nothing in this Permit shall be construed to preclude or negate the Permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, Federal, State, or local government permits, certifications, licenses, or other approvals.
- f. The discharge of a pollutant from a source not specifically identified in the permit application for this Permit and not specifically included in the description of an outfall in this Permit is not authorized and shall constitute noncompliance with this Permit.
- g. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this Permit or to minimize or prevent any adverse impact of any permit violation.

2. Change in Discharge

- a. The Permittee shall apply for a permit modification at least 180 days in advance of any facility expansion, production increase, process change, or other action that could result in the discharge of additional pollutants, increase the quantity of a discharged pollutant, or that could result in an additional discharge point. This requirement also applies to pollutants that are not subject to discharge limitations in this Permit. No new or increased discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.
- b. The Permittee shall notify the Director as soon as it knows or has reason to believe that it has begun or expects to begin to discharge any pollutant listed as a toxic pollutant

pursuant to Section 307(a) of the FWPCA, 33 U.S.C. §1317(a), any substance designated as a hazardous substance pursuant to Section 311(b)(2) of the FWPCA, 33 U.S.C. §1321(b)(2), any waste listed as a hazardous waste pursuant to Code of Alabama 1975, §22-30-10, or any other pollutants or other wastes which is not subject to any discharge limitations specified in Part I.A. of this Permit and was not reported in the Permittee's application, was reported in the Permittee's application in concentrations or mass rates lower than that which the Permittee expects to begin to be discharged, or has reason to believe has begun to be discharged.

3. Compliance with Toxic or Other Pollutant Effluent Standard or Prohibition

If any applicable effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Sections 301(b)(2)(C),(D),(E) and (F) of the FWPCA, 33 U.S.C. §1311(b)(2)(C),(D),(E), and (F); 304(b)(2) of the FWPCA, 33 U.S.C. §1314(b)(2); or 307(a) of the FWPCA, 33 U.S.C. §1317(a), for a toxic or other pollutant discharged by the Permittee, and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Part I.A. of this Permit or controls a pollutant not limited in Part I.A. of this Permit, this Permit shall be modified to conform to the toxic or other pollutant effluent standard or prohibition and the Permittee shall be notified of such modification. If this Permit has not been modified to conform to the toxic or other pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the authorization to discharge in this Permit shall be void to the extent that any discharge limitation on such pollutant in Part I.A. of this Permit exceeds or is inconsistent with the established toxic or other pollutant effluent standard or prohibition.

4. Compliance with Water Quality Standards and Other Provisions

- a. On the basis of the Permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this Permit will assure compliance with applicable water quality standards. However, this Permit does not relieve the Permittee from compliance with applicable State water quality standards established in ADEM Admin. Code ch. 335-6-10, and does not preclude the Department from taking action as appropriate to address the potential for contravention of applicable State water quality standards which could result from discharges of pollutants from the permitted facility.
- b. Compliance with Permit terms and conditions notwithstanding, if the Permittee's discharge(s) from point source(s) identified on Page 1 of this Permit cause(s) or contribute(s) to a condition in contravention of State water quality standards, the Department may require abatement action to be taken by the Permittee, modify the Permit pursuant to the Department's rules and regulations, or both.
- c. If the Department determines, on the basis of a notice provided pursuant to Part II.C.2. of this Permit or any investigation, inspection, or sampling, that a modification of this Permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the noticed act until the Permit has been modified.

5. Compliance with Statutes and Rules

a. This Permit has been issued under ADEM Admin. Code div. 335-6. All provisions of this division, that are applicable to this Permit, are hereby made a part of this Permit. A copy of this division may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Blvd., Montgomery, AL 36110-2059.

b. This Permit does not authorize the noncompliance with or violation of any Laws of the State of Alabama or the United States of America or any regulations or rules implementing such laws. FWPCA, 33 U.S.C. Section 1319, and Code of Alabama 1975, Section 22-22-14.

6. Right of Entry and Inspection

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

- a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the Permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit:
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

7. Duty to Reapply or Notify of Intent to Cease Discharge

- a. If the Permittee intends to continue to discharge beyond the expiration date of this Permit, the Permittee shall file with the Department a complete permit application for reissuance of this Permit at least 180 days prior to its expiration.
- b. If the Permittee does not desire to continue the discharge(s) allowed by this Permit, the Permittee shall notify the Department at least 180 days prior to expiration of this Permit of the Permittee's intention not to request reissuance of this Permit. This notification must include the information required in Part I.D.4.a and be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Admin. Code r. 335-6-6-09.
- c. Failure of the Permittee to submit to the Department a complete application for reissuance of this Permit at least 180 days prior to the expiration date of this Permit will void the automatic continuation of this Permit as provided by ADEM Admin. Code r. 335-6-6-0.06, and should this Permit not be reissued for any reason, any discharge after the expiration of this Permit will be an unpermitted discharge.

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under this Permit shall, upon conviction, be subject to penalties and/or imprisonment as provided by the AWPCA and/or the AEMA.

2. False Statements

Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be subject to penalties and/or imprisonment as provided by the AWPCA and/or the AEMA.

3. Permit Enforcement

This NPDES Permit is a Permit for the purpose of the AWPCA, the AEMA, and the FWPCA, and as such all terms, conditions, or limitations of this Permit are enforceable under State and Federal law.

4. Relief From Liability

Except as provided in Part II.B.1. (Bypass) and Part II.B.2. (Upset), nothing in this Permit shall be construed to relieve the Permittee of civil or criminal liability under the AWPCA, AEMA, or FWPCA for noncompliance with any term or condition of this Permit.

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under Section 311 of the FWPCA, 33 U.S.C. §1321.

C. AVAILABILITY OF REPORTS

Except for data determined to be confidential under <u>Code of Alabama</u> 1975, §22-22-9(c), all reports prepared in accordance with the terms of this Permit shall be available for public inspection at the offices of the Department. Effluent data shall not be considered confidential. Knowingly making any false statement in any such report may result in the imposition of criminal penalties as provided for in Section 309 of the FWPCA, 33 U.S.C. §1319, and <u>Code of Alabama</u> 1975, §22-22-14.

D. **DEFINITIONS**

- 1. Acid or ferruginous mine drainage means mine drainage which, before any treatment, either has a pH of less than 6 or a total iron concentration equal to or greater than 10 mg/l.
- 2. Alabama Environmental Management Act (AEMA) means <u>Code of Alabama</u> 1975, §§22-22A-1 et. seq., as amended.

- 3. Alabama Water Pollution Control Act (AWPCA) means <u>Code of Alabama</u> 1975, §§22-22-1 <u>et. seq.</u>, as amended.
- 4. Alkaline mine drainage means mine drainage which, before any treatment, has a pH equal to or greater than 6.0 and total iron concentration of less than 10 mg/l.
- 5. Average monthly discharge limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).
- 6. Arithmetic Mean means the summation of the individual values of any set of values divided by the number of individual values.
- 7. BOD means the five-day measure of the pollutant parameter biochemical oxygen demand
- 8. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- CBOD means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.
- 10. Coal Mine means an area, on or beneath land, used or disturbed in activities related to the extraction, removal, or recovery of coal from natural or artificial deposits, including active mining and reclamation.
- 11. Coal Preparation Plant means a facility where coal is subjected to cleaning, concentrating, or other processing or preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility.
- 12. Coal Preparation Plant Associated Areas means the coal preparation plant yards, immediate access roads, coal refuse piles and coal storage piles and facilities.
- 13. Coal Preparation Plant Water Circuit means all pipes, channels, basins, tanks, and all other structures and equipment that convey, contain, treat, or process any water that is used in coal preparation processes within a coal preparation plant.
- 14. Coal Refuse Disposal Pile means any coal refuse deposited on the earth and intended as permanent disposal or long-term storage (greater than 180 days) of such material, but does not include coal refuse deposited within the active mining area or coal refuse never removed from the active mining area.
- 15. Controlled Surface Mine Drainage means any surface mine drainage that is pumped or siphoned from the active mining area.
- 16. Daily discharge means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.
- 17. Daily maximum means the highest value of any individual sample result obtained during a day.
- 18. Daily minimum means the lowest value of any individual sample result obtained during a day.
- 19. Day means any consecutive 24-hour period.

- 20. Department means the Alabama Department of Environmental Management.
- 21. Director means the Director of the Department or his authorized representative or designee.
- 22. Discharge means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state." Code of Alabama 1975, §22-22-1(b)(8).
- 23. Discharge monitoring report (DMR) means the form approved by the Director to accomplish monitoring report requirements of an NPDES permit.
- 24. DO means dissolved oxygen.
- 25. E. coli means the pollutant parameter Escherichia coli.
- 26. 8HC means 8-hour composite sample, including any of the following:
 - a. The mixing of at least 5 equal volume samples collected at constant time intervals of not more than 2 hours over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
 - b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.
- 27. EPA means the United States Environmental Protection Agency.
- 28. Federal Water Pollution Control Act.(FWPCA) means 33 U.S.C. §§1251 et. seq., as amended.
- 29. Flow means the total volume of discharge in a 24-hour period.
- 30. Geometric Mean means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).
- 31. Grab Sample means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.
- 32. Indirect Discharger means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.
- 33. Industrial User means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.
- 34. mg/L means milligrams per liter of discharge.
- 35. MGD means million gallons per day.
- 36. Monthly Average means, other than for E. coli bacteria, the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for E. coli bacteria is the geometric mean of daily discharge samples collected in a one month period. The monthly average for flow is the arithmetic mean of all flow measurements

taken in a one month period. (Zero discharges shall not be included in the calculation of monthly averages.)

- 37. New Discharger means a person owning or operating any building, structure, facility or installation:
 - a. From which there is or may be a discharge of pollutants;
 - b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and
 - c. Which has never received a final effective NPDES permit for dischargers at that site.

38. New Source - means:

- a. A new source as defined for coal mines by 40 CFR Part 434.11 (1994); and
- b. Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - (1) After promulgation of standards of performance under Section 306 of FWPCA which are applicable to such source; or
 - (2) After proposal of standards of performance in accordance with Section 306 of the FWPCA which are applicable to such source, but only if the standards are promulgated in accordance with Section 206 within 120 days of their proposal.
- 39. NH3-N means the pollutant parameter ammonia, measured as nitrogen.
- 40. 1-year, 24-hour precipitation event means the maximum 24-hour precipitation event with a probable recurrence interval of once in one year as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- 41. Permit application means forms and additional information that are required by ADEM Admin. Code r. 335-6-6-.08 and applicable permit fees.
- 42. Point Source means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. §1362(14).
- 43. Pollutant includes for purposes of this Permit, but is not limited to, those pollutants specified in Code of Alabama 1975, §22-22-1(b)(3) and those effluent characteristics, excluding flow, specified in Part I.A. of this Permit.
- 44. Pollutant of Concern means those pollutants for which a water body is listed as impaired or which contribute to the listed impairment.
- 45. Preparation, Dry means a dry preparation facility within which the mineral/material is cleaned, separated, or otherwise processed without use of water or chemical additives before it is shipped to the customer or otherwise utilized. A dry preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Dry preparation also includes minor water spray(s) used solely for dust suppression on equipment and roads to minimize dust emissions.

- 46. Preparation, Wet means a wet preparation facility within which the mineral/material is cleaned, separated, or otherwise processed using water or chemical additives before it is shipped to the customer or otherwise utilized. A wet preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Wet preparation also includes mineral extraction/processing by dredging, slurry pumping, etc.
- 47. Privately Owned Treatment Works means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".
- 48. Publicly Owned Treatment Works (POTW) means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.
- 49. Receiving Stream means the "waters" receiving a "discharge" from a "point source".
- 50. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 51. 10-year, 24-hour precipitation event means that amount of precipitation which occurs during the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- 52. TKN means the pollutant parameter Total Kjeldahl Nitrogen.
- 53. TON means the pollutant parameter Total Organic Nitrogen.
- 54. TRC means Total Residual Chlorine.
- 55. TSS means the pollutant parameter Total Suspended Solids
- 56. Total Year-to-Date discharge limitation means the sum of the discharge mass flow rates of a pollutant on all previous days within a calendar year. For days when data has not been collected, the mass flow rates shall be assumed to be equal to the most recent calculated daily mass flow rate.
- 57. Treatment facility and treatment system means all structures which contain, convey, and as necessary, chemically or physically treat mine and/or associated preparation plant drainage, which remove pollutants limited by this Permit from such drainage or wastewater. This includes all pipes, channels, ponds, tanks, and all other equipment serving such structures.
- 58. 24HC means 24-hour composite sample, including any of the following:
 - a. The mixing of at least 12 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours:
 - b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or

- c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.
- 59. 24-hour precipitation event means that amount of precipitation which occurs within any 24-hour period.
- 2-year, 24-hour precipitation event means the maximum 24-hour precipitation event with a probable recurrence interval of once in two years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- 61. Upset means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate facilities, lack of preventive maintenance, or careless or improper operation.
- Waters means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the State, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, §22-22-1(b)(2). "Waters" include all "navigable waters" as defined in §502(7) of the FWPCA, 33 U.S.C. §1362(7), which are within the State of Alabama.
- 63. Week means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.
- 64. Weekly (7-day and calendar week) Average is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

E. SEVERABILITY

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

F. PROHIBITIONS AND ACTIVIES NOT AUTHORIZED

- 1. Discharges from disposal or landfill activities as described in ADEM Admin. Code div. 335-13 are not authorized by this Permit unless specifically approved by the Department.
- 2. Relocation, diversion, or other alteration of a water of the State is not authorized by this Permit unless specifically approved by the Department.
- 3. Lime or cement manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.

- 4. Concrete or asphalt manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.
- 5. The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the Permittee or not identified in the application for this Permit or not identified specifically in the description of an outfall in this Permit is not authorized by this Permit.

PART IV SPECIAL REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

A. DISCHARGES TO IMPAIRED WATERS

- 1. This Permit does not authorize new sources or new discharges of pollutants of concern to impaired waters unless consistent with an EPA-approved or EPA-established Total Maximum Daily Load (TMDL) and applicable State law, or unless compliance with the limitations and requirements of the Permit ensure that the discharge will not contribute to further degradation of the receiving stream. Impaired waters are those that do not meet applicable water quality standards and are identified on the State of Alabama's §303(d) list or on an EPA-approved or EPA-established TMDL. Pollutants of concern are those pollutants for which the receiving water is listed as impaired or contribute to the listed impairment.
- 2. Facilities that discharge into a receiving stream which is listed on the State of Alabama's §303(d) list of impaired waters, and with discharges that contain the pollutant(s) for which the waters are impaired, must within six (6) months of the Final §303(d) list approval, document in its BMP plan how the BMPs will control the discharge of the pollutant(s) of concern, and must ensure that there will be no increase of the pollutants of concern. A monitoring plan to assess the effectiveness of the BMPs in achieving the allocations must also be included in the BMP plan.
- 3. If the facility discharges to impaired waters as described above, it must determine whether a TMDL has been developed and approved or established by EPA for the listed waters. If a TMDL is approved or established during this Permit cycle by EPA for any waters into which the facility discharges, the facility must review the applicable TMDL to see if it includes requirements for control of any water discharged by the Permittee. Within six (6) months of the date of TMDL approval or establishment, the facility must notify the Department on how it will modify its BMP plan to include best management practices specifically targeted to achieve the allocations prescribed by the TMDL, if necessary. Any revised BMP plans must be submitted to the Department for review. The facility must include in the BMP plan a monitoring component to assess the effectiveness of the BMPs in achieving the allocations.

B. PRECIPITATION EVENT DISCHARGE LIMITATIONS

1. Monitoring for Claims of Precipitation Event Discharge Limitation Exemption

Any sample of discharge collected in accordance with Parts I.C.1.a. and b. for which the Permittee submits a claim of exemption pursuant to Part IV.B.2., shall be collected within 48 hours after the commencement of the 24-hour precipitation event and prior to the cessation of the discharge or increased discharge. The sample shall be analyzed for each effluent characteristic as specified in Part I.A.2. Within 24 to 36 hours after the cessation of the 24-hour precipitation event, the Permittee shall collect an additional sample of the discharge and shall analyze such sample for each effluent characteristic specified in Part I.A.1. of this Permit.

2. Precipitation Event Discharge Limitation Exemption Submittal

Excluding discharges of drainage from the underground workings of an underground coal mine which are not commingled with other drainage eligible for precipitation event discharge limitations, any discharge or increase in the volume of a discharge which is caused by an applicable 24-hour precipitation event as described in Part IV.B.3. and which occurs during or within 24-hours after such event, may be exempt from the discharge limitations specified in Part I.A. provided that the discharge is addressed in Parts IV.B.4. through 8. and the Permittee submits a written claim of exemption to the Director with the DMR required to be submitted by Part I.D. of this Permit, which shall contain:

- a. Persuasive evidence that the discharge or increase in the volume of a discharge was caused by an applicable 24-hour precipitation event;
- Persuasive evidence of the amount of precipitation occurring during the applicable 24hour precipitation event;
- c. Persuasive evidence demonstrating the origin of the drainage causing a discharge;
- d. The day and time at which the 24-hour precipitation event commenced and ceased;
- e. The volume or amount in inches of the applicable 24-hour precipitation event; and
- f. The results of monitoring conducted pursuant to Part I.A. of this Permit, if required thereby.

3. Applicable 24-Hour Precipitation Events

Applicable 24-hour precipitation events include those that are greater than 1-year, 24-hour precipitation events or less than, equal to, or greater than 2-year, 24-hour precipitation events, and 10-year, 24-hour precipitation events.

4. 24-Hour Precipitation Event Greater Than a 1-Year, 24-Hour Precipitation Event, but Less Than a 10-Year, 24-Hour Precipitation Events

Discharge limitations listed in Part I.A.2. may apply to discharges of acid or ferruginous drainage from coal refuse disposal piles, provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event greater than a 1-year, 24-hour precipitation event, but less than or equal to a 10-year, 24-hour precipitation event.

5. 24-Hour Precipitation Event Less Than or Equal to a 2-Year, 24-Hour Precipitation Event

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from acid or ferruginous mining areas (excluding discharges from steep slope mining areas, discharges from mountaintop removal operations, discharges from controlled surface mine, and discharges from underground workings of underground mines), provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event less than or equal to a 2-year, 24-hour precipitation event.

6. 24-Hour Precipitation Event Greater Than a 2-Year, 24-Hour Precipitation Event, but Less Than a 10-Year, 24-Hour Precipitation Events

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from acid or ferruginous mining areas (excluding discharges from steep slope mining areas, discharges from mountaintop removal operations, discharges from controlled surface mine, and discharges from underground workings of underground mines), provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event greater than a 2-year, 24-hour precipitation event, but less than or equal to a 10-year, 24-hour precipitation event.

7. 24-Hour Precipitation Event Less Than or Equal to a 10-Year, 24-Hour Precipitation Event

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from steep slope mining areas, discharges of drainage from mountaintop removal areas, discharges of alkaline drainage (excluding discharges from underground workings of underground mines and that are not commingled with other discharges), and discharges from coal preparation plant associated areas

(excluding acid or ferruginous mine drainage from coal refuse disposal piles), provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event less than or equal to a 10-year, 24-hour precipitation event.

8. 24-Hour Precipitation Event Greater Than a 10-Year, 24-Hour Precipitation Event

Discharge limitations listed in Part I.A.2. may apply to discharges of drainage from alkaline, acid, or ferruginous mining areas, discharges of steep slope mining areas, discharges of drainage from mountaintop removal operations, discharges of drainage from coal preparation plants and associated areas, discharges of drainage from coal refuse piles, the underground workings of an underground coal mine which are commingled with other discharges eligible for precipitation event discharge limitations, and discharges from reclamation areas, provided that the Permittee has met the submittal requirements of Part IV.B.2., for any discharge or increase in the volume of a discharge caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event.

C. POST-MINING DISCHARGE LIMITATIONS

- 1. Excluding discharges from the underground workings of an underground coal mine, any discharge shall be exempt from the discharge limitations specified in Part I.A.1., provided that:
 - a. All mining in the drainage basin(s) associated with the discharge has ceased;
 - b. Revegetation has been established on all areas mined in the drainage basin(s) associated with the discharge;
 - c. The Permittee has been granted, in writing, a Phase II Bond Release, if applicable, by the ASMC for all areas mined in the drainage basin(s) associated with the discharge;
 - d. The Permittee has certified to the Director, in writing, its compliance with Parts IV.C.1.a. through c.; and
 - e. The Permittee's request for post-mining discharge limitations has been approved by the Department in writing.
- 2. Any discharge, which pursuant to Part IV.C.1. is exempt from the discharge limitations specified in Part I.A.1., shall be limited and monitored by the Permittee as specified in Part I.A.3.

D. pH EXEMPTION DISCHARGE LIMITATIONS

Where the application of neutralization and sedimentation treatment technology results in the Permittee's inability to comply with applicable total manganese discharge limitations, the daily maximum discharge limitation for pH shall be 10.5 s.u. However, the discharge shall not cause the in-stream pH values to deviate more than 1.0 s.u. from the normal or natural pH, nor be less than 6.0 s.u., nor greater than 8.5 s.u. Use of this exemption must be noted on the DMR Form when submitted for each eligible outfall. Documentation justifying the necessity for the exemption must be also be submitted at the time of the associated DMR submittal.

E. MANGANESE EXEMPTION DISCHARGE LIMITATIONS

Limitations and monitoring requirements for total manganese do not apply if the drainage, before any treatment, has a pH equal to or more than 6.0 s.u. and a total iron concentration of less than 10.0 mg/l. Use of this exemption must be noted on the Discharge Monitoring Report (DMR) form when submitted for each

eligible outfall. Documentation of alkaline mine drainage before treatment must also be submitted at the time of or prior to the associated DMR submittal.

F. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR ACUTE TOXICITY

Except as provided below, the Permittee shall perform 48-hour acute toxicity screening tests on the discharges required to be tested for acute toxicity in Part I.A. of this Permit.

The Permittee may certify, in writing, that the activities at the site at the time of sample collection will result in representative discharges, and therefore perform the toxicity tests on only the samples collected from the representative outfalls. The certification must be signed by a responsible official of the Permittee as defined in ADEM Admin Code r. 335-6-6-.09 and include the following statement:

"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."

1. Test Requirements

- a. The tests shall be performed using undiluted effluent.
- b. Any test where survival in the effluent concentration is less than 90% and statistically lower than the control indicates acute toxicity and constitutes noncompliance with this Permit.

2. General Test Requirements

- a. A grab sample shall be obtained for use in above biomonitoring tests. The holding time for each sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-012 or most current edition or another control water selected by the Permittee and approved by the Department.
- b. Effluent toxicity tests in which the control survival is less than 90% or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period.
- c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are reported with an explanation of the tests performed and results.
- d. Should results from five consecutive testing periods indicate that the effluent does not exhibit acute toxicity, the Permittee may request, in writing, that the Toxicity monitoring and reporting requirements be suspended. It remains the responsibility of the Permittee to comply with the Toxicity monitoring and reporting requirements until written authorization to suspend the monitoring and reporting is received by the Permittee from the Director.

3. Reporting Requirements

- a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).
- b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 6. of this part, an effluent toxicity report containing the information in Section 6. shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month in which the tests were performed.

4. Additional Testing Requirements

- a. If acute toxicity is indicated (noncompliance with permit limit), the Permittee shall perform two additional valid acute toxicity tests in accordance with these procedures. The toxicity tests shall be performed on new samples collected during the first discharge event after becoming aware of the acute toxicity. The additional samples shall be collected a minimum of 12 hours apart, or sooner if the discharge is not expected to continue for 12 hours. In the event that the discharge ceases prior to collection of the second additional sample, the sample shall be collected during the beginning of the next discharge event. The results of these tests shall be submitted no later than 28 days following the month in which the tests were performed. Additional testing sample collection and analysis timeframes may be extended, as necessary, to obtain the samples during discharges.
- b. After evaluation of the results of the additional tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The Permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols/guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.).

5. Test Methods

The tests shall be performed in accordance with the latest edition of the "EPA Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" and shall be performed using the fathead minnow (*Pimephales promelas*) and the cladoceran (*Ceriodaphnia dubia*).

6. Effluent Toxicity Testing Reports

The following information shall be submitted with each discharge monitoring report unless otherwise directed by the Department. The Department may at any time suspend or reinstate this requirement or may increase or decrease the frequency of submittals.

a. Introduction

- (1) Facility Name, location and county
- (2) Permit number
- (3) Toxicity testing requirements of permit
- (4) Name of receiving water body

(5) Contract laboratory information (if tests are performed under contract) (i) Name of firm (ii) Telephone number (iii) Address (6) Objective of test Plant Operations (1) Discharge operating schedule (if other than continuous) (2) Volume of discharge during sample collection to include Mean daily discharge on sample collection date (MGD, CFS, GPM) Source of Effluent Water and Dilution Water (1) Effluent samples (i) Sample point (ii) Sample collection dates and times (iii) Sample collection method (iv) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.) Sample temperature when received at the laboratory (v) (vi) Lapsed time from sample collection to delivery (vii) Lapsed time from sample collection to test initiation (2) Dilution Water samples (i) Source (ii) Collection date(s) and time(s) (where applicable) (iii) Pretreatment (if applicable) Physical and chemical characteristics (pH, hardness, water temperature, (iv) alkalinity, specific conductivity, etc.) **Test Conditions** (1) Toxicity test method utilized End point(s) of test (2) (3) Deviations from referenced method, if any, and reason(s)

b.

c.

d.

- (4) Date and time test started
- (5) Date and time test terminated
- (6) Type and volume of test chambers
- (7) Volume of solution per chamber
- (8) Number of organisms per test chamber
- (9) Number of replicate test chambers per treatment
- (10) Test temperature, pH and dissolved oxygen as recommended by the method (to include ranges)
- (11) Feeding frequency, and amount and type of food
- (12) Light intensity (mean)
- e. Test Organisms
 - (1) Scientific name
 - (2) Life stage and age
 - (3) Source
 - (4) Disease treatment (if applicable)
- f. Quality Assurance
 - (1) Reference toxicant utilized and source
 - (2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)
 - (3) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.
 - (4) Physical and chemical methods utilized
- g. Results
 - (1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate
 - (2) Provide table of endpoints: LC50, NOAEC, Pass/Fail (as required in the applicable NPDES permit)
 - (3) Indicate statistical methods used to calculate endpoints
 - (4) Provide all physical and chemical data required by method

- (5) Results of test(s) (LC50, NOAEC, Pass/Fail, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD)
- h. Conclusions and Recommendations
 - (1) Relationship between test endpoints and permit limits
 - (2) Action to be taken

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION

ANTIDEGRADATION RATIONALE

Company Name: Cahaba Resources, LLC

Facility Name: Deerlick West Mine

County: Tuscaloosa

Permit Number: AL0083551

Prepared by: Jasmine White

Date: February 12, 2018

Receiving Waters: Cypress Creek, Yellow Creek, Unnamed Tributary to Yellow Creek

Stream Category: Tier II as defined by ADEM Admin. Code 335-6-10-.12

Discharge Description: This proposed permit covers a shale and/or common clay facility, dry preparation plant,

transportation and storage, and associated areas which discharge to surface waters.

The following preliminary determination was prepared in accordance with ADEM Admin. Code 335-6-10-.12(7)(c):

The Department has reviewed the information submitted by applicant in accordance with ADEM Admin. Code 335-6-10-.12(9). The applicant has demonstrated that there are no technically or economically viable treatment options in its alternatives analysis that would completely eliminate a direct discharge.

The permit applicant has indicated that the following economic and social benefits will result from this project:

- 1. The Permittee notes the issuance of the permit will allow recovery of coal at previously mined locations and ensue reclamation be performed at modern standards that will greatly reduce the discharge of sedimentation from the previously mined areas.
- 2. The Permittee submits that approximately 20 workers will be directly employed for the mining operation along with numerous contractors that will provide support services for the mining operation.
- 3. The Permittee estimates that the facility will pay approximately \$18,000 in state taxes, \$17,000 in fuel taxes, and \$4,050 in coal severance taxes annually.
- 4. The issuance of the permit will allow the Permittee to produce high quality coal to be used by nearby electrical facilities for the production of energy.

The Department has determined that the discharge proposed by the permit applicant is necessary for important economic and social development in the area of the outfall location in the receiving water.

Reviewed By: Catherine McNeill Monage Page 3-28-19

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION

NPDES INDIVIDUAL PERMIT RATIONALE

Company Name: Cahaba Resources, LLC

Facility Name: Deerlick West Mine

County: Tuscaloosa

Permit Number: AL0083551

Prepared by: Jasmine White

Date: March 22, 2019

Receiving Waters: Cypress Creek, Yellow Creek, Unnamed Tributaries to Yellow Creek

Permit Coverage: New Source Coal Mine, Dry Preparation, Transportation, Storage, and Associated

Areas

SIC Code: 1221

The Department has made a tentative determination that the available information is adequate to support initial issuance of this permit.

This proposed permit covers a new source coal mine, dry preparation, transportation and storage, and associated areas.

This proposed permit authorizes treated discharges into Cypress Creek, Yellow Creek, and unnamed tributaries to Yellow Creek that have a water quality use classification of Fish & Wildlife (F&W) (ADEM Admin. Code ch. 335-6-11). Unnamed tributaries flow to a segment of Yellow Creek that is classified as Public Water Supply (PWS). If the requirements of the proposed permit are fully implemented, the facility will not discharge pollutants at levels that will cause or contribute to a violation of these classifications.

Full compliance with the proposed permit terms and conditions is expected to be protective of instream water quality and ensure consistency with applicable instream State water quality standards (WQS) for the receiving streams.

The active discharge limitations for the daily maximum and minimum of pH, and the monthly average and daily maximum of Total Suspended Solids (TSS), Total Iron as Fe, and Total Manganese as Mn are based on the New Source Performance Standards (NSPS) Effluent Limit Guidelines (ELGs) found in 40 CFR Part 434.35 for acid or ferruginous mine drainage.

However, the Permittee may submit documentation that discharges from the site are alkaline mine drainage (i.e., the drainage prior to treatment has a pH equal to or more than 6.0 s.u. and a Total Fe concentration of less than 10.0 mg/L). Part IV.E. of the proposed permit provides that limitations and monitoring requirements for Total Manganese as Mn do not apply if the Permittee has provided the documentation of alkaline mine drainage. In such a case, the active mining discharge limitations for the daily maximum and minimum of pH and Total Iron as Fe are based on the NSPS ELGs found in 40 CFR Part 434.45 for alkaline mine drainage.

The instream water quality standards for pH in streams classified as F&W are 6.0 - 8.5 s.u. per ADEM Admin. Code r. 335-6-10-.09. However, due to the fact that discharges are expected only in response to rain events, it is the opinion of the Department that discharges with an allowable pH daily maximum of 9.0 s.u. will not adversely affect the instream pH based on the low discharge/stream flow ratio.

The ELGs of 40 CFR Part 434.62 allow the pH level in the final discharge to exceed 9.0 s.u. when neutralization and sedimentation treatment technology results in the Permittee's inability to comply with the applicable total manganese limitations. The acidity and metals composition of each discharge is unique and sometimes a pH value of 10.5 is necessary for the removal of manganese. However, the discharge shall not cause the in-stream pH to deviate more than 1.0 s.u. from the normal or natural pH, nor be less than 6.0 s.u., nor greater than 8.5 s.u. in accordance with ADEM Admin. Code r. 335-6-10-.09.

Post-mining discharge limitations are included in addition to the active mining and precipitation event discharge limitations. The post-mining discharge limitations are based on 40 CFR Part 434, Subpart E. This permit is more restrictive than the BAT Guidelines in that the Permittee, in order to qualify for the post-mining discharge limitations, must have received a Phase II Bond Release from the Alabama Surface Mining Commission for all areas mined in the drainage basin(s) associated with the discharge. The reason a Phase II Bond Release is required for post-mining limitations rather than a Phase I Bond Release is that topsoil replacement and the commencement of revegetation are frequently important factors in controlling the effluent quality from a coal mine. The Department has determined that tying the post-mining discharge limitations to the Phase II Bond Release will effectively protect water quality in Alabama as it relates to coal mining.

The precipitation event discharge limitations for the daily minimum and maximum for pH and the daily maximums for Total Iron as Fe and Settleable Solids are afforded under certain conditions and do not apply automatically. These alternative technology based limits are based on the ELGs for precipitation events found in 40 CFR Part 434.63.

Additional effluent monitoring for Specific Conductance, Sulfate as S, Total Dissolved Solids (TDS), and Acute Whole Effluent Toxicity (WET) testing is required so that future determinations can be made as to whether or not a reasonable potential to cause or contribute to an excursion of numeric or narrative WQS exists from this and similar discharges.

The applicant has, in accordance with 40 CFR Part 122.21 and their NPDES permit application, submitted representative effluent and background stream data for metals, cyanide, and total phenols as part of the application. The representative effluent data was obtained from Outfall 026 at the nearby Deerlick Mine (AL0083551) on July 26, 2017. The stream data was obtained in Cypress Creek and Yellow Creek on July 26, 2. The Department has acknowledged that the other Part A, B, and C pollutants listed in EPA Form 2C and 2D are not believed to be present in the waste stream due to the processes involved in the mining activity. Therefore, testing for the other Part A, B, and C pollutants listed in EPA Form 2C and 2D is not required. The Department has reviewed available data in ALAWADR, ADEM's water quality database, and found nothing to contradict the data submitted by the applicant.

The Department completed a reasonable potential analysis (RPA) of the discharges based on the laboratory data provided in the application. The RPA indicates whether or not pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream WQS. Based on the analytical data submitted by the Permittee, the RPA indicates that there was no reasonable potential for instream WQS to be exceeded.

Because the representative laboratory data submitted by the Applicant and used by the Department in completing the RPA came from a different mining operation, Part II.C.3. of the proposed permit requires the submittal of effluent data for metals, cyanide, and total phenols from the Deerlick West Mine within six months of the effective date of the permit. If no discharges occur within the first six months, the data is required to be submitted within six months of the first discharge. The permit may be reopened if necessary to address any new information resulting from the submittal of the new discharge data.

Pursuant to ADEM Admin. Code r. 335-6-6-.12(r) this permit requires the Permittee to design and implement a Spill Prevention Control and Countermeasures (SPCC) plan for all stored chemicals, fuels and/or stored pollutants that have the potential to discharge to a water of the State. This plan must meet the minimum engineering requirements as defined in 40 CFR Part 112 and must provide for secondary containment adequate to control a potential spill.

In accordance with ADEM Admin. Code r. 335-6-3-.07 the design professional engineer (PE), as evidenced by their seal and/or signature on the application, has accepted full responsibility for the effectiveness of the waste treatment

facility to treat the Permittee's effluent to meet NPDES permit limitations and requirements, and to fully comply with Alabama's WQS, when such treatment facilities are properly operated.

The Pollution Abatement/Prevention (PAP) plan for this facility has been prepared by a PE registered in the State of Alabama and is designed to ensure reduction of pollutants in the waste stream to a level that, if operated properly, the discharge will not contribute to or cause a violation of applicable State WQS. By Memorandum of Understanding with the Alabama Surface Mining Commission (ASMC) the PAP for coal operations is reviewed/approved by ASMC. The proposed permit terms and conditions are predicated on the basis of ensuring a reduction of pollutants in the discharge to a level that reduces the potential of contributing to or causing a violation of applicable State WQS.

If there is a reasonable potential that a pollutant present in the treated discharges from a facility could cause or contribute to a contravention of applicable State WQS above numeric or narrative criteria, 40 CFR § 122 requires the Department to establish effluent limits using calculated water quality criterion, establish effluent limits on a case-by-case basis using criteria established by EPA, or establish effluent limits based on an indicator parameter. Based on available information, potential pollutants discharged from this facility, if discharged within the concentrations allowed by this permit, would not have a reasonable potential to cause or contribute to a contravention of applicable State WQS.

The applicant is not proposing discharges into a stream segment or other State water that is included on Alabama's current CWA §303(d) list.

The applicant is not proposing discharges of pollutant(s) to a water of the State with an approved Total Maximum Daily Load (TMDL).

The applicant is not proposing discharges of pollutant(s) to an ADEM identified Tier I water.

The proposed permit action authorizes new discharges of pollutants to receiving waters determined by the Department to be waters where the quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (Tier II). Pursuant to ADEM Admin. Code r. 335-6-10 (Antidegradation Policy and Implementation of the Antidegradation Policy), the applicant has submitted and the Department has reviewed and considered information regarding (1) demonstration of necessity/importance, (2) alternatives analysis, and (3) calculations of total annualized costs for technically feasible treatment alternatives regarding the proposed new discharges to Tier II waters. The Department has determined, based on the applicant's demonstration, that the proposed new discharges to the Tier II waters are necessary for important economic or social development in the area in which the waters are located.

	Facility Name	· Cal	aha Dacau	rear IICD	Apriliak Most											,							
	NPDES No.	_			1-1 through		-1 123				•												
											· 					Human Healt	h Consumpt	on Fish & Wate	r (µg/l)	Human Hea	ith Consum	plion Fish only ((μg/l)
	Freshwater PWS classific	ation.				ater Acute (µg/	l) Q, =1Q10				Freshwa	ter Chronic (µg/i) Q, = 7Q10					nnual Average a Q _a = 7Q10				nnual Average n Q ₁ = 7Q10	
۵۱	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant ⁴ (C _{dmax})		Draft Permit Limit (C _{dme})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Dally Discharge as reported by Applicant (C _{desp})	Water Quality Criteria (C,)	Draft Permit Limit (C _{dang})		RP7	Water Quality Criteria (C _i)	Draft Permit Limit (C _d)	20% of Draft Permit Limit	RP7	Water Quality Criteria (C _r)	Draft Permit Limit (C _d)	20% of Draft Permit Limit	RP*
	Antimony Arsenic Berylum Cadmium Chromium VI Chromium/ Chromium VI Copper Lead Mercury		YES _	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	34.637 138.290 2.400	592.334 8.533 2713.159 16.000 34.637 138.290 2.400	6.92737797 27.6579793 0.48	No No No No No No No No No No No No No N	0 0 0	0 0 0	261,324 1,042 352,926 11,000 23,082 5,389 0,012	261.324 1.042 352.926 11.000 23.082 5.389 0.012	0.2084716 70.585259 2.2 4.6163667 1.0777917 0.0024	5 5 5 5 5 6	5.52E+00 2.10E-01 3.35E+03 1.39E-01	4.61E-01 4.61E-01 3.35E+03	2.78E-02	No No No No	1,40E-01	3.75E+02 1.16E+00 3.35E+03	2.32E-01 6.70E+02 2.81E-02	No No No
1 12 13 14 15 16	Nīckei Selenium Silver Thatīium Zinc Cyanide Total Phenolic Compounds Hārdñēss (Aš CaCO3)			0 0 0 0 0	0 0 0 0 0 0	927,200 20,000 3,217 355,092 22,000	927.200 20.000 3.217 355.092 22.000	1 185.439913 0.64335145 71.0184571 4.4	No	0 0 0 0		102.983 5.000 - 357.997 5.200	102.983 5.000 357.997 5.200	1	22 22	1.87E+04	8.13E+02 1.63E+02 1.74E-01 1.87E+04 1.38E+02	3.26E+01 3.47E-02 3.73E+03	No No No No No	1.97E+03 2.43E+03	1.97E+03 2.43E+03 2.74E-01 4.51E+04 9.33E+03	3.93E+02 4.86E+02 5.47E-02 9.03E+03	No No No No No

Oblinate on Financing in the access many and in the calculations. This is the receiving stream flow value used in the calculations. "A hardness of 100 mg/L as used in the calculations," A hardness of 100 mg/L as used in the calculations, "A hardness of 100 mg/L as used in the calculations based on Information provided in the application.

Outfalls 001-1 through 019-1 & 043-1 discharge to unnamed tributaries to Yellow Creek. The 7Q10 for the receiving stream was estimated to be 0 cfs,

	Facility Name:	Cahab	a Resources,	LLC-Deerlick V	Vest				_					_					
	NPDES No.:	AL008	3551	Outfalls 020-1	through 036-1	& 040-1 through	042-1 ¹²³												
											•					Human Hea	Ith Consump	tion Fish only	(<u>µg/l)</u>
	Freshwater F&W class	ificatio	on,		Freshw	ater Acute (µg/l)	Q _s ≈1Q10				Freshwate	r Chronic (µg/i)	Q _s = 7Q10				ogen Q₅ ≈ Aı -Carcinogen	nnual Average Q _s = 7Q10	
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant ⁴ (C _{dmax})	Water Quality Criteria (C _r)	Draft Permit Limit (C _{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (C _{davg}) ⁴	Water Quality Criteria (C _r)	Draft Permit Limit (C _{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C _r)	Draft Permit Limit (C _{davg})	20% of Draft Permit Limit	RP?
	Antimony			0	0	-			-	0	0				E	3.73E+02	3.73E+02	7.47E+01	No
	Arsenic Berylium	-	YES	0	0	340.000	340.000	68,000	No	0	0_	150.000	150.000	30.000	No	3.03E-01	6.58E+00	1.32E+00	No
-	Cadmium		<u>-</u>	0	0	8.533	8.533	1.707	 No	-		1.042	1.042		<u> </u>				-
	Chromium/ Chromium III	·		0	0 -	569.763	569,763		No.	l	<u> </u>	352,926	352,926	0.208 70,585	No No		<u> </u>		
	Chromium/ Chromium VI			ŏ -	0	16.000	16.000	113.953 3.200	No		ļ <u>.</u> -	11.000	11,000	2.200	No		-	:	. <u></u>
	Copper			o	0	34.637	34.637	6.927	No	-n -	'n	23.082	23.082	4.616	No	1.30E+03	1.30E+03	2.60E+02	Nto.
	Lead			0	0	138.290	138,290	27.658	-No	0	<u> </u>	5.389	5.389	1.078	No	1.502.105	1.002.703	2.000-02	INU
9	Mercury			0 —	0	2.400	2,400	0.480	No	0		0.012	0.012	0.002	No	4.24E-02	4.24E-02	8.48E-03	No
10	Nickel		ļ į	0	ō	927.200	927.200		No	0	70	102,983	102.983	20.597	Ño	9.93E+02	9.93E+02	1.99E+02	No
	Selenium			0	0 -	20,000	20.000		No	o -	t o ·	5,000	5.000	1.000	No	2.43E+03	2.43E+03	4.86E+02	' No
	Silver			0	0	3.217	3.217	0.643	No	0	0	-	-	-	Η-				****** %
	Thallium			0	0	-			-	0	0	-	-	-	Ι-	2.74E-01	2.74E-01	5.47E-02	No
	Zinc			0	0	117.180	117.180	23,436	No	0	0	118.139	118.139	23,628	No		1.49E+04		No
	Cyanide			0	Ö	22.000	22.000	4.400	No	0	0	5.200	5.200	1.040	No	9,33E+03	9.33E+03	1.87E+03	No
	Total Phenolic Compounds Hardness (As CaCO3)	l.		.0	0					0	0			- :-		- -			-

¹Outfalls 020-1 through 038-1 & 040-1 through 042-1 discharge to Cypress Creek. The 7Q10 for the receiving stream was estimated to be 0 cfs. This is the receiving stream flow value used in the calculations.

²Outfall 028-1 is reported to have the highest discharge flow rate of 0.107 MGD. This is the discharge flow rate used in the calculations.

³A hardness of 100 mg/L was used in the calculations based on information provided in the application.

Discharge data for all parameters are the results of samples obtained from Outfall 026-1 at Deerlick Mine on July 26, 2017

	Facility Name:	Cahat	a Resources,	LLC-Deerlick V	Vest		-		_										
	NPDES No.:	AL008	3551	Outfalls 037 th	rough 039-1 12	3	_		U										
					_						•					Human Heal	th Consump	tion Fish only	(Łg/l)
	Freshwater F&W class	ificatio	on.		Freshw	ater Acute (µg/l)	Q _s =1Q10				Freshwate	r Chronic (µg/l)	Q _s = 7Q10				gen Q _s = Ar Carcinogen	nnual Average Q _s = 7Q10	
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant ⁴ (C _{dmax})	Water Quality Criteria (C _r)	Draft Permit Limit (C _{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (C _{davg}) ⁴	Water Quality Criteria (C _r)	Draft Permit Limit (C _{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C _r)	Draft Permit Limit (C _{davg})	20% of Draft Permit Limit	RP?
	1 Antimony	-	YES	_ 0	. 0	-	: .			_ 0	0	- ,	-	-	-	3,73E+02	3.73E+02	7.47E+01	No
	2 Arsenic 3 Berylium		YES	0	0	340.000	340,000	68.000	No	0	0	150.000	150.000	30.000	Νo	3.03E-01	9.14E+00	1.83E+00	No
	4 Cadmium	F 1904		-		8.533	8.533	1.707	No		,	1.042	1.042	0,208	 -	<u> </u>	-	-	
	5 Chromlum/ Chromium III	- 1000			<u> </u>	569.763	569.763	113.953	No	l	(0	352.926	352,926		No		<u>-</u>		اـــــــا
	6 Chromium/ Chromium VI		- '	o		16,000	16.000	3.200	No	ő	, š	11.000	11.000	70.585	No				
7	7 Copper			0	- 0	34.637	34,637	6.927	No	0	- 6	23.082	23.082	4.616	No	1,30E+03	1.30E+03	2.60E+02	No.
	B Lead			0 -	0	138.290	138.290	27.658	Ño	ō	!	5.389	5.389	1.078	, No	-	-		
	Mercury			0	0	2.400	2.400	0.480	Νo	0		0.012	0.012	0.002	No	4.24E-02	4.24E-02	8,48E-03	No
	Nickel			0	o"	927.200	927.200	185.440	Νo	0	. 0	102.983	102.983	20.597	No	9.93E+02	9.93E+02	1.99E+02	١Ñ٥
11	1 Setenium			0	. 0	20,000	20.000	4.000	No	0	0	5.000	5.000	1.000	No	2.43E+03	2.43E+03	4.86E+02	Νo
	2 Silver			0	0	3.217	3.217	0.643	No	0	0		-	-			-		-
	3 Thallium			0	0	-				0	0			·		2.74E-01	2.74E-01	5.47E-02	, No
	4 Zinc			0	L. O	117,180	117.180		No	_0	. 0	118.139	118,139	23.628	No	1.49E+04			Ño
-	Cyanide			0	0	22.000	22.000	4.400	No	0	0	5.200	5.200	1.040	, No	9,33E+03	9.33E+03	1.87E+03	No
	Total Phenolic Compounds Hardness (As CaCO3)			0	0	-		-	-	0	0	- 1		-	1 -		- i -	-	. :

Outfalls 037-1 through 039-1 discharge to Yellow Creek. The 7Q10 for the receiving stream was estimated to be 0 cfs. This is the receiving stream flow value used in the calculations.

²Outfall 037-1 is reported to have the highest discharge flow rate of 0.076 MGD. This is the discharge flow rate used in the calculations.

A hardness of 100 mg/L was used in the calculations based on information provided in the application.

Discharge data for all parameters are the results of discharge monitoring report data and samples obtained from Outfall 028-1 at Deerlick Mine on July 26, 2017

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM) NPDES INDIVIDUAL PERMIT APPLICATION

SURFACE & UNDERGROUND MINERAL & ORE OR MINERAL PRODUCT MINING, QUARRYING, EXCAVATION, BORROWING, HYDRAULIC MINING, STORAGE, PROCESSING, PREPARATION, RECOVERY, HANDLING, LOADING, STORING, OR DISPOSING ACTIVITIES AND ASSOCIATED AREAS INCLUDING PRE-MINING SITE DEVELOPMENT, CONSTRUCTION, EXCAVATION, CLEARING, DISTURBANCE, RECLAMATION, AND

ASSOCIATED AREAS INSTRUCTIONS: COMPLETE ALL QUESTIONS. RESPOND WITH "N/A" AS APPROPRIATE. INCOMPLETE OR INCO ANSWERS OR MISSING SIGNATURES WILL DELAY PROCESSING. ATTACH ADDITIONAL COMMENTS OF INFORMATIVEDED. IF SPACE IS INSUFFICIENT, CONTINUE ON AN ATTACHED SHEET(S) AS NECESSARY COMMENCEDED. INCOMPLETE OR INCORRECT ACTIVITIES APPLIED FOR AS DETAILED IN THIS APPLICATION ARE NOT AUTHORIZED UNTIL PERMIT COVERAGE HA ISSUED BY THE DEPARTMENT. FEB 0 4 2019 PLEASE TYPE OR PRINT IN INK ONLY. MANAGEMENT BRANCH PURPOSE OF THIS APPLICATION Initial Permit Application for New Facility Initial Permit Application for Existing Facility (e.g. facility previously permitted less than 5 acres) Reissuance & Modification Existing Permit Modification of Existing Permit Reissuance of Existing Permit Reissuance & Transfer of Existing Permit Revocation and Reissuance of Existing Permit Other I. GENERAL INFORMATION NPDES Permit Number (Not applicable if initial permit application): County(s) in which Facility is Located: Tuscaloosa Facility Name (e.g., Mine Name, Pit Name, etc.): Company/Permittee Name: Deerlick West Mine Cahaba Resources, LLC Mailing Address of Company/Permittee: Physical Address of Facility (as near as possible to entrance): PO Box 122 13413 Lake Harris Rd. State: Zip: City: State: Zip: City: 35490 AL 35406 AL Tuscaloosa Vance Permittee Phone Number: Permittee Fax Number: Latitude and Longitude of entrance: (205) 556-8380 N/A 33.275567 Responsible Official Title: Responsible Official (as described on page 13 of this application): Randall E. Crawford Managing Member Physical Address of Responsible Official TORM WATER Mailing Address of Responsible Official: MANAGEMENT BRANCHIP: 15567 Highway 216 P.O. Box 122 City: State: Zip: City: Vance AL 35490 Brookwood

Facility Contact: Randall E. Crawford			Facility Contact Title: Managing Member	
Physical Address of Faci 13413 Lake Harris R			Phone Number of Facility Contact: (205) 556-8380	Fax Number of Facility Contact: (205) 553-3175
City: Tuscaloosa	State:	Zip: 35406	Email Address of Facility Contact: cahabaresources@bellsouth.net	

Fax Number of Responsible Official:

205-553-3175

Email Address of Responsible Official: cahabaresources@bellsouth.net

Phone Number of Responsible Official:

(205) 556-8380

ADEM Form 315 07/15 m4 Page 1 of 12

11. N	MEMBER INFORMATION				
A.	Identify the name, title/position, and partner, LLC member, investor, dir record or beneficial owner of 10 per with legal or decision making respon	rector, or person performing a i	function similar to a dire ing stock of the applicant	ector, of the applicant, and each pe	rson who is the
Na	iine:	Title/Position:	•	esidence (P.O. Box is Not Acceptabl	e)
	ANDALL E. CRAWFORD	MANAGING MEMBER	•	D, BROOKWOOD, AL 35444	
D	ENNIS N. CRAWFORD	MANAGING MEMBER		11 NORTH, VANCE, AL 354	14
D	ENA R. CRAWFORD	MANAGING MEMBER		D, BROOKWOOD, AL 35444	
В.	Other than the "Company/Permittee for which any individual identified in performing a function similar to a d five year (60 month) period immediate	in Part II.A. is or was an officer, firector, or principal (10% or mo lately preceding the date on which	, general partner, LLP pa ore) stockholder, that had ch this form is signed:	rtner, LLC member, investor, direct I an Alabama NPDES permit at any	or, or individual time during the
As	time of Corporation, Partnership, ssociation, or Single Proprietorship:	Name of Individua	al from Part II.A.:	Title/Position in Corporati Association, or Single Pro	
N	one				<u> </u>
	<u> </u>		Manager and the second		
		t produce and another second	an san	is exercised and the second se	
111.	LEGAL STRUCTURE OF APPLIC				
Ą.	Indicate the legal structure of the "C	Company/Permittee" listed in Par	rt I:		
	☐ Corporation ☐ Associatio	on 🔲 Individual 🔲	Single Proprietorship	Partnership	A rrc
	☐ Government Agency:		[] Other:	Carlo a grandamenta anticologia de la granda	
В.	If not an individual or single propri standing with the Alabama Secretar	y of State's Office? (If the answ	ver is "No," attach a letter	r of explanation.)	Yes 🔲 No
C.	Parent Corporation and Subsidiary C		y: None		
D.	Land Owner(s): See approved	permit map.	<u>,,</u>	SEE ATTACH	HMENT A.2
E.	Mining Sub-contractor(s)/Operator(s), ir known: None			<u> </u>
		<u> </u>	<u> </u>	* - * * * * * * * * * * * * * * * * * *	<u></u>
IV.	COMPLIANCE HISTORY				
A.	Has the applicant ever had any of th	ic following:	₹ #		350-7
	(1) An Alabama NPDES, SJD, or U	JIC permit suspended or termine	Yes No ated?		
	(2) An Alabama license to mine sur	• • • • • • •			
	(3) An Alabama or federal mining	permit suspended or terminated			. مورات شد
	(4) A reclamation bond, or similar	security deposited in lieu of a br	and, or partion thereof, fo	orfeited?	Yes No
	Management, forfeited?	esited in lieu of a bond, or portion bama Water Improvement Com- response to any item of Part IV.	mission or Alabama Dep	artment of Environmental	
В.	Identify every Warning Letter, No subsidiary, general partner, LLP pa date on which this form is signed violations, and indicate date of final None	artner, or LLC member and filed. Indicate the date of issuance	d by ADEM or EPA dur	ligation issued to the applicant, paring the three year (36 months) period violations, list actions (if any)	od preceding the
					-
	energen energen er en			and the state of t	
l				<u> </u>	

ADEM Form 315 07/15 m4 Page 2 of 12

V. OTHER PERMITS/AUTHORIZATIONS	
A. List any other NPDES or other environmental permits (including permit numbers issued within the State by ADEM, EPA, Alabama Surface Mining Commission or other agency, to the applicant, parent corporation, subsidiary, or LLC member suspended, revoked, or terminated:	(ASMC), Alabama Department of Industrial Relations (ADIR),
There are none.	
B. List any other NPDES or other ADEM permits (including permit numbers), auth	recitations or certifications that have been applied for or issued
within the State by ADEM, EPA, ASMC, or ADIR, to the applicant, parent corp	poration, subsidiary, or LLC member for other facilities whether
presently effective, expired, suspended, revoked, or terminated: ASMC P-3986, P-3872, P-3977, P3895, P-3965. ADEM AL0082414,	AL 0077007 AL 0078107 AL 0082693
ASMC F-3800, F-3012, F-3811, F3883, F-3800. ADDITIOUSZTIT,	ALDOTT OST, ALDOTO TOT, ALDOOLOGO.
VI. PROPOSÉD SCHEDULE	
Anticipated Activity Commencement Date: January 2018 Anticipated	ated Activity Completion Date:January 2023
VII. ACTIVITY DESCRIPTION & INFORMATION	
A. Proposed Total Area of the Permitted Site: 747.4 acres Proposed Total	al Disturbed Area of the Permitted Site: 747.4 acres
B. Township(s), Range(s), Section(s): Township 20 South, Range 9 West, 8	Sections 22, 23, 26, 27, and 34.
C. Detailed Directions to Site: From Intersection of New Watermelon Rd.	and Lake Nicol Rd., head southeast on Lake Nicol
Rd. for 2.7 miles. Turn right on to Lake Harris Rd. for 2.5 miles. The	entrance will be on the left.
	Vac Na
D. 1st will this facility: (1) an existing facility which currently results in discharges to State waters?	Yes No
(2) a proposed facility which will result in a discharge to State waters?	
(3) be located within any 100-year flood plain?	HH
(4) discharge to Municipal Separate Storm Sewer? (5) discharge to waters of or be located in the Coastal Zone?	i i
(6) need/have ADEM UIC permit coverage?	
(7) be located on Indian/historically significant lands?	H N
(8) need/have ADEM SID permit coverage? (9) need/have ASMC permit coverage?	z č
(10) need/have ADIR permit coverage?	
 (11) generate, treat, store, or dispose of hazardous or toxic waste? (If "Yes," at (12) be located in or discharge to a Public Water Supply (PWS) watershed or be 	
(12) be located in or discharge to a Public Water Supply (PWS) watershed or be	Hocard wanti 22 mile or day? Fro wear 22 LJ
VIII. MATERIAL TO BE REMOVED, PROCESSED, OR TRANSLOADED	the state of the s
List relative percentages of the mineral(s) or mineral product(s) that are proposed processed, handled, transloaded, or disposed at the facility. If more than one miner	
by tonnage for the life of the mine.	
Dirt &/or ChertSand &/or GravelChalk	TaleCrushed rock (other)
BentoniteIndustrial SandMarble	Shale &/or Common Clay Sandstone
100% Coal Knolin Coal fines/refuse recovery	Coal product, cokeSlag, Red Rock
Fire clayIron oreDimension stone	Phosphate rockGranite
Bauxitic ClayBauxite OreLimestone, crushed limes	stone and dolomite
Gold, other trace minerals:	Other:
Other:	Other:

ADEM Form 315 07/15 m4 Page 3 of 12

Other:

Other:

۸.	PROPOSED ACTIVITY TO BE CONDUCTED				
	Type(s) of activity presently conducted at applicant's ex	sting faci	lity or proposed to b	e conducted at facility (cl	eck all that apply):
	☑ Surface mining ☐ Underground mining		Quarrying	☐ Auger mining	☐ Hydraulic mining
	☐ Within-bank mining ☐ Solution mining	V	Mineral storing	☐ Lime production	☐ Cement production
	☐ Synthetic fuel production ☐ Alternative fuels open	tion 🛮	Mineral dry process	ing (crushing & screening) Mineral wet preparation
	☐ Other beneficiation & manufacturing operations	Z	Mineral loading	☐ Chemical processing	or leaching
	Construction related temporary borrow pits/areas	Ø	Mineral transportati	onrailbarge 🗸	truck
	☐ Preparation plant waste recovery		Hydraulic mining, d	lredging, instream or betw	een stream-bank mining
	Grading, clearing, grubbing, etc.		Pre-construction po	nded water removal	
	☑ Pre-mining logging or land clearing		Waterbody relocation	on or other alteration	☐ Creek/stream crossings
	Onsite construction debris or equipment storage/disp	osal 🔲	Onsite mining debri	is or equipment storage/di	sposal
	☑ Reclamation of disturbed areas		Chemicals used in p	process or wastewater trea	ment (coagulant, biocide, etc.)
	☐ Adjacent/associated asphalt/concrete plant(s)		Low volume sewage	e treatment package plant	
	Other:				·
,,	Primary SIC Code: 1221 Description	Surfac	ce Mining of Bitu	minous Coal	
В.			ce Mining of Bitu		
C.	Narrative Description of the Activity: Surface mining	of coal	using mobile eq	uipment.	and the same of th
L		· · · · · ·			
X.	FUEL – CHEMICAL HANDLING, STORAGE & SPILI			& COUNTERMEASURI	
A.	Will fuels, chemicals, compounds, or liquid waste be us	d or stor	ed onsite?		Yes No
8.	If "Yes," identify the fuel, chemicals, compounds, or lie	uid waste	and indicate the vol	ume of each:	
	Volume Contents Volu	te	Contents	Volume	Contents
	10000 gallons Diesel Fuel 500	gallons	Transmission Fl	uld 100 gallon	Waste Oil
	500 gallons Motor Oil 500	galtons	Hydraulic Oil	gallon	
	39330330	Edutions.			
l	•				
C,		and con	itent, including diag	rams, must be attached to	application in accordance with
C.	ADEM Admin. Code R. 335-6-6-,12(r). Unless w	ived in	writing by the De	rams, must be attached to	o application in accordance with natic, categorical, or individual
C.	If "Yes," a detailed SPCC Plan with acceptable forms ADEM Admin. Code R. 335-6-6-,12(r). Unless we compount/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal.	ived in	writing by the De	rams, must be attached to	o application in accordance with natic, categorical, or individual
	ADEM Admin. Code R. 335-6-6-,12(r). Unless w compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal.	ived in (MSDS)	writing by the De	rams, must be attached to	o application in accordance with natic, categorical, or individual to be used at the facility must be
XI,	ADEM Admin. Code R. 335-6-6-,12(r). Unless w compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) 1	ived in (MSDS)	writing by the De- for chemicals/comp	rams, must be attached to partment on a programmounds used or proposed to	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1
XI,	ADEM Admin. Code R. 335-6-6-,12(r). Unless w compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal.	ived in (MSDS)	writing by the De- for chemicals/comp	rams, must be attached to partment on a programmounds used or proposed to	o application in accordance with natic, categorical, or individual to be used at the facility must be
X1,) A.	ADEM Admin. Code R. 335-6-6-,12(r). Unless w compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance completed and is attached as part of this application.	(MSDS)	writing by the Defor chemicals/comp	rams, must be attached to partment on a programm ounds used or proposed to 335-6-903 has been	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1
XI,	ADEM Admin. Code R. 335-6-6-,12(r). Unless w compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance.	(MSDS)	writing by the Defor chemicals/comp	rams, must be attached to partment on a programm ounds used or proposed to 335-6-903 has been	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1
X1,) A.	ADEM Admin. Code R. 335-6-6-,12(r). Unless we compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance completed and is attached as part of this application. For coal mining facilities, a detailed PAP Plan has been for ASMC regulated facilities.	LAN with AD	writing by the Defor chemicals/comp DEM Admin, Code r. I to ASMC according	rams, must be attached to partment on a programs sounds used or proposed to 335-6-903 has been g to submittal procedures	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1
X1,) A.	ADEM Admin. Code R. 335-6-6-,12(r). Unless we compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance completed and is attached as part of this application. For coal mining facilities, a detailed PAP Plan has been for ASMC regulated facilities. (1) If "Yes" to Part XI.B., provide the date that the PAP.	LAN with AD	writing by the Derfor chemicals/comp DEM Admin. Code r. I to ASMC according as submitted to ASM	rams, must be attached to partment on a programs sounds used or proposed to 335-6-903 has been g to submittal procedures	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1 Yes No
X1,) A.	ADEM Admin. Code R. 335-6-6-,12(r). Unless we compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance completed and is attached as part of this application. For coal mining facilities, a detailed PAP Plan has been for ASMC regulated facilities.	LAN with AD	writing by the Derfor chemicals/comp DEM Admin. Code r. I to ASMC according as submitted to ASM	rams, must be attached to partment on a programs sounds used or proposed to 335-6-903 has been g to submittal procedures	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1 Yes No
XI.	ADEM Admin. Code R. 335-6-6-,12(r). Unless we compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance completed and is attached as part of this application. For coal mining facilities, a detailed PAP Plan has been for ASMC regulated facilities. (1) If "Yes" to Part XI.B., provide the date that the PA (2) If "No" to Part XI.B., provide the anticipated date to the compound of the control of the	LAN with AD	writing by the Derfor chemicals/comp DEM Admin. Code r. I to ASMC according as submitted to ASM	rams, must be attached to partment on a programs sounds used or proposed to 335-6-903 has been g to submittal procedures	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1 Yes No
XI.	ADEM Admin. Code R. 335-6-6-,12(r). Unless we compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance completed and is attached as part of this application. For coal mining facilities, a detailed PAP Plan has been for ASMC regulated facilities. (1) If "Yes" to Part XI.B., provide the date that the PAP.	LAN with AD	writing by the Derfor chemicals/comp DEM Admin. Code r. I to ASMC according as submitted to ASM	rams, must be attached to partment on a programs sounds used or proposed to 335-6-903 has been g to submittal procedures	o application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1 ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No
XI. A. B.	ADEM Admin. Code R. 335-6-6-,12(r). Unless we compound/chemical basis, Material Safety Data Sheets included in the SPCC Plan submittal. POLLUTION ABATEMENT & PREVENTION (PAP) I For non-coal mining facilities, a PAP Plan in accordance completed and is attached as part of this application. For coal mining facilities, a detailed PAP Plan has been for ASMC regulated facilities. (1) If "Yes" to Part XI.B., provide the date that the PA (2) If "No" to Part XI.B., provide the anticipated date to ASMC REGULATED ENTITIES	LAN with AD submitted	writing by the Defor chemicals/comp DEM Admin, Code r. I to ASMC according as submitted to ASM AP Plan will be subm	rams, must be attached to partment on a programs sounds used or proposed to 335-6-903 has been g to submittal procedures C:	application in accordance with natic, categorical, or individual to be used at the facility must be SEE ATTACHMENT B.1 Yes No Yes No

ADEM Form 315 07/15 m4 Page 4 of 12

XIII. TOPOGRAPHIC MAP SUBMITTAL

Attach to this application a 7.5 minute series U.S.G.S. topographic map(s) or equivalent map(s) no larger than, or folded to a size of 8.5 by 11 inches (several pages may be necessary), of the area extending to at least one mile beyond property boundaries. The topographic or equivalent map(s) must include a caption indicating the name of the topographic map, name of the applicant, facility name, county, and township, range, & section(s) where the facility is located. Unless approved in advance by the Department, the topographic or equivalent map(s), at a minimum, must show:

- (a) An accurate outline of the area to be covered by the permit
- (b) An outline of the facility

- All surrounding unimproved/improved roads
- (c) All existing and proposed disturbed areas
- High-tension power lines and railroad tracks

(d) Location of discharge areas

- Buildings and structures, including fuel/water tanks
- (c) Proposed and existing discharge points
- Contour lines, township-range-section lines (I)
- (f) Perennial, intermittent, and ephemeral streams Lakes, springs, water wells, wetlands
- (m) Drainage patterns, swales, washes (n) All drainage conveyance/treatment structures (ditches, berms, etc.)
- (h) All known facility dire/improved access/haul roads (o) Any other pertinent or significant feature

SEE ATTACHMENT A.1

XIV. DETAILED FACILITY MAP SUBMITTAL

Attach to this application a 1:500 scale or better, detailed auto-CAD map(s) or equivalent map(s) no larger than, or folded to a size of 8.5 by 11 inches (several pages may be necessary), of the facility. The facility map(s) must include a caption indicating the name of the facility, name of the applicant, facility name, county, and township, range, & section(s) where the facility is located. Unless approved in advance by the Department, the facility or equivalent map(s), at a minimum, must show:

- (a) Information listed in Item XII (a) (o) above
- (e) Location of mining or pond cleanout waste storage/disposal areas.
- (b) If noncoal, detailed, planned mining progression (c) If noncoal, location of topsoil storage areas
- (f) Other information relevant to facility or operation (g) Location of facility sign showing Permittee name, facility name, and NPDES Number
- (d) Location of ASMC bonded increments (if applicable)

SEE ATTACHMENT A.2

XV. RECEIVING WATERS

List the requested permit action for each outfall (issue, reissue, add, delete, move, etc.), outfall designation including denoting "E" for existing and "P" for proposed outfalls, name of receiving water(s), whether or not the stream is included in a TMDL, latitude and longitude (to seconds) of location(s) of each discharge point, distance of receiving water from outfall in feet, number of disturbed acres, the number of drainage acres which will drain through each treatment system, outfall, or BMP, and if the outfall discharges to an ADEM listed CWA Section 303(d) waterbody segment at the time of application submittal.

Action	Outfall E/P	Receiving Water	Latitude	Longitude	Distance to Rec. Water	Disturbed Acres	Drainage Acres	ADEM WUC	303(d) Segment (Y/N)	TMDL Segment* (Y/N)
SEE A	TACHM	ENT D.1								
					<u>-</u>					ļ
				•						3.
			ļ	<u> </u>	<u> </u>					
·	<u> </u>		 							
	<u> </u>		 							
					,					
	ļ		 	<u> </u>						
l	[[1			l			

*If a TMDL Compliance Schedule is requested, the following should be attached as supporting documentation: (1) Justification for the requested Compliance Schedule (e.g. time for design and installation of control equipment, etc.); (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be reported as available); (3) Requested interim limitations, if applicable; (4) Date of final compliance with the TMDL limitations; and (5) Any other additional information available to support the requested compliance schedule.

A. Modified EPA Form 2C Submittal Yes, pursuant to 40 CFR 122.21, the applicant requests a waiver for completion of the modified EPA Form 2C and certifies that the operating facility will discharge treated stormwater only, unless waived in writing by the Department on a programmatic, categorical, or individual compound/chemical basis that chemical/compound additives are not used, and that there are no process, manufacturing, or other industrial operations or wastewaters, including but not limited to lime or cement production, synfuel operations, etc., and that coal and coal products are

No, the applicant does not request a waiver and a complete modified EPA Form 2C is attached. SEE ATTACHMENT D.2 AND D.3

not mined nor stored onsite.

B. The applicant is required to supply the following information separately for every P or E outfall. If necessary, attach extra sheets. List expected average daily discharge flow rate in cfs and gpd, frequency of discharge in hours per day and days per month, average summer and winter temperature of discharge(s) in degrees centigrade (C), average pH in standard units, average daily discharge in pounds per day of BOD₅. Total Suspended Solids, Total Iron, Total Manganese, and Total Aluminum (if bauxite or bauxitic clay):

Outfall E/P	Information Source - # of Samples	Flow cfs	Flow gpd	Frequency hours/day	Frequency days/mth	Sum/Win Temp, *C	pH s.u.	BOD; lbs/day	TSS lbs/day	Tot Fe lbs/day	Tot Mn lbs/day	Tot Al lbs/day
SEE AT	TACHMEN	D.4	-							,		
				,		:						v
					-			· · · · · · · · · · · · · · · · · · ·			, , , , , , , , , , , , , , , , , , , 	
			· · · · · · · · · · · · · · · · · · ·									<u> </u>
:												
		*						<u> </u>				
		,										

C. The applicant is required to supply the following information separately for every P or E outfall. If necessary, attach extra sheets. Identify and list expected average daily discharge in pounds per day of any other pollutant(s) listed in EPA Form 2C, Item V – Intake And Effluent Characteristics, Parts A. B. & C that are not referenced in Part XV.B., that you know is present or have reason to believe could be present in the discharge(s) at levels of concern:

Outfall E/P	Reason Believed	Information Source - # of					***				
·	Present	Samples	lbs/day	lbs/day	lbs/day	lbs/day	ibs/day_	lbs/day	lbs/day	lbs/day	lbs/day
N/A				<u> </u>	ľ						
			·								
· ·				2 7		1		1	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
			4								<u>.</u>
		ü	,								*
									,		
	,										

ADEM Form 315 .07/15 m4 Page 6 of 12

XVII, DISCHARGE STRUCTURE DESCRIPTION & POLLUTANT SOURCE

The applicant is required to supply outfall number(s) as it appears on the map(s) required by this application [if this application is for a modification to an existing permit do not change the numbering sequence of the permitted outfalls], describe each, (e.g., pipe, spillway, channel, tunnel, conduit, well, discrete fissure, or container), and identify the origin of pollutants. The response must be precise for each outfall. If the discharge of pollutants from any outfall is the result of commingling of waste streams from different origins, each origin must be completely described.

Outfall	Discharge structure Description	Description of Origin Of pollutants	Surface Discharge	Groundwater Discharge	Wet Prep -Other Production Plant	Pumped or Controlled Discharge	Low Volume STP	Other
SEE AT	TACHMENT D.5						*	10. THE CO.
						-/		
							<u>i</u>	
			 					
			<u> </u>	,				
			<u> </u>	-				
-/								
***							***************************************	***************************************
		,				<u> </u>		
								~

Origin of Pollutants – typical examples: (1) Discharge of drainage from the underground workings of an underground coal mine, (2) Discharge of drainage from a coal surface mine, (3) Discharge of drainage from a coal preparation plant and associated areas, (4) Discharge of process wastewater from a gravel-washing plant, (5) Discharge of wastewater from an existing source coal preparation plant, (6) Discharge of drainage from a sand and gravel pit, (7) Pumped discharge from a limestone quarry, (8) Controlled surface mine drainage (pumped or siphoned), (9) Discharge of drainage from mine reclamation, (10) Other:

ADEM Form 315 07/15 m4 Page 7 of 12

XVIII. PROPOSED NEW OR INCREASED DISCHARGES Pursuant to ADEM Admin. Code Chapter 335-6-10-12(9), responses to the following questions must be provided by the applicant requesting NPDES permit coverage for new or expanded discharges of pollutant(s) to Tier 2 waters (except discharges eligible for coverage under general permits). As part of the permit application review process, the Department is required to consider, based on the applicant's demonstration,

	proposed new or increased discharge to Tier 2 waters is necessary for important economic or social development in the area sters are located.
Yes. Nev	w/increased discharges of pollutant(s) or discharge locations to Tier 2 waters are proposed.
	wincreased discharges of pollutants(s) or discharge locations to Tier 2 waters are not proposed.
Form 313-C ADEM Form ADEM Form	inplete Items 1 through 6 of this Part (XVII.B.), ADEM Form 311-Alternative Analysis, and either ADEM Form 312 or ADE alculation of Total Annualized Project Costs (Public-Section or Private-Sector, whichever is applicable). ADEM Form 312 or 313, whichever, is applicable, should be completed for each technically feasible alternative evaluated on ADEM Form 31 as can be found on the Department's website at www.adem.ulabama.gov/DeptForms . Attach additional sheets/documentation ing information as needed.
	vironmental of public health problem will the discharge be correcting? n the site have been previously surface mined for coal. Issuance of this permit to discharge will allow recovery of coal
at or near p	previously mined locations, and the ensuing reclamation performed at modern standards will greatly reduce the
discharge o	of sedimentation from these previously mined areas of the watershed to receiving waters.
	ch will the discharger be increasing employment (at its existing facility or as a result of locating a new facility)?
	tely 20 workers will be directly employed for the mining operation and numerous contractors
will be emp	loyed to perform a variety of support services for the mining operation.

* *.	ch reduction in employment will the discharger be avoiding?
(3) How mu None	ch reduction in employment will the discharger be avoiding?
*	
None (4) How mu	
None (4) How mu Assuming	ch additional state or local taxes will the discharger be paying?
(4) How man Assuming a paid in stat	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be
(4) How mu Assuming a paid in stat estimated o	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an
(4) How mu Assuming a paid in stat estimated o	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an coal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes
(4) How man Assuming a paid in state estimated care estimated (5) What put	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an coal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes led to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing?
(4) How may Assuming a paid in state estimated (are estimated (5) What put This facility	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an coal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes and to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing? will produce high quality coal for the production of energy. This coal will be used by nearby electrical facilities for the
(4) How mu Assuming a paid in stat estimated of are estimated (5) What pu This facility production	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an coal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes ted to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing? will produce high quality coal for the production of energy. This coal will be used by nearby electrical facilities for the of energy that will promote economic growth within the local community. The issuance of this permit will additionally
(4) How mu Assuming a paid in stat estimated of are estimated (5) What pu This facility production help to mail	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an coal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes and to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing? will produce high quality coal for the production of energy. This coal will be used by nearby electrical facilities for the of energy that will promote economic growth within the local community. The issuance of this permit will additionally ntain and create support industries such as fuel suppliers, transportation companies, industrial materials suppliers,
(4) How may Assuming a paid in state estimated of are estimated for an are estimated for are estimated for are estimated for a power and power are assumed for a power are assumed for a power as a power as a power as a power are as a power are as a power are as a power as a power as a power as a power are as a power are as a power are as a power are as a power as a power are as a power are as a power a power as a power a powe	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an accal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes and to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing? will produce high quality coal for the production of energy. This coal will be used by nearby electrical facilities for the of energy that will promote economic growth within the local community. The issuance of this permit will additionally intain and create support industries such as fuel suppliers, transportation companies, industrial materials suppliers, production facilities and maintain the workforces associated with each industry. Reclamation efforts will also improve
(4) How may Assuming a paid in state estimated of are estimated for an are estimated for are estimated for are estimated for an are estimated for a state of a stat	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an coal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes and to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing? will produce high quality coal for the production of energy. This coal will be used by nearby electrical facilities for the of energy that will promote economic growth within the local community. The issuance of this permit will additionally ntain and create support industries such as fuel suppliers, transportation companies, industrial materials suppliers,
(4) How mu Assuming a paid in stat estimated of are estimated (5) What pu This facility production help to mail and power runoff quali	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be a taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an accal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes and to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing? will produce high quality coal for the production of energy. This coal will be used by nearby electrical facilities for the of energy that will promote economic growth within the local community. The issuance of this permit will additionally intain and create support industries such as fuel suppliers, transportation companies, industrial materials suppliers, production facilities and maintain the workforces associated with each industry. Reclamation efforts will also improve
(4) How mu Assuming a paid in state estimated care estimated to are estimated and power runoff quality (6) What extra the facility	ch additional state or local taxes will the discharger be paying? an annual payroll of \$600,000 for this facility and a 3% annual state payroll tax, a total of approximately \$18,000 will be e taxes annually. With additional coal severance taxes of \$0.27 per ton (\$0.135 county and 0.135 state) and an coal recovery of 150,000 tons per year. With an estimated \$17,000 in fuel taxes, additional state and local taxes sed to total of \$75,500 in state and local taxes. blic service to the community will the discharger be providing? will produce high quality coal for the production of energy. This coal will be used by nearby electrical facilities for the of energy that will promote economic growth within the local community. The issuance of this permit will additionally intain and create support industries such as fuel suppliers, transportation companies, industrial materials suppliers, production facilities and maintain the workforces associated with each industry. Reclamation efforts will also improve thy in previously mined areas, which ultimately flows to Lake Harris and the Black Warrior River.

ADEM Form 315 07/15 m4 Page 8 of 12

XIX, POLLUTION ABATEMENT PLAN (PAP) SUMMARY Outfall(s): 001P - 043P Y N NA Runoff from all areas of disturbance is controlled Drainage from pit area, stockpiles, and spoll areas directed to a sedimentation pond Sedimentation basin at least 0.25 acre/feet for every acre of disturbed drainage Sedimentation basin cleaned out when sediment accumulation is 60% of design capacity Trees, boulders, and other obstructions removed from pond during initial construction Width of top of dam greater than 12' Side slopes of dam no steeper than 3:1' Gutoff trench at least 8' wide Side slopes of cutoff trench no less than 1:1 Cutoff trench located along the centerline of the dam Cutoff trench extends at least 2' into bedrock or impervious soil Cutoff trench filled with impervious material Embankments and cutoff trench 95% compaction standard proctor ASTM Embankment free of roots, tree debris, stones >6" diameter, etc. Embankment constructed in lifts no greater than 12" Spillpipe sized to carry peak flow from a one year storm event Spillpipe will not chemically react with effluent Subsurface withdrawal Anti-seep collars extend radially at least 2' from each joint in spillpipe Splashpad at the end of the spillpipe Emergency Spillway sized for peak flow from 25-yr 24-hr event if discharge not into PWS classified stream Emergency spillway sized for peak flow from 50-yr 24-hr event if discharge is into PWS classified stream Emergency overflow at least 20' long Side slopes of emergency spillway no steeper than 2:1 Emergency spillway lined with riprap or concrete Minimum of 1.5' of freeboard between normal overflow and emergency overflow Minimum of 1.5 of freeboard between max, design flow of emergency spillway and top of dam All emergency overflows are sized to handle entire drainage area for ponds in series Dam stabilized with permanent vegetation Sustained grade of haul road <10% Maximum grade of haul road <15% for no more than 300' Outer slopes of haul road no steeper than 2:1 Outer slopes of haul road vegetated or otherwise stabilized



The applicant has completed the surface water discharge alternatives analysis and has supporting documentation, including annualized costs for each technically feasible alternative available for review upon request

IDENTIFY AND PROVIDE DETAILED EXPLANATION FOR ANY "N" OR "N/A" RESPONSE(s):

Short-Term Stabilization/Grading And Temporary Vegetative Cover Plans

Detail drawings supplied for all stream crossings

During the design of each basin, the design storage and detention volumes will be reviewed and approved by the ASMC. Sedimentation basins will be cleaned prior to reaching the maximum sediment storage volume.

The side slopes of each embankment will be designed for a minimum static factor of safety of at least 1.3

No emergency spillways will discharge directly into a PWS classified stream.

Long-Term Stabilization/Grading And Permanent Reclamation or Water Quality Remediation Plans

Vegetative lining is adequate if the emergency spillway is not expected to carry continuous flow and is constructed at an elevation above the maximum peak flow elevation. Spillways will be constructed to meet ASMC standards and will be certified on an individual basis based upon the individual considerations of each sediment basin location.

There are no stream crossings at this facility.

The above deviations from the standard ADEM guidelines are standard design practices in accordance with the Alabama Surface Mining Comission rules and regulations.

ADEM Form 315 07/15 m4 Page 9 of 12

XX. POLLUTION ABATEMENT PLAN (PAP) REVIEW CHECKLIST V N N/A
PE Scal with License #
Name and Address of Operator
Legal Description of Facility
General Information:
Name of Company
Number of Employees Products to be Mined
Hours of Operation
Water Supply and Disposition
Topographic Map:
Mine:Location
Location of Prep Plant
Location of Treatment Basins
Location of Discharge Points
Location of Adjacent Streams
1"-500' or Equivalent Facility Map: J Drainage Patterns
Mining Details
All Roads, Structures Detailed
All Treatment Structures Detailed
Detailed Design Diagrams:
Plan Views
Cross-section Views
Method of Diverting Runoff to Treatment Basins
Narrative of Operations:
Processes Defined
Products Defined
Schematic Diagram:
Points of Waste Origin
Collection System
Disposal System
Post Treatment Quantity and Quality of Effluent:
Flow Suspended Solids
Iron Concentration
7 pii
Description of Waste Treatment Facility:
Pre-Treatment Measures
Recovery System
Expected Life of Treatment Basin
Schedule of Cleaning and/or abundonment Other:
Precipitation/Volume Calculations/Diagram Attached
BMP Plan for Haul Roads
Measures for Minimizing Impacts to Adjacent Stream i.e., Buffer Strips, Berms, etc.
Methods for Minimizing Nonpoint Source Discharges
Facility Closure Plans
PE Rationale(s) For Alternate Standards, Designs or Plans
IDENTIFY AND PROVIDE DETAILED EXPLANATION FOR ANY "N" OR "N/A" RESPONSE(s):
No preparation plant is proposed at this mine site.
No alternate standards, designs, or plans are proposed.

ADEM Form 315 07/15 m4 Page 10 of 12

Contact the Department <u>prior</u> to submittal with any questions or to request acceptable alternate content/format. Be advised that you are not authorized to commence regulated activity until this application can be processed, publicly noticed, and approval to proceed is received in writing from the Department.

EPA Form(s) 1 and 2F need not be submitted unless specifically required by the Department. EPA Form(s) 2C and/or 2D are required to be submitted unless the applicant is eligible for a waiver and the Department grants a waiver.

Planned/proposed mining sites that are greater than 5 acres, that mine/process coal or metallic mineral/ore, or that have wet or chemical processing, must apply for and obtain coverage under and Individual NPDES Permit prior to commencement of any land disturbance. Such coverage may be requested via this ADEM Form 315.

The applicant is advised to contact:

- (1) The Alabama Surface Mining Commission (ASMC) if coal, coal fines, coal refuse, or other coal related materials are mined, transloaded, processed, etc.;
- (2) The Alabama Department of Industrial Relations (ADIR) if conducting non-coal mining operations;
- (3) The Alabama Historical Commission for requirements related to any potential historic or culturally significant sites;
- (4) The Alabama Department of Conservation and Natural Resources (ADCNR) for requirements related to potential presence of threatened/endangered species; and
- (5) The US Army Corps of Engineers, Mobile or Nashville Districts, if this project could cause fill to be placed in federal waters or could interfere with navigation.

The Department must be in receipt of a completed version of this form, including any supporting documentation, and the appropriate processing fee (including Greenfield Fee and Biomonitoring & Toxicity Limits fee(s), if applicable), prior to development of a draft NPDES permit. Send the completed form, supporting documentation, and the appropriate fees to:

Water Division
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463
Phone: (334) 271-7823
Fax: (334) 279-3051

Fax: (334) 279-3051 h2omail@adem.state.al.us. www.adem.alabama.gov

XXIII. RESPONSIBLE OFFICIAL SIGNATURE

This application must be signed by a Responsible Official of the applicant pursuant to ADEM Admin. Code Rule 335-6-6-.09 who has overall responsibility for the operation of the facility.

Date Signed

"I certify under penalty of law that this document, including technical information and data, the PAP plan, including any SPCC plan, maps, engineering designs, and all other attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the PE and other person or persons under my supervision 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 or imprisonment for knowing violations.

A comprehensive PAP Plan to prevent and minimize discharges of pollution to the maximum extent practicable has been prepared at my direction by a PE for this facility utilizing effective, good engineering and pollution control practices and in accordance with the provisions of ADEM Admin. Code Division 335-6, including Chapter 335-6-9 and Appendices A & B, and information contained in this application, including any attachments. I understand that regular inspections must be performed by, or under the direct supervision of, a PE and all appropriate pollution abatement/prevention facilities and structural & nonstructural management practices or Department approved equivalent management practices identified by the PE must be fully implemented prior to and concurrent with commencement of regulated activities and regularly maintained as needed at the facility in accordance with good sediment, erosion, and other pollution control practices and ADEM requirements. I understand that the PAP plan must be fully implemented and regularly maintained so that discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable and according to permit discharge limitations and other requirements to ensure protection of groundwater and surface water quality. I understand that failure to fully implement and regularly maintain required management practices for the protection of groundwater and surface water quality may subject the Permittee to appropriate enforcement action.

I certify that this form has not been altered, and if copied or reproduced, is consistent in format and identical in content to the ADEM approved form.

I further certify that the discharges described in this application have been tested or evaluated for the presence of non-stormwater discharges and any non-mining associated beneficiation/process pollutants and wastewaters have been fully identified."

Name (type or print) Randall E. Crawford Official Title Date Signed 925

335-6-6-.09 Signatories to Permit Applications and Reports.

(1) The application for an NPDES permit shall be signed by a responsible official, as indicated below:

- (a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;
- (b) In the case of a partnership, by a general partner;

(c) In the case of a sole proprietorship, by the proprietor; or

(d) In the case of a municipal, state, federal, or other public entity by either a principal executive officer, or ranking elected official.

ATTACHMENT INDEX

Attachment A

- A.1 Topographic Map (ADEM Form 315 Part XIII.)
- A.2 Detailed Facility Map (ADEM Form 315 Part XIV.)

Attachment B

B.1 - Spill Prevention Control & Countermeasures Plan (ADEM Form 315 Part X.)

Attachment C

C.1 - Pre-Mining Hydrologic Sampling Reports (ADEM Form 315 Part XII.)

Attachment D

- D.1 Receiving Waters (ADEM Form 315 Part XV.)
- D.2 Modified EPA Form 2C for Proposed Outfalls to Yellow Creek (ADEM Form 315 Part XVI.A)
- D.3 Modified EPA Form 2C for Proposed Outfalls to Cypress Creek (ADEM Form 315 Part XVI.A)
- D.4 Estimated Contaminant Discharge Rates (ADEM Form 315 Part XVI.B)
- D.5 Discharge Structures and Pollutant Source (ADEM Form 315 Part XVII)

Attachment E

- E.1 Alternatives Analysis, ADEM Form 311, and Supporting Documentation (ADEM Form 315 Part XVIII.B)
- E.2 Annualized Project Costs, ADEM Form 313 (ADEM Form 315 Part XVIII.B)

Attachment F

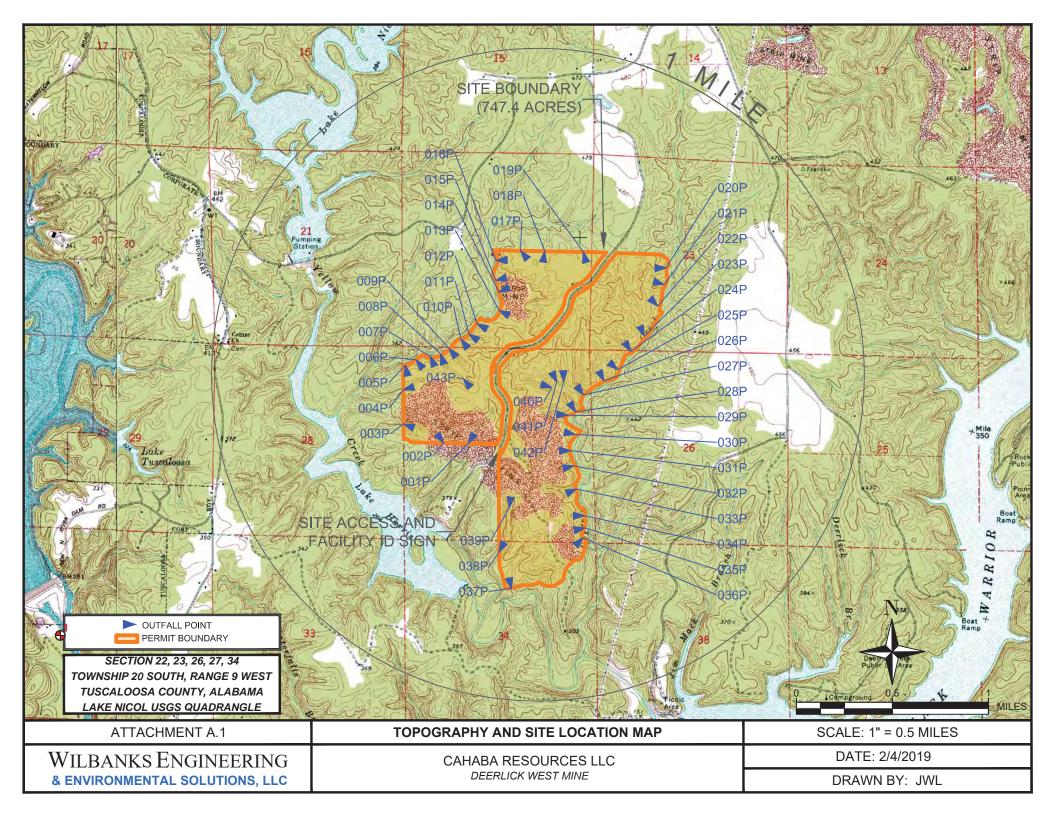
- F.1 Pond Construction Criteria
- F.2 Specifications for the Construction, Maintenance, and Reclamation of Primary Roads
- F.3 Specifications for the Construction, Maintenance, and Reclamation of Ancillary Roads

ATTACHMENT A

(ADEM Form 315 Parts XIII and XIV)

A.1 - Topography Map

A.2 - Detailed Facility Map



ATTACHMENT B

(ADEM Form 315 Part X)

B.1 - Spill Prevention Control and Countermeasures Plan

DATE: FEBRUARY 2019

SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN

for

DEERLICK WEST MINE CAHABA RESOURCES, LLC

P.O. Box 122, Vance, AL 35490

Prepared by



Section	Title	Rule Citation
Section 1.0	Facility Information	
1.1	General	
1.2	Facility Operations	
Section 2.0	PE Certification of the Plan	112.3
Section 3.0	Amendments to the Plan	112.4 and 112.5
3.1	Determination of Needed Amendments by EPA/State	112.4(a),(b) &(c)
	Agencies following spills	
3.2	Amendments as required by EPA/State Agencies	112.4(d) & (e)
3.3	Amendments due to facility changes or 5 year review	112.5(a) & (b)
3.4	Technical Amendments Certified by P.E.	112.5(c)
Section 4.0	General Requirements for SPCC Plans	112.7
4.1	Written Commitment of Manpower, Equipment and	112.7
	Materials	
4.2	Proposed facilities, methods or equipment not yet fully	112.7
	operational	
4.3	Detailed Requirements	
4.3.1	Discussion of Facility Conformance	112.7(a)(1)
4.3.2	Deviations from Requirements	112.7(a)(2)
4.3.3	Physical Layout and Facility Diagram	112.7(a)(3)
4.3.3.1	Container Capacity and Content	112.7(a)(3)(i)
4.3.3.2	Discharge Prevention Measures	112.7(a)(3)(ii)
4.3.3.3	Discharge and Drainage Controls	112.7(a)(3)(iii)
4.3.3.4	Countermeasures	112.7(a)(3)(iv)
4.3.3.5	Methods of Disposal of Recovered Material	112.7(a)(3)(v)
4.3.3.6	Emergency Contacts	112.7(a)(3)(vi)
4.3.4	Discharge Reporting Information	112.7(a)(4)
4.3.4.1	Petroleum Product Spill	112.7(a)(4)(i)
4.3.4.2	CERCLA Spills	112.7(a)(4)(ii)
4.3.5	Emergency Procedures	112.7(a)(5)
4.4	Potential Spill Predictions, Volumes, Rates and Controls	112.7(b)
4.5	Discharge Prevention Procedures	112.7(c)
4.6	Containment Not Practical	112.7(d)
4.7	Inspection, Test and Records	112.7(e)
4.8	Personnel Training and Discharge Prevention Procedures	112.7(f)
4.8.1	Personnel Training	112.7(f)(1)
4.8.2	Designated Person Accountable for Discharge Prevention	112.7(f)(2)
4.8.3	Discharge Prevention Briefings	112.7(f)(3)
4.9	Security	112.7(g)
4.9.1	Facility Fencing	112.7(g)(1)
4.9.2	Securing of Containment Drain	112.7(g)(2)
4.9.3	Locking of Oil Pump	112.7(g)(3)
4.9.4	Securing of Loading/Unloading Connections	112.7(g)(4)
4.9.5	Facility Lighting	112.7(g)(5)
4.10	Facility Loading/Unloading Racks	112.7(h)
4.10.1	Containment for Loading/Unloading Racks	112.7(h)(1)
4.10.2	Warning Systems	112.7(h)(2)
4.10.3	Vehicle Inspection Procedures	112.7(h)(3)
4.11	Brittle Fracture Evaluation of Field-Erected Containers	112.7(i)
4.12	Conformance with State Requirements	112.7(j)
	-	.

Section 5.0	SPCC Plan Requirements for Onshore Facility	112.8
5.1	Meeting General Requirements of 112.7	112.8(a)
5.2	SPCC Plan Requirements for Onshore Facilities	112.8(b)
5.2.1	Diked Storage Area Drainage	112.8(b)(1)
5.2.2	Valve Design for Diked Area Drainage	112.8(b)(2)
5.2.3	Drainage from Undiked Areas	112.8(b)(3)
5.2.4	Alternate Drainage System	112.8(b)(4)
5.2.5	Safeguard for Human Error and Equipment Failure	112.8(b)(5)
5.3	Bulk Storage Containers	112.8(c)
5.3.1	Container Materials and Construction Compatibility	112.8(c)(1)
5.3.2	Containment	112.8(c)(2)
5.3.3	Drainage Procedures from Diked Areas	112.8(c)(3)
5.3.3.1 5.3.3.2	Drain Valves Inspection of Accumulated Storm Water	112.8(c)(3)(i)
5.3.3.3	Supervised Drainage	112.8(c)(3)(ii) 112.8(c)(3)(iii)
5.3.3.4	Drainage Records	112.8(c)(3)(iv)
5.3.4	Corrosion Protection of USTs	112.8(c)(4)
5.3.5	Corrosion Protection of Partially Buried Tanks	112.8(c)(5)
5.3.6	Integrity Testing of Aboveground Containers	112.8(c)(6)
5.3.7	Tank Internal Heating Coils	112.8(c)(7)
5.3.8	Fail-Safe Overfill and Liquid Level Devices	112.8(c)(8)
5.3.9	Effluent Treatment System Inspections	112.8(c)(9)
5.3.10	Correction of Visible Discharges and Removal of Oil	
	Accumulation from Diked Areas	
5.3.11	Mobile/Potable Containers Siting and Containment	112.8(c)(11)
5.4	Facility Transfer Operations, Pumping and Facility Process	112.8(d)
5.4.1	Corrosion Provisions for Buried Piping	112.8(d)(1)
5.4.2	Security of Transfer Connections	112.8(d)(2)
5.4.3	Pipe Support Design	112.8(d)(3)
5.4.4	Inspections of Aboveground Valves, Piping and	112.8(d)(4)
5.4.5	Appurtenances Warning Practices for Vehicles	112.8(d)(5)
5.4.5	warming reactices for venicles	112.8(u)(3)
Section 6.0	Inapplicable Sections	112.7(c)
FIGURES	SITE LOCATION MAP	
	SITE MAP WITH STORAGE AREAS	
	CONTAINMENT STRUCTURE DETAIL	
APPENDIX A	SPILL INFORMATION FORM	
FORMS	SPCC FIVE YEAR REVIEW FORM	
	FACILITY AND STORAGE TANK INSPECTION	
	FORMS	
	OIL TRANSFER AND SPILL INFORMATION	
	SPCC TRAINING FORMS	
	CERTIFICATION OF APPLICABILITY OF	
	SUBSTANTIAL HARM	
	PART 112 OF 40 CFR - OIL POLLUTION	
	PREVENTION	

1.1 GENERAL

OWNER and OPERATOR

Cahaba Resources, LLC. P.O. Box 122 Vance, AL 35490 Telephone: (205) 556-8380

FACILITY

Deerlick West Mine 13413 Lake Harris Rd. Tuscaloosa, AL 35406 Tuscaloosa County

EMERGENCY COORDINATOR

Randall E. Crawford 16098 House Rd. Brookwood, AL 35444 Phone: (205) 300-4799 Fax: (205) 553-3175

1.2 FACILITY OPERATIONS

The Deerlick West Mine is a surface coal mining facility. Operations include recovery, storage, dry preparation, and transport of bituminous coal as well as highwall, haul road, and sedimentation basin reclamation. The location where the fueling operations take place adjacent to the primary office. Only fueling and maintenance operations are conducted on vehicles used on-site.

SECTION 2 P.E. CERTIFICATION OF THE PLAN [40 CFR 112.3]

Facility Name:

Cahaba Resources, LLC.

Date(s) site visited:

August 27, 2017

Site visit performed by: Zachary Wilbanks, PE

I hereby certify that:

I am familiar with the requirements of 40 CFR 112;

- I have (or my agent has) visited and examined the facility;
- The SPCC Plan has been prepared in accordance with good engineering practice, including the consideration of applicable industry standards, and with the requirements of 40 CFR 112;
- The SPCC Plan establishes procedures for required inspections and testing, and;
- The SPCC Plan is adequate for the facility.

Certifying Engineer:

Name Zachary Wilbanks

State Alabama

P.E. No. 34440

Certification Date: February 4, 2019

Engineering Seal:

Signature:

3.1 <u>Determination of Needed Amendments by EPA/State Agencies following spills</u> [40CFR 112.4(a) & (b) &(c)]

If a facility discharges more than 1,000 gallons in a single discharge, or discharges more than 42 gallons in each of two discharges within a twelve month period, then the following information must be submitted to the EPA and any other state or local agency in charge of oil pollution control activities. **This information must be submitted within 60 days of becoming subject to this part.** These agencies will review this information and determine if changes or amendments to the SPCC plan for the facility is necessary.

Information required:

- Name of the facility
- Your name
- Location of the facility
- Maximum storage capacity of oil at the facility and normal daily usage
- Corrective actions and countermeasures taken including a description of equipment repairs and replacements
- A description of the facility including maps, flow diagrams and topographical maps
- Cause of the discharges as well as a failure analysis of the system
- Additional preventative measures taken or contemplated to prevent recurrence
- Other necessary information as required by EPA or the State

A spill report form is available in **Appendix A**.

3.2 Amendments as required by EPA/State Agencies [40 CFR 112.4(d) & (e)]

There have been no amendments to this plan as a result of EPA or ADEM comments or requirements.

Any amendments that would be required as described in Section 3.1 above must be made within 30 days of such notification, or an appeal filed in accordance with 112.4(f) in writing within 30 days of the EPA/ADEM decision.

3.3 Amendments due to facility changes or 5 year review [40 CFR 112.5(a) & (b)]

In accordance with 40 CFR 112.5, a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, Cahaba Resources will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. Additionally, any changes identified in the plan must be fully implemented within 6 months thereafter.

If there are no amendments to the plan as a result of the 5-year review, a review form will be completed and maintained in the files. A copy of the form is available in **Appendix A**.

3.4 Technical Amendments Certified by P.E.

Any amendments to the plan which materially affect the facility's potential for the discharge of oil into or upon the navigable waters of the U.S. require the re-certification of the plan by the P.E. A new certification page should be included, and revision record should be amended to reflect this change.

The owner or operator of a facility subject to the spill prevention, control and countermeasures regulations must prepare a plan in accordance with good engineering practices. The plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the plan. The plan must be prepared in writing. If the plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, those items must be discussed in separate paragraphs and the details of installation and operational start-up must be explained separately.

4.1 Written Commitment of Manpower, Equipment and Materials [40 CFR 112.7]

By my signature below, I certify that I have authority to commit the necessary resources for full implementation of this plan and that all necessary manpower, equipment and resources will be available at all times to control and remove any quantity of oil discharged that may be harmful to navigable waters and the environment.

Authorized Representative:	Randall E. Crawford
Γitle:	Managing Member
Signature:	
Date:	

4.2 <u>Proposed facilities, methods or equipment not yet fully operational</u> [40 CFR 112.7]

All equipment discussed in this plan at the Deerlick West Mine facility in Tuscaloosa, Alabama was fully operational at the time this plan was written.

4.3 <u>Detailed Requirements</u>

4.3.1 <u>Discussion of Facility Conformance</u> [40 CFR 112.7(a) (1)]

The Deerlick West Mine facility is in accordance with all Oil Pollution Prevention Rules and Regulations listed in part 112 of 40 CFR. All containment areas are capable of containing greater than 110% of the largest tank within the containment area. Responsible employees are aware of damages possible when oil encounters the environment, and are committed to preventing such encounters.

4.3.2 <u>Deviations from Requirements</u> [40 CFR 112.7(a) (2)]

This facility is in complete conformance with all applicable requirements of 40 CFR 112.

4.3.3 Physical Layout and Facility Diagram [40 CFR 112.7(a) (3)]

Stormwater runoff from the Deerlick West Mine facility is permitted through an NPDES Mining and Non Point Source (MNPS) permit considering mining is conducted on-site. The facility's surface drainage enters Lost Creek in Goolsby Hollow via storm conveyance ditches following sedimentation basins. The facility location and diagram are shown as Figure 1 and 2, respectively.

4.3.3.1 Container Capacities and Content [40 CFR 112.7(a) (3) (i)]

Table 1

Potential Spill Sources	Maximum Spill Volume (gallons)	Secondary Containment Volume (gallons)	Comments			
Area A – Fueling Area						
One (1) 10,000 gallon diesel fuel tank	10000 gallons	The Tank is a single Walled AST, within a steel containment basin	Spills would flow into the secondary containment structure provided to this area and on to the facility's sediment basin if breached			
One (1) 100 gallon waste oil tank	500 gallons	The Tank is a single Walled AST, within an earthen containment basin with a plastic liner	Spills would flow into the secondary containment structure provided to this area and on to the facility's sediment basin if breached			
Miscellaneous petroleum products, oils, and chemicals	Maximum 1500 gallons	Consists of 55-gallon drums of motor oil and 10 gallon containers of motor oil, hydraulic oil, transmission fluid, and antifreeze	Spills would flow into the secondary containment structure provided to this area and on to the facility's sediment basin if breached			

4.3.3.2 Discharge Prevention Measures [40 CFR 112.7(a) (3) (ii)]

A. <u>General Spill Prevention Procedures</u>

Spills and releases are most likely to result from equipment failure or operator error:

- Operator error during loading/unloading or refueling operations. Potential errors include overfilling, not disconnecting lines prior to vehicle departure, drain valves being left open, or fill valves being left open allowing precipitation to enter and cause tank overflow. Specific procedures have been developed to minimize this potential and include regular periodic inspections, locking valves when not in use and on-the-job training in correct procedures. Because of secondary containment, release is unlikely; however, operators are instructed in proper procedures to prevent releases from secondary containment.
- Rupture of piping, pressure fittings, or tanks, or another form of equipment failure. The potential for such a release will always exist. The rate and quantity of release would depend on the location of the rupture. Release rate could be assumed to be the total volume of the tank associated with the piping or fittings being released in 15 minutes. The release to the environment would be at that rate and the quantity would be the total volume minus the secondary containment volume. To minimize the potential for a significant release, regular inspections and maintenance are performed with noted problems addressed in a timely manner by repair, replacement, or equipment taken out of service.
- 3. Puncture of tank or associated piping by heavy equipment. Operators of equipment and vehicles are well trained in operating large equipment on the facility. However, should a puncture occur, the rate and volume of a release would be the same as that calculated in item 2. In addition, tanks and piping are highly visible by size, signage, flagging, or protective paint color. Where necessary, additional barriers such as protective walls or posts have been provided. In the event of night traffic, sufficient lighting is provided to make tanks and piping visible.
- 4. <u>Small drips, leaks, and spills from lines or valves.</u> Release rates would be negligible and are not likely to produce significant quantities or to have significant environmental effects. To minimize the potential for a release, equipment is inspected regularly, repaired in a timely manner when a problem is discovered, and released material is promptly cleaned up (within 72 hours). In general, this type of release presents a very low risk to the environment.

B. <u>Standard Procedure for Tank Loading and Unloading</u>

- Set tank trailer brakes and block wheels. The driver must remain with the vehicle during the entire loading or unloading period.
- 2. Read the level indicator or visually inspect the receiving tank to be sure that sufficient space is available to receive material being transferred.
- 3. Place catch pans in position under plant and tank trailer connections as needed to catch any liquid that may leak during the transfer.
- 4. To remove the tank trailer unloading line closure:
 - Be sure the unloading line valve is closed
 - Carefully loosen the unloading line closure
 - If leakage begins, leave closure partially engaged and allow sufficient time for any accumulation of liquid in the outlet line to escape
 - If leakage stops or diminishes materially, entirely remove the closure
 - If initial rate of leakage continues, open and close the valve a couple of times to seat it
 - If the valve fails to seat and stop the leakage, screw the closure up tight
 - Contact the supervisor in charge of this operation for instruction on how to proceed.
- 5. When connections are secured, open the valve for liquid transfer.
- Start pump and check to be sure there is no leakage at any of the connections or anywhere along the transfer line. Note: Operator must remain with truck during loading/unloading. If vehicle is left unattended, operator will be considered negligent.

4.3.3.3 Discharge and Drainage Controls [40 CFR 112.7(a) (3) (iii)]

All petroleum product tanks (oils and fuels) have either secondary containment, a collection area designed to collect materials associated with a spill, or are contained in an area which contains sufficient area to contain the contents of containers held within. All containment is sized to hold 110% of any single tank located within the containment. Due to these factors and the distance to the discharge point, a release from any of the petroleum product containment into the environment is highly unlikely.

4.3.3.4 Countermeasures [40 CFR 112.7 (a) (3) (iv)]

De minimis spills of petroleum products at the site should be cleaned up as soon as practical using best management practices including: removal of free product using adsorbents, excavation of petroleum contaminated soil, and handling the subject materials as petroleum contaminated waste.

Petroleum product spills which are contained within the building or within bermed storage areas can usually be handled by on-site personnel. Small spills may require dry clean up with absorbents. A spill responder will be notified if needed to pump spilled material from a containment area. All material pumped will be placed in an appropriate container and handled according to RCRA, OSHA and Fire Code regulations. Only non-biodegradable adsorbents will be used to clean up spills.

In the event of a large spill, every effort should be made to prevent the spill from entering the open channel drainages. Appropriate measures would include immediate pumping of any pooled liquid into totes, immediate construction of temporary earthen berms, construction of temporary dams within the open channel drainage ditches, and placing plastic sheets over drop inlets and covering them with soil to temporarily stop drainage during clean up operations.

In the event a spill enters either of the facility's containment basins, then emergency response contractors will be contacted immediately. In the event of such a spill, the **Tuscaloosa Fire Department** will also be contacted to access the fire hazard, and to advise the Environmental Coordinator. Emergency response personnel will then act to remove free product from the containment basin, and to remove affected soil as necessary.

4.3.3.5 Methods of Disposal of Recovered Material [40 CFR 112.7(a) (3) (v)]

De minimus spills of non-hazardous petroleum products (<42 gallons) will generally not require soil analysis during cleanup. Small quantities of non-hazardous petroleum contaminated soil may be disposed of as common industrial waste with the facility's regular solid waste service.

Soil cleanup from non-hazardous spills of greater than 42 gallons will generally require stockpiling of the excavated petroleum contaminated soil, laboratory analysis, and confirmatory sampling. All soils associated with a reportable spill event that exceeds 100 ppm TPH should be excavated for disposal as petroleum contaminated waste. All excavated soil exceeding 100 ppm shall be disposed of at a pre-approved Subtitle D lined landfill.

Analysis of soils for petroleum contaminants shall be performed for the following parameters according to the type of petroleum product causing the contamination:

Total petroleum hydrocarbons	Standard Method 503	
	EPA Method 9071	
2. Benzene, ethyl benzene, toluene and	EPA Method 5030 or 3810 followed by	
total xylene	EPA Method 8020 or 8240	
3. Lead and/or MTBE	EPA Std. Method	

4.3.3.6 Emergency Contacts [40 CFR 112.7(a) (3) (vi)]

If it is determined that the spill is reportable, the Emergency Coordinator will immediately contact the following agencies:

1.	National Response Center (NRC)
2.	Regional Administrator Environmental Protection Agency, Region IV 61 Forsyth Street, SW Atlanta, Georgia 30303-8960
3.	Water Division/Field Operations Alabama Department of Environmental Management 1400 Coliseum Blvd. (36110-2059) P.O. Box 301463 Montgomery, AL 36130-1463 Office Hours: (334)271-7700 After Hours: 1-800-843-0699
	Others to contact, if necessary:
4.	Fire and Police Departments911 Tuscaloosa Fire Department911
5. 6.	Spill Response of Record: Action Resources
7.	Alabama Department of Public Safety State Trooper Office 908 Bankhead Highway Birmingham, Alabama 35204

The regulations in Part 110 establish the criteria for determining whether an oil spill may be harmful to public health or welfare or the environment, thereby triggering the reporting requirements. Oil discharges deemed to be harmful include:

- Discharges that cause a sheen or discoloration on the surface of a body of water;
- Discharges that violate applicable water quality standards; and
- Discharges that cause a sludge or emulsion to be deposited beneath the surface of the water or on adjoining shorelines.

4.3.4 <u>Discharge Reporting Information</u> [40 CFR 112.7(a) (4)]

4.3.4.1 Petroleum Product Spill

In the event of a reportable spill, the following information should be supplied to EPA and ADEM. A blank reporting form and an in-house spill information form are provided in **Appendix A**.

- Exact facility address and phone number
- Date and time of spill
- Type of material spilled (for example: diesel fuel)
- Estimated quantity spilled
- Estimated quantity entering navigable waters (not plant drainage)
- Source of spill
- Description of affected area (for example: spill covered dirt area 80 feet long by 20 feet wide and 20 feet of concrete drainage channel)
- Cause of the spill
- Injuries or damages
- Corrective actions taken
- State whether evacuation is needed
- Names of other parties contacted
- Names of other parties to be contacted

If the facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the United States, or has discharged more than 42 gallons in each of two spill events within any 12 month period, the facility must submit to EPA Region IV and ADEM within 60 days of the trigger event the following information:

- Name of the facility
- Name(s) of the owner or operator of the facility
- Location of the facility
- Maximum storage or handling capacity of the facility and normal daily throughput
- Description of the facility, including maps, flow diagrams, and topographical maps
- The cause(s) of the triggering spill event, including a failure analysis of the system or subsystem in which the failure occurred
- The corrective actions taken, including an adequate description of equipment repairs and/or replacements

- Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and
- Other information as may be requested by EPA pertinent to the facility's SPCC plan or the spill event

4.3.4.2 CERCLA Spills (Not Applicable)

In addition, under SARA Title III (Community Right-to-Know Act) Section 304, SARA facilities that have a reportable spill of listed materials must immediately notify the National Response Center, state agencies, and local emergency planning commissions. Notify any others as necessary. The initial notifications for reportable spills can be by telephone (numbers listed above) and should include:

- 1. Chemical name or identity of the chemical or substance released;
- 2. Indicate whether the substance is on SARA list [Section 302(a)(2)] or on CERCLA list [Section 101];
- 3. An estimate of the quantity of substance released;
- Time and duration of the release:
- Specific location of the spill;
- 6. The medium or media into which the release occurred (air, water, land);
- 7. Any known or anticipated acute or chronic health problems, and where applicable, advice regarding medical attention necessary for exposed individuals;
- 8. Proper precautions to be taken as a result of the release, such as evacuation; and
- 9. Name and telephone number(s) for the person(s) to be contacted for additional information.

4.3.5 <u>Emergency Procedures</u> [40 CFR 112.7(a)(5)]

This section outlines initial response actions for a spill or release at the facility. It does not detail the necessary actions for remediation of a major release, but provides guidance for minimizing potential damage. The intent of this plan is to provide appropriate guidance for response to spills of petroleum products and hazardous substances. However, this plan may not address all compliance issues for spills covered by regulations mandated by laws other than the Clean Water Act (for example, RCRA, CERCLA, or State requirements). These guidelines should be followed to the extent possible and practical.

<u>General</u> guidelines for spill response are outlined in the following numbered items followed by six area-specific response guidelines.

Action Checklist:

1. IF AT ALL POSSIBLE, STOP THE SOURCE OF THE SPILL IMMEDIATELY. Close the valve, shut down pumping, or take whatever actions are possible to stop any release. If conditions are hazardous (for example, fire or potential explosion), do not approach. Call the Environmental Coordinator. If unavailable, call one of the alternates listed below. The Environmental Coordinator (or alternate) will designate the appropriate personnel safety equipment, which must be worn when approaching releases.

EMERGENCY COORDINATOR

Randall E. Crawford, Managing Member 13413 Lake Harris Rd. Tuscaloosa, AL 35406 Phone: (205) 300-4799

Fax: (205) 553-3175

ALTERNATE EMERGENCY CONTACTS

Cahaba Resources, LLC (205) 556-8380

If safety is not an issue, call other nearby employees for assistance in stopping the release.

When the Environmental Coordinator (or alternate) arrives, all other response actions are to be under his or her direction. The Environmental Coordinator (or alternate) should then determine the necessary response actions including whether evacuation of parts or all of the plant is necessary for employee safety. In general, the Environmental Coordinator (or alternate) will be required to direct the containment of the release and decide on alternative source control if the source of the release was not controlled by the person(s) discovering it. The release should be confined to the smallest area possible. Use booms or sandbags, dig small trenches, or place absorbent pads to stop the spread. If necessary, wood chips, fiberglass mates, sawdust, or scrap paper may be used as a last resort. Take immediate action to prevent the spill from reaching off-site or surface waters. Place booms or pads, dig a diversion ditch, or use soil to form a berm. If the release reaches water, attempt to place booms to contain the release or, if necessary, block drainage downstream of spill to prevent further discharge.

Spill reporting information is detailed in Section 4.3.

4.4 Potential Spill Predictions, Volumes, Rates and Control (40 CFR 112.7(b)]

Potential spill information is detailed in section 4.3.3.1 and 4.5 of this plan.

4.5 <u>Discharge Prevention Procedure</u> [40 CFR 112.7(c)]

4.5.1 Area A - Fueling Area

Containment structures are detailed within Table 1 of this SPCC Plan.

4.6 Containment Not Practical [40 CFR 112.7(d)]

This facility is in complete conformance with all applicable requirements of 40 CFR 112.

4.7 <u>Inspection, Test and Records [40 CFR 112.7(e)]</u>

Monthly inspections of secondary containment areas and general housekeeping procedures are scheduled at the facility. Inspections are also conducted prior to draining storm water from secondary containment areas. Written logs of these inspections are kept on file at the Environmental Coordinator's office. Sample inspection logs are contained in **Appendix A**. Sample records of oil transfer, drainage, and oil removal, along with recommended spill clean up equipment are located in **Appendix A**.

4.8 Personnel Training and Discharge Prevention Procedures [40 CFR 112.7(f)]

4.8.1 **Personnel Training** [40 CFR 112.7(f)(1)]

Each employee is responsible for recognizing the potential for an occurrence of any spill and for calling this to the attention of appropriate personnel. The training of oil-handling employees will address the following topics:

- The operation and maintenance of equipment to prevent discharges;
- Discharge procedure protocols (including spill communication procedures);
- Applicable pollution control laws, rules and regulations
- General facility operations; and
- The contents of the SPCC Plan

Personnel receiving annual training at the facility include maintenance and operational personnel that are involved in activities involving oil storage, operating equipment using oil, oil transfer operations, and emergency response/spill coordination. Training certification forms are included in **Appendix A**.

4.8.2 <u>Designated Person Accountable for Discharge Prevention</u> [40 CFR 112.7(f)(2)]

Randall E. Crawford is the designated person accountable for spill prevention at the facility and reports to facility ownership. His contact telephone number is listed in prior sections of this report:

4.8.3 <u>Discharge Prevention Briefings</u> [40 CFR 112.7(f)(3)]

At a minimum, discharge prevention briefings will be conducted with oil-handling employees on an annual basis to assure adequate understanding of the SPCC Plan for the facility. In addition to the topics described above, these briefings will also highlight the following:

- Known discharges of oil to the waters of the state (or U.S.) and failures in preventing such discharges
- The contribution of any malfunctioning operational equipment or spill prevention equipment to the discharges described above
- The remedies, controls or precautionary measures recently developed to prevent and/or control similar discharges in the future

Records of the training briefings will be maintained for a period of three years and will include a short description of the topics covered, and employee sign-in sheets. A copy of these records will be kept in the environmental files so that they are immediately accessible to the Plan.

4.9 Security

4.9.1 Facility Fencing [40 CFR 112.7(g)(1)]

Entrance to the Deerlick West Mine facility, on which Cahaba Resources operates, is locked and gated during non-operational hours. Pump controls are limited to access via authorized personnel.

4.9.2 <u>Security of Containment Drain Valves</u> [40 CFR 112.7(g)(2)]

Containment areas at the facility are not equipped with drain valves. Any collected material or material leaving any containment area should be immediately reported to the Environmental Coordinator.

4.9.3 Locking of Oil Pump Starter Controls [40 CFR 112.7 (g)(3)]

All pump starter controls remain locked and in the closed position when in non-operating or non-standby status. The double wall tank on-site has master controls to disable pumps in case of an emergency.

4.9.4 Security of Loading/Unloading Connections [40 CFR 112.7(g)(4)]

Securely cap or blank-flange the loading/unloading connections of oil pipelines and facility piping that are not in use for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or pressure. Any uncapped connections that are not attended should be reported to the Environmental Coordinator.

4.9.5 Facility Lighting [40 CFR 112.7(g) (5)]

Adequate lighting is provided in the vicinity of all petroleum storage tanks to allow for detection of leaks during hours of darkness. Inadequate or non-functioning lighting should be reported to the Environmental Coordinator.

4.10 Facility Loading/Unloading Racks [40 CFR 112.7(h)]

The facility does not have a loading/unloading rack. Equivalent environmental protection is provided by careful observation during loading/unloading operations, maintenance of ample supplies of spill absorbent materials at loading/unloading areas and barriers to protect direct discharge to waters of the state. Any spills would be detected and cleaned immediately.

4.10.1 Containment for Loading/Unloading Racks [40 CFR 112.7(h) (1)]

The facility does not have a loading/unloading rack.

4.10.2 Warning Systems [40 CFR 112.7(h) (2)]

All incoming and outgoing petroleum or petroleum byproduct shipments are made by tank truck. All drivers comply with DOT regulations in 40 CFR Part 177, Subpart B and facility contractor rules. Tank trucks remain running during delivery as their pumps are used to pump product into the storage tanks. The vehicle hand brake is set and wheel chocks are utilized to prevent vehicular departure prior to complete disconnection of transfer lines. Tanks are properly grounded and bonded and smoking is not permitted in the area at any time. Typically tanks are only filled to 85% of their capacity. Although inventories are monitored so that the tanks will always be able to accept the largest shipment, the unloading driver verifies product level before each delivery to prevent tank overfill.

4.10.3 <u>Vehicle Inspection Procedures</u> [40 CFR 112.7(h)(3)]

The truck driver will examine vehicle drain and outlets on tank trucks prior to departure. Rail tank cars are not used for oil at this facility.

4.11 Brittle Facture Evaluation of Field-Erected Containers [40 CFR 112.7(i)]

Not applicable.

4.12 Conformance with State Requirements [40 CFR 112.7(j)]

There are no other state prevention standards that are required to be followed, including other prevention and containment procedures listed in this part or any applicable State of Alabama or local rules, regulations or guidelines.

5.1 <u>Meeting General Requirements of CFR 112.7</u> [40 CFR 112.8(a)]

General requirements of Section 112.7 have been addressed in Section 4 of the Plan. Discharge prevention and containment procedures are addressed in this section.

5.2 SPCC Plan Requirements for Onshore Facilities [40 CFR 112.8(b)]

5.2.1 <u>Diked Storage Area Drainage</u> [40 CFR 112.8(b)(1)]

Containment areas at the facility are not equipped with drain valves. Collected material within containment areas will be manually removed. Records of release of the contents of secondary containment areas are maintained at the site office. Any collected material or material leaving any containment area should be immediately reported to the Environmental Coordinator.

5.2.2 <u>Valve Design for Diked Area Drainage</u> [40 CFR 112.8(b)(2)]

Primary containment areas at the facility are not equipped with drain valves. The containment curb associated with the tanker fill area will maintain a valved design with the valve to be closed during fuel transfers. The valve will remain open at all other times.

5.2.3 Drainage from Undiked Areas [40 CFR 112.8(b) (3)]

Petroleum containing areas are designed to hold 110% of the largest container within the containment area. Petroleum products should not encounter undiked areas.

5.2.4 Alternate Drainage Systems [40 CFR 112.8(b) (4)]

Spills from tanks, containers and hydraulic units are contained or collected on absorbent material. Procedures are in place to minimize the risk of releasing petroleum contaminated water.

5.2.5 Safeguards for Human Error and Equipment Failure [40 CFR 112.8(b) (5)]

Storm water and potential spills do not encounter equipment prior to discharge that could fail and cause a release to the environment. However, human error is always a concern. Adequate absorbent material is available to contain and absorb any spill.

5.3 Bulk Storage Containers [40 CFR 112.8(c)]

5.3.1 Container Materials and Construction Compatibility [40 CFR 112.8(c)(1)]

All ASTs are constructed of mild steel and are compatible with its contents. The tanks were primed and painted upon installation. All tanks are at atmospheric pressure and were designed for the temperature ranges normally encountered in Alabama.

A listing of major oil tanks, and other oil contained in drums and totes, is shown in Table 1.

5.3.2 <u>Containment</u> [40 CFR 112.8(c)(2)]

All secondary containment systems which contain petroleum products are designed to hold at least 110% of the tanks contents. If tank sizes or containment areas are modified, then the Environmental Coordinator should be contacted immediately. The double wall tank on-site meets this requirement.

The containment sizes are shown in Table 1.

5.3.3 Drainage Procedures from Diked Areas [40 CFR 112.8(c) (3)]

5.3.3.1 <u>Drain Valves</u> [40 CFR 112.8(c)(3)(i)]

Tank containment areas at the facility are not equipped with drain valves. Collected material within containment areas will be manually removed. Records of release of the contents of secondary containment areas are maintained at the site office. Any collected material or material leaving any containment area should be immediately reported to the Environmental Coordinator.

The tanker fill area does maintain a drain valve/dike. Records of any accumulation of stormwater or fuel products will be maintained along with disposal information as necessary. The drains will be closed during fuel transfer operations and opened at all other times.

5.3.3.2 Inspection of Accumulated Storm Water [40 CFR 112.8(c) (3) (ii)]

Accumulated stormwater or spilled material will be inspected for the presence of sheen before being released or removed, and records of the inspection will be kept with the Environmental Coordinator. Records of release of the contents of secondary containment areas are maintained at the site office.

5.3.3.3 Supervised Drainage [40 CFR 112.8(c)(3)(iii)]

Accumulated stormwater will be inspected for the presence of sheen before being released, and records of the inspection will be kept in with the Environmental Coordinator. Records of release of the contents of secondary containment areas are maintained at the site office. The drainage of the petroleum-free storm water will be supervised by an employee who has been trained on the SPCC plan and familiar with proper techniques associated with this procedure.

5.3.3.4 <u>Drainage Records</u> [40 CFR 112.8(c) (3) (IV)]

In the event that petroleum-free storm water is released from the containment area, a record will be kept on file documenting the approximate amount of storm water released from the containment.

5.3.4 Corrosion Protection of USTs [40 CFR 112.8(c) (4)]

There are no USTs on-site. Not applicable.

5.3.5 Corrosion Protection of Partially Buried Tanks [40 CFR 112.8(c) (5)]

There are no partially buried tanks at this facility. Not applicable.

5.3.6 <u>Integrity Testing of Aboveground Containers</u> [40 CFR 112.8(c) (6)]

Inspections are conducted monthly to examine the exterior of all tanks, supports and foundations, the containment areas, and outside containment structures. In addition, the tank will be visually inspected at the time of any repair. The requirement to provide integrity testing is met with equivalent environmental protection by the ability to visually survey the exterior surfaces of all petroleum storage vessels on site. Routine inspection of containment areas and storage areas will allow for rapid awareness of potential spills or leaks.

5.3.7 Tank Internal Heating Coils [40 CFR 112.8(c)(7)]

This facility does not have any tanks that have internal heating coils. Not applicable.

5.3.8 Fail-Safe Overfill and Liquid Level Devices [40 CFR 112.8(c) (8)]

Petroleum product transfers are attended continuously by plant and delivery personnel. Direct audible communication between the container gauger and the pump operator are maintained continuously during product loading operations.

5.3.9 Effluent Treatment System Inspections [40 CFR 112.8(c) (9)]

Not Applicable.

5.3.10 Correction of Visible Discharges and Removal of Oil Accumulation from Diked Area [40 CFR 112.8(c)(10)]

Any accumulation of petroleum within secondary containment areas is to be immediately cleaned up using adsorbent pads, booms, or other removal methods. Any and all defective equipment or leaks are to be immediately reported to the Environmental Coordinator.

5.3.11 Mobile/Potable Containers Siting and Containment [40 CFR 112.8(c)(11)]

Minimal amounts of lubricating, motor and hydraulic oils are maintained in the site structure and may be at various locations on-site. All petroleum containers are stored in such a manner as to reduce the likelihood of release to the environment.

5.4 Facility Transfer Operations, Pumping and Facility Process [40 CFR 112.8(d)]

5.4.1 Corrosion Provisions for Buried Piping [40 CFR 112.8(d)(1)]

There is no buried piping on-site. Not applicable.

5.4.2 <u>Security of Transfer Connections</u> [40 CFR 112.8(d)(2)]

Pipe connections are equipped with a cap when not in use.

5.4.3 Pipe Support Design [40 CFR 112.8(d)(3)]

Pipe supports at the facility are inspected periodically to confirm structural integrity. Corrosion, abrasion, or structural defects observed in any petroleum product piping should be immediately reported to the Environmental Coordinator.

5.4.4 Inspections of Aboveground Valves, Piping and Appurtenances [40 CFR 112.8(d)(4)]

Valves and piping at the facility are inspected periodically to confirm structural integrity. General condition of items such as flange joints, expansion joints, valve glands, catch pans, pipeline supports, locking valves, and metal surfaces should be assessed. Structural defects observed in any petroleum product piping of valves should be immediately reported to the Environmental Coordinator.

5.4.5 <u>Warning Practices for Vehicles</u> [40 CFR 112.8(d)(5)]

All vehicles entering the facility are warned to be aware of aboveground piping. Any damage to aboveground piping should be immediately reported to the Environmental Coordinator.

SECTION 6.0 NON APPLICABLE SECTIONS

The following sections of the SPCC regulations are **NOT APPLICABLE** to this facility.

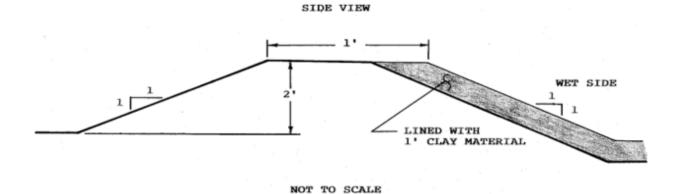
Rule Citation	<u>Title</u>
112.7(c)(2)	Spill Prevention Systems – Offshore
112.7(h)	Loading/Unloading Racks
112.7(i)	Evaluation of Tanks for Brittle Fracture
112.8(c)(4)	Protection of USTs
112.8(c)(5)	Protection of Partially Buried Tanks
112.8(c)(7)	Tank Internal Heating Coils
112.8(c)(9)	Effluent Treatment System Inspections
112.8(d)(1)	Provisions for Buried Piping
112.9	Requirements for Onshore Oil Production Facilities
112.10	Onshore Oil Drilling and Workover Facilities
112.11	Offshore Oil Drilling, Production or Workover Facilities
Subpart C	Requirements for Animal Fats and Vegetable Oils
112.12	Onshore Facilities
112.13	Onshore Oil Production Facilities
112.14	Onshore Oil Drilling and Workover Facilities
112.15	Offshore Oil Drilling, Production or Workover Facilities
112.20	Facility Response Plans (see Appendix A)
112.21	Facility Response Training and Drills/Exercises

Note: A copy of the Oil Pollution Prevention Regulations (40 CFR 112) is included in Appendix A.

Figures

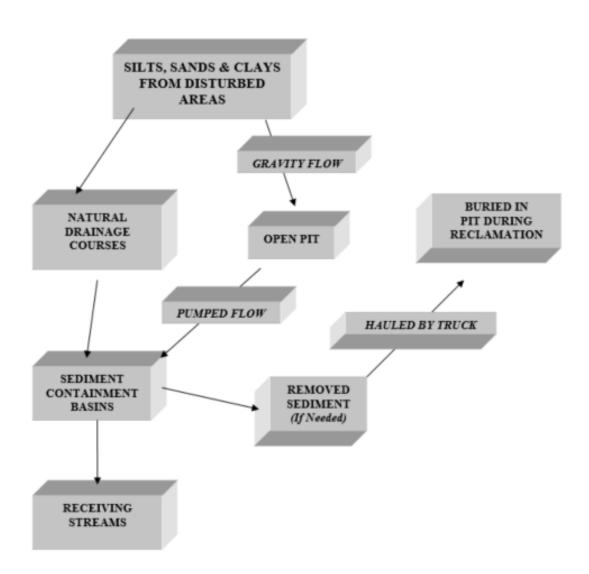
BERM DESIGN TYPICAL SECTIONS

Berm to be lined with 12 inches of clay material with a permeability of 1 x 10-6 cm/sec or less. Interior to be lined with impermeable plastic liner beneath clay liner.



NOTE: Containment berm to be lined with a clay material with a permeability of 1 x 10^{-6} cm/sec or less.

SCHEMATIC DIAGRAM OF WASTE CYCLE



Appendix A

SPILL REPORTING FORM

Facility Name:	Cahaba Resources, LLC – Deerlick West Mine Tuscaloosa, Alabama 35406	
Date of Report:		
Person Filing Re	eport:	
Time of Report:		
What was spilled	d:	
Amount of spill:		
Cause of spill: _		
Maximum Capad	city of Petroleum Products at Facility:	
Normal Daily Us	age of Petroleum Products:	
Was the Nationa	al Response Center (NRC) and the appropriate State authorities contacted:	
Yes	No	
If yes, give the ti	me and the name(s) of the people contacted:	
List the names c	of the EPA or ADEM personnel who inspected the clean-up:	
		_
List the methods	s of clean-up or disposal approved or recommended by them:	
		_
Reported by:		
Emergency Coo	rdinator's Signature:	
Date:		

SPILL INFORMATION FORM

Exact Facility Address and Telephone Number: Deerlick West Mine

13413 Lake Harris Rd. Tuscaloosa, Alabama 35406

(205) 556-8380

Spill Date and Time
Type of Material Spilled (for example: diesel fuel, oil)
Estimated Quantity Spilled:
Estimated Quantity Entering Navigable Waters (not plant discharge)
Source of Spill:
Description of Affected Area (for example: spill covered dirt area 80 feet long by 20 feed wide)
Cause of Spill:
Injuries or Damages:
Corrective Actions Taken:
Evacuation Needed:
Names of Other Parties Contacted:
Names of Other Parties to be Contacted:

SPILL PREVENTION CONTROL AND COUNTERMEASURE COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR §112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, Cahaba Resources will amend the SPCC Plan within six months of the review to include more effective prevention and control technology. Any amendments to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Signature

Review Dates

1.	
2.	
3.	
	Management Approval
navigable waters and the prevention control and	is committed to the prevention of discharges of oil to environment, and maintains the highest standards for spill countermeasures through regular review, updating and pill Prevention Control and Countermeasure Plan for the lity.
Authorized Facility Represe	entative:
Signature:	
Title:	

Facility Inspection Report and Checklist

Date:				X = Satisfactory		
Time:				NA = Not Applicable		
				O = Repair or Adjustment Required		
Inspector:				C = See Comment Under		
				Remarks/Recommendations		
<u>Drainage</u>		<u>ASTs</u>				
	Any noticeable oil sheen or runoff		ank su akage	urfaces checked for signs of		
	Containment area drainage valves are closed and locked.	T	ank co	condition good (no rusting, corrosion,		
<u>N/A</u>	Oil/water separator systems working Properly.		pitting) Bolts, rivets, or seams are not damaged.			
<u>N/A</u>		Т	ank fo	undation intact.		
	No visible oil sheen in containment area. No standing water in containment area.	L	evel ga	auges and alarms working properly.		
		N/A Valves, flanges, and gaskets are free from leaks.				
<u>N/</u>			N/A Containment walls are intact.			
<u>Pipelines</u>		Truck	<u>Loadii</u>	ng/Unloading Area		
	No signs of corrosion damage to pipelines or supports.	<u>N/A</u> N	o stand	ding water in rack area		
	Buried pipelines are not exposed Out-of-service pipes capped			g signs posted s in hoses		
N/A Signs/barriers to protect pipelines from vehicles are in place		N/A Drip pans not overflowing				
	No leaks at valves, flanges, or other fittings			asins free of contamination ment curbing or trenches intact		
Security		<u>Training</u>				
 	Fence and gates intact Gates have locks ASTs locked when not in use Starter controls for pumps locked when not in use Lighting is working properly			evention briefing held g records are in order		
Remarks/Pa	commendations:					

Record of Oil Transfer

Truck Drivers Responsibilities:

- 1. Stay with truck, within reach of transfer shutoff valve at all times while transferring product.
- 2. Verify with Plant Personnel which tank and fill point should be used for product transfer.
- 3. Cleanup all transfer related releases of products, including releases from connection and disconnecting product transfer lines.
- 4. Meet with Plant Personnel after completing transfer to sign off on this *Record of Oil Transfer*.

Date:
Time:
Product Off-loaded:
Truck Driver's Name:
Plant Representative's Name:
Was any product dripped or spilled during transfer? Yes No
Driver's Comments:
Plant Representative's Comments:
Driver's Signature:
Plant Representative's Signature:

Record of Drainage, Inspection, and Oil Removal from Secondary Containment

Date	te:	
Stora	prage Location:	
Conte	ntents of Vessel:	
Wher tank	nenever discharging storm water that has collected in the bulk k containment area, an inspector must complete the following for	petroleum storag m.
I.	INSPECTION OF CONTAINMENT Is there any indication that the collected storm water would:	
	A. Violate applicable water quality standards?Yes	_No
	B. Cause a film, sheen, or discoloration?Yes	_No
II.	DRAINAGE OF CONTAINMENT If the answer to either questions above was yes, describve te of the collected liquid.	
	,	
	and the second s	
	If the answer to both questions was no, then record the follow	
A.	A. Valve opening date:Time:	
В.	B. Valve closed and locked date:Time:	
	Signature of Inspe	ector

Recommended Spill Clean-up Equipment

- 1. Shovels, rakes, and other hand tools stored in close proximity to oil storage facilities.
- 2. Oil booms and socks.
- 3. Oil absorbent pads (2-bales).
- 4. Oil-dry (1-pallet).
- 5. Access to earth moving equipment either on-site or by local contractors on a 24-hour basis.

SPCC Plan Training Attendee List

- <u>-</u>		
	·	
		
		
		
	-	

SPCC Training Certification Form

This is to acknowledge that I have reviewed the June 2011 version of the Spill Prevention Control and Countermeasure Plan for the Deerlick West Mine facility, and have been trained in its use and am familiar with its contents.

I understand that I am personally responsible for my actions and will be held accountable. on my part may be grounds for dismissal, government fines, or possible imprisonment.	Negligent acts
Name (please print)	
Signature	

Date

Certification of the Applicability of the Substantial Harm Criteria Checklist

Section 112.20(e) of the facility response plan regulation requires that all facilities regulated by the Oil Petroleum Prevention Regulation (40 CFR Part 112) conduct an initial screening to determine whether they are required to develop a facility response plan. The criteria in this checklist can be found in 40 CFR 112.20(f)(1). Facilities should include this form with their SPCC Plan.

Certification of the Applicability of the Substantial Harm Criteria Checklist

Deerlick West Mine

Facility Name:

Facility	Address:	13413 Lake Harris Rd.		
,		Tuscaloosa, AL 35406		
1.		ry transfer oil over water to or from v y greater than or equal to 42,000 gallon No <u>x</u>	essels and does the facility have a totans?	ıl oil
2.	does the facility largest abovegr	lack secondary containment that is su	eater than or equal to 1 million gallons ufficiently large to contain the capacity of reeboard to allow for precipitation within	the
3.	the facility located 40 CFR 112 or to fish and wild sensitive environments. Vessel Responsitions of the facility of the facili	ted at a distance (as calculated using to a comparable formula (1) such that a collife and sensitive environments? For paraments, see Appendices I, II and III and II and	ater than or equal to 1 million gallons an he formula in Attachment C-III, Appendiz lischarge from the facility could cause in r further description of fish and wildlife to DOC/NQAA's "Guidelines for Facility dix E, 40 CFR 112 for availability) and	x C, njury and and
4.	the facility loc Appendix C, 40	ated at a distance (as calculated using	ater than or equal to 1 million gallons and the appropriate formula (Attachment C-I such that a discharge from the facility wo	III,
5.		erienced a reportable oil spill in an am-	er than or equal to 1 million gallons and bunt greater than or equal to 10,000 gall	
		Certification		
	submitted in th	penalty of law that I have personally ex is document, and that based on my	amined and am familiar with the informa inquiry of those individuals responsible information is true, accurate, and comple	for
	Name (please t	ype or print) Signature	Date	

112 of the Code of Federal Regulations, is amended as follows:

PART 112—OIL POLLUTION **PREVENTION**

1. The authority for part 112 continues to read as follows:

Authority: 33 U.S.C. 1251 et seq.; 33 U.S.C 2720; E.O. 12777 (October 18, 1991), 3 CFR, 1991 Comp., p. 351.

2. Part 112 is amended by designating §§ 112.1 through 112.7 as subpart A, adding a subpart heading and revising newly designated subpart A to read as

Subpart A-Applicability, Definitions, and General Requirements For All Facilities and All Types of Oils

Sec

112.1 General applicability.

Definitions

112.3 3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.

112.6 [Reserved].112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

Subpart A-Applicability, Definitions, and General Requirements for All Facilities and All Types of Oils

§112.1 General applicability.

(a)(1) This part establishes procedures, methods, equipment, and other requirements to prevent the discharge of oil from nontransportation-related onshore and offshore facilities into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act).

(2) As used in this part, words in the singular also include the plural and words in the masculine gender also include the feminine and vice versa, as

the case may require.
(b) Except as provided in paragraph (d) of this section, this part applies to any owner or operator of a nontransportation-related onshore or offshore facility engaged in drilling, producing, gathering, storing,

processing, refining, transferring, distributing, using, or consuming oil and oil products, which due to its location, could reasonably be expected to discharge oil in quantities that may be harmful, as described in part 110 of this chapter, into or upon the navigable waters of the United States or adjoining shorelines, or into or upon the waters of the contiguous zone, or in connection with activities under the Outer Continental Shelf Lands Act or the Deepwater Port Act of 1974, or that may affect natural resources belonging to, appertaining to, or under the exclusive management authority of the United States (including resources under the Magnuson Fishery Conservation and Management Act) that has oil in:

(1) Any aboveground container;(2) Any completely buried tank as

defined in § 112.2;

(3) Any container that is used for standby storage, for seasonal storage, or for temporary storage, or not otherwise "permanently closed" as defined in

(4) Any "bunkered tank" or "partially buried tank" as defined in § 112.2, or any container in a vault, each of which is considered an aboveground storage container for purposes of this part.

(c) As provided in section 313 of the Clean Water Act (CWA), departments, agencies, and instrumentalities of the Federal government are subject to this part to the same extent as any person.

(d) Except as provided in paragraph (f) of this section, this part does not

apply to:
(1) The owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the Environmental Protection Agency (EPA) under section 311(j)(1)(C) of the CWA,

as follows: (i) Any onshore or offshore facility, that due to its location, could not reasonably be expected to have a discharge as described in paragraph (b) of this section. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters or adjoining shorelines, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge as described in paragraph (b) of this

(ii) Any equipment, or operation of a vessel or transportation-related onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of

Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971

(Appendix A of this part).
(iii) Any equipment, or operation of a vessel or onshore or offshore facility which is subject to the authority and control of the U.S. Department of Transportation or the U.S. Department of the Interior, as defined in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA, dated November 8, 1993 (Appendix B of this part).
(2) Any facility which, although

otherwise subject to the jurisdiction of EPA, meets both of the following

requirements:

(i) The completely buried storage capacity of the facility is 42,000 gallons or less of oil. For purposes of this exemption, the completely buried storage capacity of a facility excludes the capacity of a completely buried tank, as defined in § 112.2, and connected underground piping, underground ancillary equipment, and containment systems, that is currently subject to all of the technical requirements of part 280 of this chapter or all of the technical requirements of a State program approved under part 281 of this chapter. The completely buried storage capacity of a facility also excludes the capacity of a container that is "permanently closed," as defined in § 112.2.

(ii) The aggregate aboveground storage

capacity of the facility is 1,320 gallons or less of oil. For purposes of this exemption, only containers of oil with a capacity of 55 gallons or greater are counted. The aggregate aboveground storage capacity of a facility excludes the capacity of a container that is 'permanently closed," as defined in

§ 112.2.
(3) Any offshore oil drilling production, or workover facility that is subject to the notices and regulations of the Minerals Management Service, as specified in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA. dated November 8, 1993 (Appendix B of

this part).
(4) Any completely buried storage tank, as defined in § 112.2, and connected underground piping, underground ancillary equipment, and containment systems, at any facility, that is subject to all of the technical requirements of part 280 of this chapter or a State program approved under part 281 of this chapter, except that such a tank must be marked on the facility diagram as provided in § 112.7(a)(3), if

the facility is otherwise subject to this part.

(5) Any container with a storage

capacity of less than 55 gallons of oil.
(6) Any facility or part thereof used exclusively for wastewater treatment and not used to satisfy any requirement of this part. The production, recovery, or recycling of oil is not wastewater treatment for purposes of this

paragraph.

(e) This part establishes requirements for the preparation and implementation of Spill Prevention, Control, and Countermeasure (SPCC) Plans. SPCC Plans are designed to complement existing laws, regulations, rules, standards, policies, and procedures pertaining to safety standards, fire prevention, and pollution prevention rules. The purpose of an SPCC Plan is to form a comprehensive Federal/State spill prevention program that minimizes the potential for discharges. The SPCC Plan must address all relevant spill prevention, control, and countermeasures necessary at the specific facility. Compliance with this part does not in any way relieve the owner or operator of an onshore or an offshore facility from compliance with other Federal, State, or local laws

(f) Notwithstanding paragraph (d) of this section, the Regional Administrator may require that the owner or operator of any facility subject to the jurisdiction of EPA under section 311(j) of the CWA prepare and implement an SPCC Plan, or any applicable part, to carry out the

purposes of the CWA

(1) Following a preliminary determination, the Regional Administrator must provide a written notice to the owner or operator stating the reasons why he must prepare an SPCC Plan, or applicable part. The Regional Administrator must send such notice to the owner or operator by certified mail or by personal delivery. If the owner or operator is a corporation. the Regional Administrator must also mail a copy of such notice to the registered agent, if any and if known, of the corporation in the State where the facility is located.
(2) Within 30 days of receipt of such

written notice, the owner or operator may provide information and data and may consult with the Agency about the need to prepare an SPCC Plan, or

applicable part.

(3) Within 30 days following the time under paragraph (b)(2) of this section within which the owner or operator may provide information and data and consult with the Agency about the need to prepare an SPCC Plan, or applicable part, the Regional Administrator must make a final determination regarding

whether the owner or operator is required to prepare and implement an SPCC Plan, or applicable part. The Regional Administrator must send the final determination to the owner or operator by certified mail or by personal delivery. If the owner or operator is a corporation, the Regional Administrator must also mail a copy of the final determination to the registered agent, if any and if known, of the corporation in the State where the facility is located.

(4) If the Regional Administrator makes a final determination that an SPCC Plan, or applicable part, is necessary, the owner or operator must prepare the Plan, or applicable part, within six months of that final determination and implement the Plan, or applicable part, as soon as possible, but not later than one year after the Regional Administrator has made a final

determination.
(5) The owner or operator may appeal a final determination made by the Regional Administrator requiring preparation and implementation of an SPCC Plan, or applicable part, under this paragraph. The owner or operator must make the appeal to the Administrator of EPA within 30 days of receipt of the final determination under paragraph (b)(3) of this section from the Regional Administrator requiring preparation and/or implementation of an SPCC Plan, or applicable part. The owner or operator must send a complete copy of the appeal to the Regional Administrator at the time he makes the appeal to the Administrator. The appeal must contain a clear and concise statement of the issues and points of fact in the case. In the appeal, the owner or operator may also provide additional information. The additional information may be from any person. The Administrator may request additional information from the owner or operator. The Administrator must render a decision within 60 days of receiving the appeal or additional information submitted by the owner or operator and must serve the owner or operator with the decision made in the appeal in the manner described in paragraph (f)(1) of this section.

§ 112.2 Definitions.

For the purposes of this part: Adverse weather means weather conditions that make it difficult for response equipment and personnel to clean up or remove spilled oil, and that must be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height as specified in Appendix E to this part

(as appropriate), ice conditions, temperatures, weather-related visibility, and currents within the area in which the systems or equipment is intended to function.

Alteration means any work on a container involving cutting, burning, welding, or heating operations that changes the physical dimensions or configuration of the container.

Animal fat means a non-petroleum oil, fat, or grease of animal, fish, or

marine mammal origin.

Breakout tank means a container used to relieve surges in an oil pipeline system or to receive and store oil transported by a pipeline for reinjection and continued transportation by pipeline.

Bulk storage container means any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

Bunkered tank means a container constructed or placed in the ground by cutting the earth and re-covering the container in a manner that breaks the surrounding natural grade, or that lies above grade, and is covered with earth, sand, gravel, asphalt, or other material. A bunkered tank is considered an aboveground storage container for

purposes of this part.

Completely buried tank means any container completely below grade and covered with earth, sand, gravel, asphalt, or other material. Containers in vaults, bunkered tanks, or partially buried tanks are considered aboveground storage containers for purposes of this part.

Complex means a facility possessing a combination of transportation-related and non-transportation-related components that is subject to the jurisdiction of more than one Federal agency under section 311(j) of the CWA.

Contiguous zone means the zone established by the United States under Article 24 of the Convention of the Territorial Sea and Contiguous Zone, that is contiguous to the territorial sea and that extends nine miles seaward from the outer limit of the territorial

Contract or other approved means means:

(1) A written contractual agreement with an oil spill removal organization that identifies and ensures the availability of the necessary personnel and equipment within appropriate response times; and/or

(2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times; and/or

(3) Active membership in a local or regional oil spill removal organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the

specified geographic area; and/or (4) Any other specific arrangement approved by the Regional Administrator upon request of the owner or operator.

Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil, but excludes discharges in compliance with a permit under section 402 of the CWA; discharges resulting from circumstances identified, reviewed, and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit; or continuous or anticipated intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems. For purposes of this part, the term discharge shall not include any discharge of oil that is authorized by a permit issued under section 13 of the River and Harbor Act of 1899 (33 U.S.C. 407).

Facility means any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and waste treatment, or in which oil is used, as described in Appendix A to this part. The boundaries of a facility depend on several site-specific factors, including, but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and the

types of activity at the site.

Fish and wildlife and sensitive environments means areas that may be identified by their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine

reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

Injury means a measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource resulting either directly or indirectly from exposure to a discharge, or exposure to a product of reactions resulting from a discharge.

Maximum extent practicable means within the limitations used to determine oil spill planning resources and response times for on-water recovery, shoreline protection, and cleanup for worst case discharges from onshore nontransportation-related facilities in adverse weather. It includes the planned capability to respond to a worst case discharge in adverse weather, as contained in a response plan that meets the requirements in § 112.20 or in a specific plan approved by the Regional Administrator.

Navigable waters means the waters of the United States, including the territorial seas.

(1) The term includes:

(i) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;

(ii) All interstate waters, including

interstate wetlands;

(iii) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:

(A) That are or could be used by interstate or foreign travelers for recreational or other purposes; or

(B) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or,

(C) That are or could be used for industrial purposes by industries in interstate commerce:

(iv) All impoundments of waters otherwise defined as waters of the United States under this section;

(v) Tributaries of waters identified in paragraphs (1)(i) through (iv) of this definition;

(vi) The territorial sea; and (vii) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (1) of this definition.

(2) Waste treatment systems. including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds which also meet the criteria of this definition) are not waters of the United States. Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency. for the purposes of the CWA, the final authority regarding CWA jurisdiction

remains with EPA. Non-petroleum oil means oil of any kind that is not petroleum-based, including but not limited to: Fats, oils, and greases of animal, fish, or marine mammal origin; and vegetable oils, including oils from seeds, nuts, fruits,

and kernels.

Offshore facility means any facility of any kind (other than a vessel or public vessel) located in, on, or under any of the navigable waters of the United States, and any facility of any kind that is subject to the jurisdiction of the United States and is located in, on, or under any other waters.

Oil means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Oil Spill Removal Organization means an entity that provides oil spill response resources, and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources

Onshore facility means any facility of any kind located in, on, or under any land within the United States, other than submerged lands.

Owner or operator means any person owning or operating an onshore facility or an offshore facility, and in the case of any abandoned offshore facility, the person who owned or operated or maintained the facility immediately prior to such abandonment.

Partially buried tank means a storage

container that is partially inserted or constructed in the ground, but not entirely below grade, and not

completely covered with earth, sand, gravel, asphalt, or other material. A partially buried tank is considered an aboveground storage container for purposes of this part.

Permanently closed means any

container or facility for which:

(1) All liquid and sludge has been removed from each container and connecting line; and

(2) All connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting the date of closure.

Person includes an individual, firm,

corporation, association, or partnership. Petroleum oil means petroleum in any form, including but not limited to crude oil, fuel oil, mineral oil, sludge, oil refuse, and refined products.

Production facility means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flowlines or gathering lines), or equipment (including but not limited to workover equipment, separation equipment, or auxiliary nontransportation-related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil, or associated storage or measurement, and located in a single geographical oil or gas field operated by a single operator.

Regional Administrator means the Regional Administrator of the Environmental Protection Agency, in and for the Region in which the facility is located.

Repair means any work necessary to maintain or restore a container to a condition suitable for safe operation, other than that necessary for ordinary day-to-day maintenance to maintain the functional integrity of the container and that does not weaken the container.

Spill Prevention, Control, and Countermeasure Plan; SPCC Plan, or Plan means the document required by § 112.3 that details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to a discharge.

Storage capacity of a container means the shell capacity of the container.

Transportation-related and nontransportation-related, as applied to an onshore or offshore facility, are defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of the Environmental Protection Agency, dated November 24, 1971, (Appendix A of this part).

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Pacific Island Governments.

Vegetable oil means a non-petroleum oil or fat of vegetable origin, including but not limited to oils and fats derived from plant seeds, nuts, fruits, and

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other

than a public vessel.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

Worst case discharge for an onshore

non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions as determined using the worksheets in Appendix D to this part.

§ 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

The owner or operator of an onshore or offshore facility subject to this section must prepare a Spill Prevention. Control, and Countermeasure Plan (hereafter "SPCC Plan" or "Plan)," in writing, and in accordance with § 112.7, and any other applicable section of this

(a) If your onshore or offshore facility was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, on or before February 17, 2003, and must implement the amended Plan as soon as possible, but not later than August 18, 2003. If your onshore or offshore facility becomes operational after August 16, 2002, through August 18, 2003, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare a Plan on or before August 18, 2003, and fully implement it as soon as possible, but not later than August

(b) If you are the owner or operator of an onshore or offshore facility that becomes operational after August 18,

2003, and could reasonably be expected to have a discharge as described in § 112.1(b), you must prepare and implement a Plan before you begin

(c) If you are the owner or operator of an onshore or offshore mobile facility, such as an onshore drilling or workover rig, barge mounted offshore drilling or workover rig, or portable fueling facility, you must prepare, implement, and maintain a facility Plan as required by this section. This provision does not require that you prepare a new Plan each time you move the facility to a new site. The Plan may be a general plan. When you move the mobile or portable facility, you must locate and install it using the discharge prevention practices outlined in the Plan for the facility. You may not operate a mobile or portable facility subject to this part unless you have implemented the Plan. The Plan is applicable only while the facility is in a fixed (non-transportation) operating

(d) A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.

(1) By means of this certification the Professional Engineer attests:
(i) That he is familiar with the

requirements of this part

(ii) That he or his agent has visited and examined the facility;

(iii) That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part; (iv) That procedures for required

inspections and testing have been established; and

(v) That the Plan is adequate for the

facility.

(2) Šuch certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.

(e) If you are the owner or operator of a facility for which a Plan is required under this section, you must:

(1) Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and

(2) Have the Plan available to the Regional Administrator for on-site review during normal working hours

(f) Extension of time. (1) The Regional Administrator may authorize an extension of time for the preparation and full implementation of a Plan, or any amendment thereto, beyond the time permitted for the preparation, implementation, or amendment of a

Plan under this part, when he finds that the owner or operator of a facility subject to this section, cannot fully comply with the requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond the control and without the fault of such owner or operator or his agents or employees.

(2) If you are an owner or operator seeking an extension of time under paragraph (f)(1) of this section, you may submit a written extension request to the Regional Administrator. Your

request must include:

(i) A full explanation of the cause for any such delay and the specific aspects of the Plan affected by the delay;

(ii) A full discussion of actions being taken or contemplated to minimize or

mitigate such delay; and

(iii) A proposed time schedule for the implementation of any corrective actions being taken or contemplated, including interim dates for completion of tests or studies, installation and operation of any necessary equipment, or other preventive measures. In addition you may present additional oral or written statements in support of

your extension request.

(3) The submission of a written extension request under paragraph (f)(2) of this section does not relieve you of your obligation to comply with the requirements of this part. The Regional Administrator may request a copy of your Plan to evaluate the extension request. When the Regional Administrator authorizes an extension of time for particular equipment or other specific aspects of the Plan, such extension does not affect your obligation to comply with the requirements related to other equipment or other specific aspects of the Plan for which the Regional Administrator has not expressly authorized an extension.

§ 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

If you are the owner or operator of a facility subject to this part, you must:

(a) Notwithstanding compliance with § 112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in § 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in § 112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject to this section:

(1) Name of the facility;

(2) Your name;

(3) Location of the facility; (4) Maximum storage or handling capacity of the facility and normal daily

throughput;

(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;

(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;

(7) The cause of such discharge as described in § 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;

(8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and

(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge

discharge.
(b) Take no action under this section until it applies to your facility. This section does not apply until the expiration of the time permitted for the initial preparation and implementation of the Plan under § 112.3, but not including any amendments to the Plan.

(c) Send to the appropriate agency or agencies in charge of oil pollution control activities in the State in which the facility is located a complete copy of all information you provided to the Regional Administrator under paragraph (a) of this section. Upon receipt of the information such State agency or agencies may conduct a review and make recommendations to the Regional Administrator as to further procedures, methods, equipment, and other requirements necessary to prevent and

to contain discharges from your facility. (d) Amend your Plan, if after review by the Regional Administrator of the information you submit under paragraph (a) of this section, or submission of information to EPA by the State agency under paragraph (c) of this section, or after on-site review of your Plan, the Regional Administrator requires that you do so. The Regional Administrator may require you to amend your Plan if he finds that it does not meet the requirements of this part or that amendment is necessary to prevent and contain discharges from your facility.

(e) Act in accordance with this paragraph when the Regional Administrator proposes by certified mail or by personal delivery that you amend your SPCC Plan. If the owner or operator is a corporation, he must also notify by mail the registered agent of such corporation, if any and if known,

in the State in which the facility is located. The Regional Administrator must specify the terms of such proposed amendment. Within 30 days from receipt of such notice, you may submit written information, views, and arguments on the proposed amendment. After considering all relevant material presented, the Regional Administrator must either notify you of any amendment required or rescind the notice. You must amend your Plan as required within 30 days after such notice, unless the Regional Administrator, for good cause, specifies another effective date. You must implement the amended Plan as soon as possible, but not later than six months after you amend your Plan, unless the Regional Administrator specifies another date.

(f) If you appeal a decision made by the Regional Administrator requiring an amendment to an SPCC Plan, send the appeal to the EPA Administrator in writing within 30 days of receipt of the notice from the Regional Administrator requiring the amendment under paragraph (e) of this section. You must send a complete copy of the appeal to the Regional Administrator at the time you make the appeal. The appeal must contain a clear and concise statement of the issues and points of fact in the case. It may also contain additional information from you, or from any other person. The EPA Administrator may request additional information from you, or from any other person. The EPA Administrator must render a decision within 60 days of receiving the appeal and must notify you of his decision.

§ 112.5 Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators.

If you are the owner or operator of a facility subject to this part, you must:
(a) Amend the SPCC Plan for your facility in accordance with the general requirements in § 112.7, and with any specific section of this part applicable to your facility, when there is a change in the facility design, construction, operation, or maintenance that materially affects its potential for a discharge as described in § 112.1(b). Examples of changes that may require amendment of the Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at

a facility. An amendment made under this section must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment.

(b) Notwithstanding compliance with paragraph (a) of this section, complete a review and evaluation of the SPCC Plan at least once every five years from the date your facility becomes subject to this part; or, if your facility was in operation on or before August 16, 2002, five years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your SPCC Plan within six months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge as described in § 112.1(b) from the facility. You must implement any amendment as soon as possible, but not later than six months following preparation of any amendment. You must document your completion of the review and evaluation, and must sign a statement as to whether you will amend the Plan, either at the beginning or end of the Plan or in a log or an appendix to the Plan. The following words will suffice, "I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result.

(c) Have a Professional Engineer certify any technical amendment to your Plan in accordance with § 112.3(d).

§ 112.6 [Reserved]

§ 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss

these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(2) Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2),112.8(c)(11) 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11),112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in § 112.4(d) and (e).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under § 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes. You must also address in your Plan:

(i) The type of oil in each container

and its storage capacity;

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

(iii) Discharge or drainage controls such as secondary containment around containers and other structures equipment, and procedures for the control of a discharge;

(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

(v) Methods of disposal of recovered materials in accordance with applicable

legal requirements; and (vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in § 112.1(b).

(4) Unless you have submitted a response plan under § 112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in § 112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in § 112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been

(5) Unless you have submitted a response plan under § 112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate

supporting material as appendices.
(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing;

(iii) Culverting, gutters, or other drainage systems;

(iv) Weirs, booms, or other barriers; (v) Spill diversion ponds; (vi) Retention ponds; or (vii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or (ii) Sumps and collection systems. (d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c) to prevent a discharge as described in § 112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under § 112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of part 109 of

this chapter.

(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged

that may be harmful.

(e) Inspections, tests, and records. Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will

suffice for purposes of this paragraph. (f) Personnel, training, and discharge prevention procedures. (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of

the facility SPCC Plan.

(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

(3) Schedule and conduct discharge prevention briefings for your oilhandling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

(g) Security (excluding oil production facilities). (1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is

unattended.

(2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

(3) Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when the pump is in a nonoperating or non-standby status.

(4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by

inert gas pressure. (5) Provide facility lighting commensurate with the type and location of the facility that will assist in

(i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and (ii) Prevention of discharges occurring

through acts of vandalism.

(h) Facility tank car and tank truck loading/unloading rack (excluding offshore facilities). (1) Where loading/ unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility

(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles,

and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

3. Part 112 is amended adding subpart B consisting of §§ 112.8 through 112.11 to read as follows:

Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils: and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities. 112.10 Spill Prevention, Control, and

Countermeasure Plan requirements for onshore oil drilling and workover

facilities.

112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

Subpart B-Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

§112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed in this section

(b) Facility drainage. (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to

ensure no oil will be discharged.
(2) Use valves of manual, open-andclosed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.
(4) If facility drainage is not

engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge,

retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error

at the facility.
(c) Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure

and temperature.
(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose.

You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:
(i) Normally keep the bypass valve

sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause

a discharge as described in § 112.1(b). (iii) Open the bypass valve and reseal it following drainage under responsible supervision; and

(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41(j)(2) and 122.41(m)(3) of this chapter.

(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions You must regularly leak test such completely buried metallic storage tanks.

(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs The frequency of and type of testing must take into account container size and design (such as floating roof, skidmounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.
(7) Control leakage through defective

internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open

watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.

(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.

(iii) Direct audible or code signal communication between the container gauger and the pumping station.

(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.

(v) You must regularly test liquid level sensing devices to ensure proper operation.

(9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b).

(10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.

(11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in § 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.

(d) Facility transfer operations, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as

indicated by the magnitude of the

(2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.

(3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.

(4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.

(5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other

oil transfer operations.

§ 112.9 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore production facility, you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed under this section.

(b) Oil production facility drainage.
(1) At tank batteries and separation and treating areas where there is a reasonable possibility of a discharge as described in § 112.1(b), close and seal at all times drains of dikes or drains of equivalent measures required under § 112.7(c)(1), except when draining uncontaminated rainwater. Prior to drainage, you must inspect the diked area and take action as provided in § 112.8(c)(3)(ii), (iii), and (iv). You must remove accumulated oil on the rainwater and return it to storage or dispose of it in accordance with legally approved methods.

(2) Inspect at regularly scheduled intervals field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers, for an accumulation of oil that may have resulted from any small discharge. You

must promptly remove any accumulations of oil.

(c) Oil production facility bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of storage.

(2) Provide all tank battery, separation, and treating facility installations with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must safely confine drainage from undiked areas in a catchment basin or holding pond.

(3) Periodically and upon a regular schedule visually inspect each container of oil for deterioration and maintenance needs, including the foundation and support of each container that is on or above the surface of the ground.

(4) Engineer or update new and old tank battery installations in accordance with good engineering practice to prevent discharges. You must provide at

least one of the following:

(i) Container capacity adequate to assure that a container will not overfill if a pumper/gauger is delayed in making regularly scheduled rounds.

(ii) Overflow equalizing lines between containers so that a full container can overflow to an adjacent container.

(iii) Vacuum protection adequate to prevent container collapse during a pipeline run or other transfer of oil from the container.

(iv) High level sensors to generate and transmit an alarm signal to the computer where the facility is subject to a computer production control system.

(d) Facility transfer operations, oil production facility. (1) Periodically and upon a regular schedule inspect all aboveground valves and piping associated with transfer operations for the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items.

(2) Inspect saltwater (oil field brine) disposal facilities often, particularly following a sudden change in atmospheric temperature, to detect possible system upsets capable of causing a discharge.

(3) Have a program of flowline maintenance to prevent discharges from each flowline.

§ 112.10 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

If you are the owner or operator of an onshore oil drilling and workover facility, you must:

(a) Meet the general requirements listed under § 112.7, and also meet the specific discharge prevention and containment procedures listed under

this section.

(b) Position or locate mobile drilling or workover equipment so as to prevent a discharge as described in § 112.1(b).

(c) Provide catchment basins or diversion structures to intercept and

contain discharges of fuel, crude oil, or oily drilling fluids

oily drilling fluids.

(d) Install a blowout prevention (BOP) assembly and well control system before drilling below any casing string or during workover operations. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

§ 112.11 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

If you are the owner or operator of an offshore oil drilling, production, or workover facility, you must:

(a) Meet the general requirements

(a) Meet the general requirements listed under § 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Use oil drainage collection equipment to prevent and control small oil discharges around pumps, glands, valves, flanges, expansion joints, hoses, drain lines, separators, treaters, tanks, and associated equipment. You must control and direct facility drains toward a central collection sump to prevent the facility from having a discharge as described in § 112.1(b). Where drains and sumps are not practicable, you must remove oil contained in collection equipment as often as necessary to prevent overflow.

(c) For facilities employing a sump system, provide adequately sized sump and drains and make available a spare pump to remove liquid from the sump and assure that oil does not escape. You must employ a regularly scheduled preventive maintenance inspection and testing program to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations.

(d) At facilities with areas where separators and treaters are equipped with dump valves which predominantly fail in the closed position and where pollution risk is high, specially equip the facility to prevent the discharge of oil. You must prevent the discharge of oil by:

(1) Extending the flare line to a diked area if the separator is near shore;

(2) Equipping the separator with a high liquid level sensor that will automatically shut in wells producing to the separator; or

(3) Installing parallel redundant dump valves.

(e) Equip atmospheric storage or surge containers with high liquid level

sensing devices that activate an alarm or control the flow, or otherwise prevent discharges.

(f) Equip pressure containers with high and low pressure sensing devices that activate an alarm or control the

(g) Equip containers with suitable corrosion protection.

(h) Prepare and maintain at the facility a written procedure within the Plan for inspecting and testing pollution prevention equipment and systems.

(i) Conduct testing and inspection of the pollution prevention equipment and systems at the facility on a scheduled periodic basis, commensurate with the complexity, conditions, and circumstances of the facility and any other appropriate regulations. You must use simulated discharges for testing and inspecting human and equipment pollution control and countermeasure systems.

(j) Describe in detailed records surface and subsurface well shut-in valves and devices in use at the facility for each well sufficiently to determine their method of activation or control, such as pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote

control mechanisms.

(k) Install a BOP assembly and well control system during workover operations and before drilling below any casing string. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while the BOP assembly and well control system are on the well.

(l) Equip all manifolds (headers) with check valves on individual flowlines.

(m) Equip the flowline with a high pressure sensing device and shut-in valve at the wellhead if the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves. Alternatively you may provide a pressure relief system for flowlines.

(n) Protect all piping appurtenant to the facility from corrosion, such as with protective coatings or cathodic

protection.

(o) Adequately protect sub-marine piping appurtenant to the facility against environmental stresses and other activities such as fishing operations.

(p) Maintain sub-marine piping appurtenant to the facility in good operating condition at all times. You must periodically and according to a schedule inspect or test such piping for failures. You must document and keep a record of such inspections or tests at the facility.

4. Part 112 is amended by adding subpart C consisting of §§ 112.12 through 112.15 to read as follows:

Subpart C—Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, Including Oils from Seeds, Nuts, Fruits and Kernels

112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities)

Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

112.14 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities

Subpart C—Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, including Oils from Seeds, Nuts, Fruits, and Kernels.

§ 112.12 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities)

If you are the owner or operator of an onshore facility (excluding a production

facility), you must:
(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed in this

(b) Facility drainage. (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-andclosed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, subject to the requirements of paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.
(4) If facility drainage is not

engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge,

retain oil in the facility.
(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "life pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error at the facility.

(c) Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure

and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.
(3) Not allow drainage of

uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve

sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).

(iii) Open the bypass valve and reseal it following drainage under responsible

supervision; and

(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41(j)(2) and 122.41(m)(3) of this chapter

(4) Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks

(5) Not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.

(6) Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. The frequency of and type of testing must take into account container size and design (such as floating roof, skidmounted, elevated, or partially buried). You must combine visual inspection with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of nondestructive shell testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.
(7) Control leakage through defective

internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or

retention system.

(8) Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices:

(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities an audible air vent may suffice.

(ii) High liquid level pump cutoff devices set to stop flow at a

predetermined container content level.
(iii) Direct audible or code signal communication between the container gauger and the pumping station.

(iv) A fast response system for determining the liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.

- (v) You must regularly test liquid level sensing devices to ensure proper
- (9) Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b).
- (10) Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.
- (11) Position or locate mobile or portable oil storage containers to prevent a discharge as described in § 112.1(b). You must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.
- (d) Facility transfer operations, pumping, and facility process. (1) Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect it for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the
- (2) Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.
- (3) Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.
- (4) Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.
- (5) Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.

§112.13 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil production facilities.

If you are the owner or operator of an onshore production facility, you must:

(a) Meet the general requirements for the Plan listed under § 112.7, and the specific discharge prevention and containment procedures listed under

this section.

(b) Oil production facility drainage.

(1) At tank batteries and separation and treating areas where there is a reasonable possibility of a discharge as described in § 112.1(b), close and seal at all times drains of dikes or drains of equivalent measures required under § 112.7(c)(1), except when draining uncontaminated rainwater. Prior to drainage, you must inspect the diked area and take action as provided in § 112.12(c)(3)(ii), (iii), and (iv). You must remove accumulated oil on the rainwater and return it to storage or dispose of it in accordance with legally approved methods.
(2) Inspect at regularly scheduled

intervals field drainage systems (such as drainage ditches or road ditches), and oil traps, sumps, or skimmers, for an accumulation of oil that may have resulted from any small discharge. You

must promptly remove any accumulations of oil.

(c) Oil production facility bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and the conditions of

(2) Provide all tank battery separation, and treating facility installations with a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must safely confine drainage from undiked areas in a catchment basin or holding pond

(3) Periodically and upon a regular schedule visually inspect each container of oil for deterioration and maintenance needs, including the foundation and support of each container that is on or above the surface of the ground.
(4) Engineer or update new and old

tank battery installations in accordance with good engineering practice to prevent discharges. You must provide at least one of the following:

(i) Container capacity adequate to assure that a container will not overfill if a pumper/gauger is delayed in making regularly scheduled rounds.

(ii) Overflow equalizing lines between containers so that a full container can

overflow to an adjacent container. (iii) Vacuum protection adequate to prevent container collapse during a

pipeline run or other transfer of oil from

the container.

(iv) High level sensors to generate and transmit an alarm signal to the computer where the facility is subject to a

computer production control system. (d) Facility transfer operations, oil production facility. (1) Periodically and upon a regular schedule inspect all aboveground valves and piping associated with transfer operations for the general condition of flange joints, valve glands and bodies, drip pans, pipe supports, pumping well polish rod stuffing boxes, bleeder and gauge valves, and other such items.

(2) Inspect saltwater (oil field brine) disposal facilities often, particularly following a sudden change in atmospheric temperature, to detect possible system upsets capable of causing a discharge.

(3) Have a program of flowline maintenance to prevent discharges from each flowline.

§112.14 Spill Prevention, Control, and Countermeasure Plan requirements for onshore oil drilling and workover facilities.

If you are the owner or operator of an onshore oil drilling and workover facility, you must:

(a) Meet the general requirements listed under § 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Position or locate mobile drilling or workover equipment so as to prevent a discharge as described in § 112.1(b).

(c) Provide catchment basins or diversion structures to intercept and contain discharges of fuel, crude oil, or

oily drilling fluids.
(d) Install a blowout prevention (BOP) assembly and well control system before drilling below any casing string or during workover operations. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

§112.15 Spill Prevention, Control, and Countermeasure Plan requirements for offshore oil drilling, production, or workover facilities.

If you are the owner or operator of an offshore oil drilling, production, or workover facility, you must:

(a) Meet the general requirements listed under § 112.7, and also meet the specific discharge prevention and containment procedures listed under this section.

(b) Use oil drainage collection equipment to prevent and control small oil discharges around pumps, glands, valves, flanges, expansion joints, hoses,

drain lines, separators, treaters, tanks, and associated equipment. You must control and direct facility drains toward a central collection sump to prevent the facility from having a discharge as described in § 112.1(b). Where drains and sumps are not practicable, you must remove oil contained in collection equipment as often as necessary to prevent overflow.

(c) For facilities employing a sump system, provide adequately sized sump and drains and make available a spare pump to remove liquid from the sump and assure that oil does not escape. You must employ a regularly scheduled preventive maintenance inspection and testing program to assure reliable operation of the liquid removal system and pump start-up device. Redundant automatic sump pumps and control devices may be required on some installations

(d) At facilities with areas where separators and treaters are equipped with dump valves which predominantly fail in the closed position and where pollution risk is high, specially equip the facility to prevent the discharge of oil. You must prevent the discharge of oil by

(1) Extending the flare line to a diked area if the separator is near shore;

(2) Equipping the separator with a high liquid level sensor that will automatically shut in wells producing to the separator; or

(3) Installing parallel redundant dump valves.

(e) Equip atmospheric storage or surge containers with high liquid level sensing devices that activate an alarm or control the flow, or otherwise prevent discharges.

(f) Equip pressure containers with high and low pressure sensing devices that activate an alarm or control the flow

(g) Equip containers with suitable corrosion protection.

(h) Prepare and maintain at the facility a written procedure within the Plan for inspecting and testing pollution prevention equipment and systems.

(i) Conduct testing and inspection of the pollution prevention equipment and systems at the facility on a scheduled periodic basis, commensurate with the complexity, conditions, and circumstances of the facility and any other appropriate regulations. You must use simulated discharges for testing and inspecting human and equipment pollution control and countermeasure systems.

(j) Describe in detailed records surface and subsurface well shut-in valves and devices in use at the facility for each well sufficiently to determine their

method of activation or control, such as pressure differential, change in fluid or flow conditions, combination of pressure and flow, manual or remote control mechanisms.

(k) Install a BOP assembly and well control system during workover operations and before drilling below any casing string. The BOP assembly and well control system must be capable of controlling any well-head pressure that may be encountered while that BOP assembly and well control system are on the well.

(1) Equip all manifolds (headers) with check valves on individual flowlines.

(m) Equip the flowline with a high pressure sensing device and shut-in valve at the wellhead if the shut-in well pressure is greater than the working pressure of the flowline and manifold valves up to and including the header valves. Alternatively you may provide a pressure relief system for flowlines

(n) Protect all piping appurtenant to the facility from corrosion, such as with protective coatings or cathodic protection.

(o) Adequately protect sub-marine piping appurtenant to the facility against environmental stresses and other activities such as fishing operations.

(p) Maintain sub-marine piping appurtenant to the facility in good operating condition at all times. You must periodically and according to a schedule inspect or test such piping for failures. You must document and keep a record of such inspections or tests at the facility.

5. Part 112 is amended by designating §§ 112.20 and 112.21 as subpart D, and adding a subpart heading as follows:

Subpart D-Response Requirements

Sec

112.20 Facility response plans. 112.21 Facility response training and drills/ exercises.

Subpart D-Response Requirements

6. Section 112.20 is amended by revising the first sentence of paragraph (h) to read as follows:

§ 112.20 Facility response plans.

*

(h) A response plan shall follow the format of the model facility-specific response plan included in Appendix F to this part, unless you have prepared an equivalent response plan acceptable to the Regional Administrator to meet State or other Federal requirements.

Appendix C-[Amended]

- 7. Appendix C of part 112 is amended by:
- a. Revising the first sentence of section 2.1; and
- b. Revising the title and first sentence of section 2.4.

Appendix C to Part 112-Substantial Harm Criteria

2.1 Non-Transportation-Related Facilities With a Total Oil Storage Capacity Greater Than or Equal to 42,000 Gallons Where Operations Include Over-Water Transfers of

A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA. * * *

2.4 Proximity to Public Drinking Water Intakes at Facilities with a Total Oil Storage Capacity Greater than or Equal to 1 Million

A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c).

Appendix D-[Amended]

8. Appendix D of part 112 is amended by revising footnote 2 to section A.2 of Part A to read as follows:

Appendix D to Part 112—Determination of a Worst Case Discharge Planning Volume

Part A * * * * *

A.2 Secondary Containment—Multiple-Tank Facilities

Secondary containment is described in 40 CFR part 112, subparts A through C. Acceptable methods and structures for containment are also given in 40 CFR 112.7(c)(1).

Appendix F-[Amended]

- 9. Appendix F of part 112 is amended by: a. Revising section 1.2.7;
- b. Revising the second and last sentences of section 1.4.3;

c. Revising paragraph (7) and the undesignated paragraph and NOTE following paragraph (7) in section 1.7.3;

d. Revising section 1.8.1: e. Revising the first two sentences of

section 1.8.1.1. introductory text; f. Revising the next to the last

- sentence of section 1.8.1.3; g. Revising the next to last sentence of section 1.10.:
- h. Revising paragraph (6) of section 2.1;
- i. Remove the acronym "SIC" in section 3.0, and add in alphabetical order the acronym "NAICS"; and.
- j. Remove the reference to "Standard Industrial Classification (SIC) Code" in Attachment F-1, General Information, and add in in alphabetical order a reference to "North American Industrial Classification System (NAICS) Code.'

The revisions read as follows: Appendix F to Part 112—Facility-Specific Response Plan

1.2.7 Current Operation

Briefly describe the facility's operations and include the North American Industrial Classification System (NAICS) code. * *

1.4.3 Analysis of the Potential for an Oil Discharge

* * * This analysis shall incorporate factors such as oil discharge history, horizontal range of a potential discharge, and vulnerability to natural disaster, and shall, as appropriate, incorporate other factors such as tank age. * * * The owner or operator may need to research the age of the tanks the oil discharge history at the facility.

1.7.3 Containment and Drainage Planning * * *

(7) Other cleanup materials.

In addition, a facility owner or operator must meet the inspection and monitoring requirements for drainage contained in 40 CFR part 112, subparts A through C. A copy of the containment and drainage plans that are required in 40 CFR part 112, subparts A through C may be inserted in this section, including any diagrams in those plans.

Note: The general permit for stormwater drainage may contain additional requirements.

1.8.1 Facility Self-Inspection

Under 40 CFR 112.7(e), you must include the written procedures and records of inspections for each facility in the SPCC

Plan. You must include the inspection records for each container, secondary containment, and item of response equipment at the facility. You must crossreference the records of inspections of each container and secondary containment required by 40 CFR 112.7(e) in the facility response plan. The inspection record of response equipment is a new requirement in this plan. Facility self-inspection requires two-steps: (1) a checklist of things to inspect; and (2) a method of recording the actual inspection and its findings. You must note the date of each inspection. You must keep facility response plan records for five years. You must keep SPCC records for three years.

1.8.1.1. Tank Inspection

The tank inspection checklist presented below has been included as guidance during inspections and monitoring. Similar requirements exist in 40 CFR part 112, subparts A through C. * * *

1.8.1.3 Secondary Containment Inspection

* * * Similar requirements exist in 40 CFR part 112, subparts A through C. * * *

1.10 Security

* *

According to 40 CFR 112.7(g) facilities are required to maintain a certain level of security, as appropriate. *

2.1 General Information

(6) North American Industrial Classification System (NAICS) Code: Enter the facility's NAICS code as determined by the Office of Management and Budget (this information may be obtained from public library resources.)

3.0 Acronyms

*

NAICS: North American Industrial Classification System

Attachments to Appendix F

*

Attachment F-1-Response Plan Cover Sheet

* * * **General Information**

North American Industrial Classification System (NAICS) Code:

[FR Doc. 02-16852 Filed 7-16-02; 8:45 am] BILLING CODE 6560-50-P

ATTACHMENT C

(ADEM Form 315 Part XII)

C.1 - Pre-Mining Hydrologic Sampling Reports



Location: , WEES-Special, Project LHM -- Pond A

Sample Date: 7/26/2017 @ 9:30:00 AM Comments: Inpond Lab ID: 17072823-04

<u>Analyte</u>	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Arsenic, Dissolved	BML	0.27 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Conductance	226.9	μS/cm	SM2510-B	7/26/2017	Wilbanks Engineering & Environmenta Solutions
Copper, Dissolved	BML	0.90 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	8/7/2017	KyleThomas
Iron, Total	0.15	0.02 mg/L	EPA200.8	7/31/2017 3:39:19 PM	KyleThomas
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Manganese, Total	0.23	0.03 mg/L	EPA200.8	7/31/2017 3:39:19 PM	KyleThomas
Mercury, Total	BML	0.010 μg/L	EPA245.2	8/8/2017 3:40:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
рН	6.85	s.u.	D1293-B	7/26/2017	Wilbanks Engineering & Environmenta Solutions
Phenols, Total	BML	6.0 µg/L	EPA420.1	8/4/2017	KyleThomas
Selenium, Total	BML	0.95 μg/L	EPA200.8	7/31/2017 3:39:19 PM	KyleThomas
Silver, Dissolved	BML	0.15 μg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Solids, Total Dissolved	132	mg/L	SM2540-C	7/26/2017	Wilbanks Engineering & Environmenta Solutions
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	7/31/2017 3:43:20 PM	KyleThomas



Client: Wilbanks Engineering & Environmental Solutions

297 Lotawata Drive Jasper, AL 35504

REPORT OF FINDINGS

Location: , WEES-Special, Project LHM -- SW-1

Lab ID: 17072823-01

Sample Date: 7/26/2017 @ 1:00:00 PM

Comments:

<u>Analyte</u>	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Acidity	5	mg/L	SM2310-B	7/28/2017	JW_Wilcutt
Alkalinity	5	mg/L	SM2320-B	7/28/2017	JW_Wilcutt
Aluminum, Total	0.05	0.02 mg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Antimony, Total	BML	1.92 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Arsenic, Dissolved	BML	0.27 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Arsenic, Total	BML	0.27 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Beryllium, Total	BML	2.20 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Cadmium, Total	BML	0.08 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Chromium, Total	BML	1.64 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Conductance	37.1	μS/cm	SM2510-B	7/26/2017	Wilbanks Engineering & Environmenta Solutions
Copper, Dissolved	BML	0.90 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	8/7/2017	KyleThomas
Flow/CFS	6.065	CFS	EPA5.1	7/26/2017	Wilbanks Engineering a Environmenta Solutions
Iron, Total	0.41	0.02 mg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Manganese, Total	BML	0.03 mg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Mercury, Total	BML	0.010 µg/L	EPA245.2	8/8/2017 3:32:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
рН	7.25	s.u.	D1293-B	7/26/2017	Wilbanks Engineering & Environmenta Solutions

NA = Not Analyzed ND = No Discharge

BML = Below Minimum Level

Page 1 of 6



Date	Printed:	8/9	/2017

Phenols, Total	BML	6.0 µg/L	EPA420.1	8/4/2017	KyleThomas
Selenium, Total	BML	0.95 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Silver, Dissolved	BML	0.15 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Silver, Total	BML	0.15 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Solids, Total Dissolved	21	mg/L	SM2540-C	7/26/2017	Wilbanks Engineering & Environmental Solutions
Solids, Total Suspended	1	mg/L	SM2540-D	7/28/2017 2:50:35 PM	IsaacWhitlock
Sulfate	BML	6 mg/L	D516	7/28/2017	IsaacWhitlock
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Thallium, Total	BML	0.08 µg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	7/31/2017 3:22:55 PM	KyleThomas
Zinc, Total	BML	16.45 μg/L	EPA200.8	7/31/2017 3:18:52 PM	KyleThomas



Location: , WEES-Special, Project LHM -- SW-2

Sample Date: 7/26/2017 @ 3:00:00 PM Comments:

Lab ID: 17072823-02

<u>Analyte</u>	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Acidity	12	mg/L	SM2310-B	7/28/2017	JW_Wilcutt
Alkalinity	6	mg/L	SM2320-B	7/28/2017	JW_Wilcutt
Aluminum, Total	0.17	0.02 mg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Antimony, Total	BML	1.92 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Arsenic, Dissolved	BML	0.27 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Arsenic, Total	0.45	0.27 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Beryllium, Total	BML	2.20 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Cadmium, Total	BML	0.08 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Chromium, Total	BML	1.64 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Conductance	48.7	μS/cm	SM2510-B	7/26/2017	Wilbanks Engineering & Environmental Solutions
Copper, Dissolved	BML	0.90 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Copper, Total	BML	0.90 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	8/7/2017	KyleThomas
Flow/CFS	0.1359	CFS	EPA5.1	7/26/2017	Wilbanks Engineering & Environmental Solutions
Iron, Total	1.27	0.02 mg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Manganese, Total	0.04	0.03 mg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Mercury, Total	BML	0.010 µg/L	EPA245.2	8/8/2017 3:35:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Nickel, Total	BML	6.86 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
рН	6.62	s.u.	D1293-B	7/26/2017	Wilbanks Engineering & Environmental Solutions
Phenols, Total	BML	6.0 µg/L	EPA420.1	8/4/2017	KyleThomas
Selenium, Total	BML	0.95 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Silver, Dissolved	BML	0.15 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas



Silver, Total	BML	0.15 μg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Solids, Total Dissolved	31	mg/L	SM2540-C	7/26/2017	Wilbanks Engineering & Environmental Solutions
Solids, Total Suspended	7	mg/L	SM2540-D	7/28/2017 2:50:46 PM	IsaacWhitlock
Sulfate	BML	6 mg/L	D516	7/28/2017	IsaacWhitlock
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Thallium, Total	BML	0.08 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	7/31/2017 3:31:17 PM	KyleThomas
Zinc, Total	BML	16.45 µg/L	EPA200.8	7/31/2017 3:27:16 PM	KyleThomas

ATTACHMENT D

(ADEM Form 315 Parts XV, XVI, and XVII)

D.1 - Receiving Waters

- D.2 Modified EPA Form 2C for Proposed Outfalls to Yellow Creek
- D.3 Modified EPA Form 2C for Proposed Outfalls to Cypress Creek
 - D.4 Estimated Contaminant Discharge Rates
 - D.5 Discharge Structures and Pollutant Source



XV. RECEIVING WATERS

List the requested permit action for each outfall (issue, reissue, add, delete, move, etc.), outfall designation including denoting "E" for existing and "P" for proposed outfalls, name of receiving water(s), whether or not the stream is included in a TMDL, latitude and longitude (to seconds) of location(s) of each discharge point, distance of receiving water from outfall in feet, number of disturbed acres, the number of drainage acres which will drain through each treatment system, outfall, or BMP, and if the outfall discharges to an ADEM listed CWA Section 303(d) waterbody segment at the time of application submittal.

Action	Outfall E/P	Receiving Water	Latitude N	Longitude W	Distance to Rec. Water	Disturbed Acres	Drainage Acres	ADEM WUC	303(d) Segment (Y/N)	TMDL Segment * (Y/N)
Issue	001P	UT to Yellow Creek	33.276546	-87.468002	Directly	33.4	33.4	F/W	N	N
Issue	002P	UT to Yellow Creek	33.276231	-87.470632	788	6.1	6.1	F/W	N	N
Issue	003P	UT to Yellow Creek	33.277513	-87.472547	2446	38.6	38.6	F/W	N	N
Issue	004P	UT to Yellow Creek	33.277513	-87.473463	1606	3.5	3.5	F/W	N	N
Issue	005P	UT to Yellow Creek	33.280864	-87.473013	1987	5.5	5.5	F/W	N	N
Issue	006P	UT to Yellow Creek	33.282522	-87.473118	100	3.5	3.5	F/W	N	N
Issue	007P	UT to Yellow Creek	33.282627	-87.471747	100	3.9	3.9	F/W	N	N
Issue	008P	UT to Yellow Creek	33.282875	-87.470793	100	19.4	19.4	F/W	N	N
Issue	009P	UT to Yellow Creek	33.283374	-87.470140	100	13.3	13.7	F/W	N	N
Issue	010P	UT to Yellow Creek	33.284026	-87.469022	100	5.0	5.0	F/W	N	N
Issue	011P	UT to Yellow Creek	33.284451	-87.468354	100	16.0	18.2	F/W	N	N
Issue	012P	UT to Yellow Creek	33.285205	-87.467412	100	4.7	4.7	F/W	N	N
Issue	013P	UT to Yellow Creek	33.286243	-87.465625	100	69.2	76.3	F/W	N	N
Issue	014P	UT to Yellow Creek	33.287606	-87.465639	100	5.1	5.1	F/W	N	N
Issue	015P	UT to Yellow Creek	33.288504	-87.465927	100	9.5	9.5	F/W	N	N
Issue	016P	UT to Yellow Creek	33.290015	-87.465896	100	5.4	5.4	F/W	N	N
Issue	017P	UT to Yellow Creek	33.290752	-87.463703	928	4.5	4.5	F/W	N	N
Issue	018P	UT to Yellow Creek	33.290715	-87.461526	778	7.3	7.3	F/W	N	N
Issue	019P	UT to Yellow Creek	33.290666	-87.458053	1128	13.8	16.5	F/W	N	N
Issue	020P	Cypress Creek	33.289454	-87.450617	154	7.0	7.0	F/W	N	N
Issue	021P	Cypress Creek	33.288202	-87.450777	138	13.8	13.8	F/W	N	N
Issue	022P	Cypress Creek	33.286560	-87.451357	179	10.7	10.7	F/W	N	N
Issue	023P	Cypress Creek	33.284289	-87.452554	100	53.8	58.3	F/W	N	N
Issue	024P	Cypress Creek	33.283143	-87.453785	100	15.3	15.3	F/W	N	N
Issue	025P	Cypress Creek	33.281770	-87.454958	100	19.0	19.0	F/W	N	N
Issue	026P	Cypress Creek	33.280922	-87.456208	100	7.2	7.2	F/W	N	N
Issue	027P	Cypress Creek	33.279854	-87.458055	100	35.9	38.6	F/W	N	N
Issue	028P	Cypress Creek	33.278568	-87.458751	100	75.4	75.4	F/W	N	N
Issue	029P	Cypress Creek	33.278321	-87.459474	170	34.7	37.7	F/W	N	N
Issue	030P	Cypress Creek	33.276867	-87.458801	100	10.0	10.0	F/W	N	N
Issue	031P	Cypress Creek	33.275646	-87.459221	100	8.9	8.9	F/W	N	N
Issue	032P	Cypress Creek	33.274493	-87.458919	100	12.6	12.6	F/W	N	N
Issue	033P	Cypress Creek	33.272630	-87.459809	561	54.5	54.5	F/W	N	N
Issue	034P	Cypress Creek	33.270729	-87.458067	100	4.6	4.6	F/W	N	N
Issue	035P	Cypress Creek	33.269803	-87.457925	100	6.9	6.9	F/W	N	N
Issue	036P	Cypress Creek	33.268916	-87.458244	323	18.9	18.9	F/W	N	N
Issue	037P	Yellow Creek	33.265761	-87,464785	2287	52.5	52.5	F/W	N	N
Issue	038P	Yellow Creek	33.268876	-87.464954	1762	14.3	14.3	F/W	N	N
Issue	039P	Yellow Creek	33.271318	-87.464743	2325	24.1	24.1	F/W	N	N
Issue	040P	Cypress Creek	33.280413	-87.460896	1100	33.0	38.6	F/W	N	N
Issue	041P	Cypress Creek	33.280822	-87.460454	1096	10.5	11.7	F/W	N	N
Issue	042P	Cypress Creek	33.280857	-87.459819	1031	13.8	15.6	F/W	N	N
Issue	043P	UT to Yellow Creek	33.281085	-87.468843	1116	8.6	8.6	F/W	N	N

*If a TMDL Compliance Schedule is requested, the following should be attached as supporting documentation: (1) Justification for the requested Compliance Schedule (e.g. time for design and installation of control equipment, etc.); (2) Monitoring results for the pollutant(s) of concern which have not previously been submitted to the Department (sample collection dates, analytical results (mass and concentration), methods utilized, MDL/ML, etc. should be reported as available); (3) Requested interim limitations, if applicable; (4) Date of final compliance with the TMDL limitations; and (5) Any other additional information available to support the requested compliance schedule.



B. The applicant is required to supply the following information separately for every P or E outfall. If necessary, attach extra sheets. List expected average daily discharge flow rate in cfs and gpd, frequency of discharge in hours per day and days per month, average summer and winter temperature of discharge(s) in degrees centigrade (C), average pH in standard units, average daily discharge in pounds per day of BODs, Total Suspended Solids, Total Iron, Total Manganese, and Total Aluminum (if bauxite or

Outfall E/P	Information Source - # of Samples	Flow	Flow 1000 gpd	Frequency hours/day	Frequency days/mth	Sum/Win Temp, °C	pH s.u.	BOD5 lbs/day	TSS lbs/day	Tot Fe lbs/day	Tot Mn lbs/day	Tot Al lbs/day
001P	BPE	0.08	54.15	Precipitation	Precipitation	26/7	6.85	0.86	6.04	0.41	0.77	N/A
002P	BPE	0.01	8.62	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
003P	BPE	0.10	63.20	Precipitation	Precipitation	26/7	6.85	1.08	7.55	0.51	0.96	N/A
004P	BPE	0.03	17.81	Precipitation	Precipitation	26/7	6.85	0.32	2,27	0.15	0.29	N/A
005P	BPE	0.00	2.83	Precipitation	Precipitation	26/7	6.85	0.00	0.00	0.00	0.00	N/A
006P	BPE	0.01	4.95	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
007P	BPE	0.01	5.51	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
008P	BPE	0.04	27.43	Precipitation	Precipitation	26/7	6.85	0.43	3.02	0.20	0.38	N/A
009P	BPE	0.03	19.37	Precipitation	Precipitation	26/7	6.85	0.32	2.27	0.15	0.29	N/A
010P	BPE	0.01	7.07	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
011P	BPE	0.04	25.73	Precipitation	Precipitation	26/7	6.85	0.43	3.02	0.20	0.38	N/A
012P	BPE	0.01	6.64	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
013P	BPE	0.17	107.87	Precipitation	Precipitation	26/7	6.85	1.83	12.84	0.87	1.63	N/A
014P	BPE	0.01	7.21	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
015P	BPE	0.02	13.43	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
016P	BPE	0.01	7.63	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
017P	BPE	0.01	6.36	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
018P	BPE	0.02	10.32	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
019P	BPE	0.04	23.33	Precipitation	Precipitation	26/7	6.85	0.43	3.02	0.20	0.38	N/A
020P	BPE	0.02	9.90	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
021P	BPE	0.03	19.51	Precipitation	Precipitation	26/7	6.85	0.32	2.27	0.15	0.29	N/A
022P	BPE	0.02	15.13	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
023P	BPE	0.13	82.43	Precipitation	Precipitation	26/7	6.85	1.40	9.82	0.67	1,25	N/A
024P	BPE	0.03	21.63	Precipitation	Precipitation	26/7	6.85	0.32	2.27	0.15	0.29	N/A
025P	BPE	0.04	26.86	Precipitation	Precipitation	26/7	6.85	0.43	3.02	0.20	0.38	N/A
026P	BPE	0.02	10.18	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
027P	BPE	0.08	54.57	Precipitation	Precipitation	26/7	6.85	0.86	6.04	0.41	0.77	N/A
028P	BPE	0.16	106.60	Precipitation	Precipitation	26/7	6.85	1.72	12.08	0.82	1.54	N/A
029P	BPE	0.08	53.30	Precipitation	Precipitation	26/7	6.85	0.86	6.04	0.41	0.77	N/A
030P	BPE	0.02	14.14	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
031P	BPE	0.02	12.58	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
032P	BPE	0.03	17.81	Precipitation	Precipitation	26/7	6.85	0.32	2.27	0.15	0.29	N/A
033P	BPE	0.12	80.30	Precipitation	Precipitation	26/7	6.85	1.29	9.06	0,61	1.15	N/A
034P	BPE	0.01	6.50	Precipitation	Precipitation	26/7	6.85	0.11	0.76	0.05	0.10	N/A
035P	BPE	0.02	9.76	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A
036P	BPE	0.04	26.72	Precipitation	Precipitation	26/7	6.85	0.43	3.02	0.20	0.38	N/A
037P	BPE	0.12	75.92	Precipitation	Precipitation	26/7	6.85	1.29	9.06	0.61	1.15	N/A
038P	BPE	0.09	59.80	Precipitation	Precipitation	26/7	6.85	0.97	6.80	0.46	0.86	N/A
039P	BPE	0.05	34.07	Precipitation	Precipitation	26/7	6.85	0.54	3.78	0.26	0.48	N/A
040P	BPE	0.08	54.57	Precipitation	Precipitation	26/7	6.85	0.86	6.04	0.41	0.77	N/A
041P	BPE	0.03	16.54	Precipitation	Precipitation	26/7	6.85	0.32	2.27	0.15	0.29	N/A
042P	BPE	0.03	22.06	Precipitation	Precipitation	26/7	6.85	0.32	2.27	0.15	0.29	N/A
043P	BPE	0.02	12.16	Precipitation	Precipitation	26/7	6.85	0.22	1.51	0.10	0.19	N/A

XVII. DISCHARGE STRUCTURE DESCRIPTION & POLLUTANT SOURCE

The applicant is required to supply outfall number(s) as it appears on the map(s) required by this application [if this application is for a modification to an existing permit do not change the numbering sequence of the permitted outfalls], describe each, (e.g., pipe, spillway, channel, tunnel, conduit, well, discrete fissure, or container), and identify the origin of pollutants. The response must be precise for each outfall. If the discharge of pollutants from any outfall is the result of commingling of waste streams from different origins, each origin must be completely described.

Outfall	Discharge structure Description	Description of Origin Of pollutants	Surface Discharge	Groundwater Discharge	Wet Prep -Other Production Plant	Pumped or Controlled Discharge	Low Volume STP	Other
001P	Pipe and/or Channel	(2) and (9)	х	N/A	N/A	N/A	_ N/A	N/A
002P	Pipe and/or Channel	(2) and (9)	х	N/A	N/A	N/A	N/A	N/A
003P	Pipe and/or Channel	(2) and (9)	х	N/A	N/A	N/A	N/A	N/A
004P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
005P	Pipe and/or Channel	(2) and (9)	x	N/A	N/A	_N/A	N/A	N/A
006P	Pipe and/or Channel	(2) and (9)	_ x	N/A	_N/A	N/A	N/A	N/A
007P	Pipe and/or Channel	(2) and (9)	х	N/A	N/A	N/A	N/A	N/A
008P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/A	N/A	N/A
009P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
010P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/Ä	N/A	N/A
011P	Pipe and/or Channel	(2) and (9)	х	N/A	N/A	N/A	N/A_	N/A
012P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/A	N/A	N/A
013P	Pipe and/or Channel	(2) and (9)	X_	N/A	N/A	N/A	N/A	N/A
014P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/A	N/A	N/A
015P	Pipe and/or Channel	(2) and (9)	x	N/A	N/A	N/A	N/A	N/A
016P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
017P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A_	N/A
018P	Pipe and/or Channel	(2) and (9)	Х	N/A_	N/A	N/A	N/A	N/A
019P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
020P	Pipe and/or Channel	(2) and (9)	х	N/A	N/A	N/A	N/A	N/A
021P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
022P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/A	N/A	N/A
023P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/A	N/A	N/A
024P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
025P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
026P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
027P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
028P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
029P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
030P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
031P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
032P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
033P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/A	N/A	N/A
034P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
035P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
036P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
037P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
038P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
039P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
040P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
041P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
042P	Pipe and/or Channel	(2) and (9)	Х	N/A	N/A	N/A	N/A	N/A
043P	Pipe and/or Channel	(2) and (9)	X	N/A	N/A	N/A	N/A	N/A

Origin of Pollutants – typical examples: (1) Discharge of drainage from the underground workings of an underground coal mine, (2) Discharge of drainage from a coal surface mine, (3) Discharge of drainage from a coal preparation plant and associated areas, (4) Discharge of process wastewater from a gravel-washing plant, (5) Discharge of wastewater from an existing source coal preparation plant, (6) Discharge of drainage from a sand and gravel pit, (7) Pumped discharge from a limestone quarry, (8) Controlled surface mine drainage (pumped or siphoned), (9) Discharge of drainage from mine reclamation, (10) Other:

ATTACHMENT E

(ADEM Form 315 Part XVIII)

E.1 - Alternatives Analysis, ADEM Form 311, and Supporting Documentation

E.2 - Annualized Project Costs, ADEM Form 313

NPDES MINING AND PREPARATION PLANT OUTFALL DATA FOR METALS, CYANIDE, AND TOTAL PHENOLS

NPDES Permit No.: New Pe	rmit	Applicant: Cahabi	a Resources, LLC		Facility: Deerlick West Mine
Outfall Sampled ¹ : ALD077097-026E (Lab Reports for <i>Pond A</i> ⁴ and <i>SWI</i> ¹)	Date of Sampling: 7/26/2017	Was Sample Taken In-Pond? Yes	Was Sample Taken from Discharge?	Substantially Identical Outfalls: 001P, 002P, 003P, 004P, 005P, 006P, 007P, 008P, 009P, 010P, 011P, 012P, 013P, 014P, 015P, 016P, 017P, 018P, 019P, and 043P.	Description of Discharge: Surface Mine Drainage

Please supply the following information separately for every P or E outfall evaluated or tested. If necessary, attach extra sheets. If you are a coal facility, mark "X" in appropriate column for all listed metals, cyanide, and total phenois. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is a valiable, at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical existing outfall at the facility.

		Mark "X"								Effluen	t*						Instream ⁵	
Pollutant and CAS No.	Existing Outfall	Proposed Outfall –	Proposed Outfall –	Maximu Val		Maximur Value (if a		Long Term Value (if a		# of	Frequency of Discharge	EPA Approved	Method Detection	Receiving Water	Discharge	Background Instream	Instream Hardness (optional)	Instream
(If available)	(Testing Required)	Parameter Believed Present	Parameter Believed Absent	Concen- tration (µg/L)	Mass (lbs)	Concen- tration (µg/L)	Mass (lbs)	Concen- tration (µg/L)	Mass (lbs)	Analyses	(Days/Month Hours/Day)	Method Analysis Used ²	Limit (µg/L)	7Q10 Flow (cfs)	Flow (cfs)	Concentration (μg/L)	(mg/L CaCO3) ³	(optional) (cfs)
3M. Antimony, Dissolved (7440-36-0)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.92</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.92</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	1.92	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
2M. Arsenic, Dissolved (7440-38-2)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.27</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.27</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.27	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
3M. Beryllium, Dissolved (7440-41-7)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>2.20</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>2.20</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	2.20	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
4M. Cadmium, Dissolved (7440-43-9)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200,8</td><td>0.08</td><td>0,19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200,8</td><td>0.08</td><td>0,19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200,8	0.08	0,19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
SM. Overnium, Dissolved (744-47-3)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.64</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.64</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	1.64	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
EM. Copper, Dissolved (7440-50-8)			×	<mdl< td=""><td><mdl< td=""><td></td><td>-</td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.90</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td>-</td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.90</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>		-			1	Precip. Based	EPA 200.8	0.90	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
7M. Lead, Dissolved (7439-92-1)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.31</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.31</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.31	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
BM. Mercury, Total (7439-97-6)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 245.2</td><td>0.01</td><td>0.19</td><td>0.08</td><td>≺MDL</td><td>100</td><td>6.1</td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 245.2</td><td>0.01</td><td>0.19</td><td>0.08</td><td>≺MDL</td><td>100</td><td>6.1</td></mdl<>					1	Precip. Based	EPA 245.2	0.01	0.19	0.08	≺MDL	100	6.1
9M. Nickel, Dissolved (7440-02-0)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>6.86</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6,1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>6.86</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6,1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	6.86	0.19	0.08	<mdl< td=""><td>100</td><td>6,1</td></mdl<>	100	6,1
10M. Selenium, Total (7782-49-2)			×	<mdl< td=""><td><mdl.< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.95</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl.<></td></mdl<>	<mdl.< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.95</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl.<>					1	Precip. Based	EPA 200.8	0.95	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
11M. Silver, Dissolved (7440-22-4)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.15</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.15</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.15	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
12M. Thallium, Dissolved (74440-26-0)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.08</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.08</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.08	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
13M. Zinc, Total (7445-66-6)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>16.45</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>16.45</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	16.45	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
14M. Cyanide, Total (57-12-5)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>4500-CN-E</td><td>3.00</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>4500-CN-E</td><td>3.00</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>6.1</td></mdl<></td></mdl<>					1	Precip. Based	4500-CN-E	3.00	0.19	0.08	<mdl< td=""><td>100</td><td>6.1</td></mdl<>	100	6.1
15M. Phenois, Total			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 420.1</td><td>6.00</td><td>0.19</td><td>0.08</td><td>CMDL COL</td><td>100</td><td>61</td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 420.1</td><td>6.00</td><td>0.19</td><td>0.08</td><td>CMDL COL</td><td>100</td><td>61</td></mdl<>					1	Precip. Based	EPA 420.1	6.00	0.19	0.08	CMDL COL	100	61

<MDL = Less than minimum detection limits.



¹ Sampling results must be representative of the discharge.

FTest methods used must be in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).

Instream Hardness (CaCO₃) will be assumed to be either 50 mg/L or 100 mg/L based on the location of the discharge if Hardness data is not submitted.

^{*} Pond A corresponds to in-pond sample taken from 026E from ADEM permit AL0077097, sedimentation basin 026E

⁵ SW1 corresponds to sample taken upstream of the proposed mine site on Yellow Creek

NPDES MINING AND PREPARATION PLANT OUTFALL DATA FOR METALS, CYANIDE, AND TOTAL PHENOLS

NPDES Permit No.: New Per	rmit	Applicant: Cahab	a Resources, LLC		Facility: Deerlick West Mine
Outfall Sampled ¹ : AL0077097-026E (Lab reports for <i>Pond A</i> ⁴ and <i>SW2</i> ⁵)	Date of Sampling: 7/26/2017	Was Sample Taken In-Pond? Yes	Was Sample Taken from Discharge?	Substantially Identical Outfalls: 020P, 021P, 022P, 023P, 024P, 025P, 036P, 027P, 028P, 029P, 030P, 031P, 032P, 033P, 034P, 035P, 036P, 037P, 038P, 039P, 040P, 041P, and 042P.	Description of Discharge: Surface Mine Drainage

Please supply the following information separately for every P or E outfall evaluated or tested. If necessary, attach extra sheets. If you are a coal facility, mark "X" in appropriate column for all listed metals, cyanide, and total phenois. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is proposed, you must either submit at least one representative analysis for a substantially identical existing outfall at the facility or a substantially identical custal at another similar facility.

Pollutant and CAS No. (If available)	Mark "X"				Effluent*									Instream ⁵				
	Existing Outfall (Testing Required)	Proposed Outfall – Parameter Believed Present	Proposed Outfall – Parameter Believed Absent	Maximum Daily Value		Maximum 30 Day Value (if available)		Long Term Average Value (if available)		# of	Frequency of Discharge	EPA Approved	Method Detection	Receiving Water	Discharge	Background Instream	Instream Hardness	Instream Flow
				Concen- tration (µg/L)	Mass (lbs)	Concen- tration (µg/L)	Mass (lbs)	Concen- tration (µg/L)	Mass (lbs)	Analyses	(Days/Month Hours/Day)	Method Analysis Used ²	Limit (µg/L)	7Q10 Flow (cfs)	Flow (cfs)	Concentration (µg/L)	(optional) (mg/L CaCO3) ³	(optional) (cfs)
1M. Antimony, Dissolved (7440-36-0)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.92</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.92</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	1.92	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
2M. Arsenic, Dissolved (7440-38-2)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.27</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.27</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.27	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
3M. Beryllium, Dissolved (7440-41-7)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>2.20</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>2.20</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	2.20	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
4M. Cadmium, Dissolved (7440-43-9)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.08</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.08</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.08	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
SM. Chromium, Dissolved (744-47-3)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.64</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>1.64</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	1.64	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
6M. Copper, Dissolved (7440-50-8)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.90</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.90</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.90	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
7M. Lead, Dissolved (7439-92-1)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td>ME</td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.31</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td>ME</td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.31</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>				ME	1	Precip. Based	EPA 200.8	0.31	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
BM. Mercury, Total (7439-97-6)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 245.2</td><td>0.01</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 245.2</td><td>0.01</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 245.2	0.01	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
9M. Nickel, Dissolved (7440-02-0)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>6.86</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>6.86</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	6.86	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
10M. Selenium, Total (7782-49-2)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.95</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.95</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.95	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
11M. Silver, Dissolved (7440-22-4)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td>/-</td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.15</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td>/-</td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.15</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>			/-		1	Precip. Based	EPA 200.8	0.15	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
12M. Thallium, Dissolved (74440-28-0)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.08</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>0.08</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	0.08	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
13M. Zinc, Total (7440-66-6)			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>16.45</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>EPA 200.8</td><td>16.45</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	EPA 200.8	16.45	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
14M. Cyanide, Total (57-12-5)			×	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>4500-CN-E</td><td>3.00</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td></td><td>1</td><td>Precip. Based</td><td>4500-CN-E</td><td>3.00</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>					1	Precip. Based	4500-CN-E	3.00	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15
15M. Phenois, Yotal			x	<mdl< td=""><td><mdl< td=""><td></td><td></td><td></td><td>15</td><td>1</td><td>Precip. Based</td><td>EPA 420.1</td><td>6.00</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<></td></mdl<>	<mdl< td=""><td></td><td></td><td></td><td>15</td><td>1</td><td>Precip. Based</td><td>EPA 420.1</td><td>6.00</td><td>0.19</td><td>0.08</td><td><mdl< td=""><td>100</td><td>0.15</td></mdl<></td></mdl<>				15	1	Precip. Based	EPA 420.1	6.00	0.19	0.08	<mdl< td=""><td>100</td><td>0.15</td></mdl<>	100	0.15

<MDL = Less than minimum detection limits.

* SW2 corresponds to sample taken upstream of the proposed mine site on Cypress Creek.



¹ Sampling results must be representative of the discharge.

² Test methods used must be in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).

Instream Hardness (CaCO₃) will be assumed to be either 50 rmg/L or 100 mg/L based on the location of the discharge if Hardness data is not submitted.

^{*} Pond A corresponds to in-pond sample taken from ADEM permit AL0077097, sedimentation basin 026E

Attachment E.1 ADEM Form 311

Alternatives Analysis

Cahaba Resources

All new or expanded discharges (except discharges eligible for coverage under general permits) covered by the NPDES permitting
program are subject to the provisions of ADEM's antidegradation policy. Applicants for such discharges to Tier 2 waters are required
to demonstrate " that the proposed discharge is necessary for important economic or social development." As a part of this
demonstration, the applicant must complete an evaluation of the discharge alternatives listed below, including a calculation of the total

annualized project costs for each technically feasible alternative (using ADEM Form 312 for public-sector projects and ADEM Form 313 for private-sector projects). Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

Applicant/Project: _

Alternative	Viable	Non-Viable	Comment
1 Land Application	-		Non-Viable, Please see supporting documentation
2 Pretreatment/Discharge to POTW			Non-Viable. Please see supporting documentation
Relocation of Discharge	٠.	· · · · · · · · · · · · · · · · · · ·	Non-Viable. Please see supporting documentation
Reuse/Recycle			Non-Viable. Please see supporting documentation
Process/Treatment Alternatives			Non-Viable. Please see supporting documentation
On-site/Sub-surface Disposal			Non-Viable. Please see supporting documentation
(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)			
<u> </u>		· · · · · · · · · · · · · · · · · · ·	

Pursuant to ADEM Administrative Code
Rule 335-6-3-04, I certify on behalf of the
applicant that I have completed an evaluation
of the discharge alternatives identified above,
and reached the conclusions indicated.

gnature: Professional Engineer

Date: 10/3/201

(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)

ADEM Form 311 3/02

ATTACHMENT E.1 - ALTERNATIVES ANALYSIS SUPPORTING DOCUMENTATION

1) Land Application

The Alabama Surface Mining Commission will not allow this method. As stated in Section 880-X-10C.(1) (a) and (b) of the Alabama Surface Mining Commission Regulations, all surface drainage from disturbed areas shall pass through an approved sedimentation pond, a series of sediment ponds or other treatment facilities before leaving the permit area. Other treatment facilities shall mean any chemical treatment system, such as flocculation or mechanical structures such as clarifiers that have a point source discharge & are utilized to prevent additional contributions of suspended solids to stream flow. Also, the quantity of stormwater runoff from coal mining operations is too great to use this method.

2) Pretreatment/Discharge to POTW by SID Permit

There is no Publicly Owned Treatment Works Facility located in the general area of the mine site. This mine site is located in a very rural area with no POTW located within economic wastewater transportation range.

3) Relocation of Discharge

Based on topographic mapping, aerial photography, and reconnaissance of the mine site the proposed outfalls are located at the most economically feasible locations to control surface runoff from the mine site. Also, the surrounding topography is of such steepness that the outfalls cannot be relocated.

4) Reuse/Recycle - Pollution Prevention

This is a coal recovery operation; there are no viable methods for the reuse/recycle of storm water from a mining operation, except for dust suppression on haul roads. However, all discharge of storm water shall be made in compliance with all applicable state and federal water quality effluent limitation guidelines for coal mining operations as required by Section 880-X-10C-.13.(5) of the Alabama Surface Mining Commission Regulations.

5) Other Process/Treatment Alternatives

The Alabama Surface Mining Commission Regulations do not allow any other process or treatment alternatives of stormwater runoff other than treatment through approved sediment basins.

6) Underground Injection by UIC Permit

The steepness of the topography within the permit area will not allow this method to be utilized at this mine site. This method is economically unfeasible due to the distance that stormwater would have to be pumped and the size of the pumps that it would take to transport the stormwater to a permitted UIC site. Therefore, it is more feasible to allow stormwater to gravity drain to the sediment basins prior to leaving the permitted area. The water quantity is too great and there are no zones of injection within or adjacent to this site therefore this option would not be technically feasible.

Attachment E.2

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	\$ 975,000 ₍₁₎
Interest rate for Financing (Expressed as a decimal)	0.10 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10}-1}$ + i	0.163 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	\$ 158,676.76 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)	\$ 35,650.00 ₍₄₎
Total Annual Cost of Pollution Control Project [(3)+(4)]	\$ ^{194,326.76} (5)

- While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.
- For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

ADEM Form 313 8/02

ATTACHMENT F

F.1 - Pond Construction Criteria

- F.2 Specifications for the Construction, Maintenance, and Reclamation of Primary Roads
- F.3 Specifications for the Construction, Maintenance, and Reclamation of Ancillary Roads

ATTACHMENT F.1

POND CONSTRUCTION CRITERIA

The embankment for sediment basins (temporary and permanent) shall be designed and built using the following as minimum criteria:

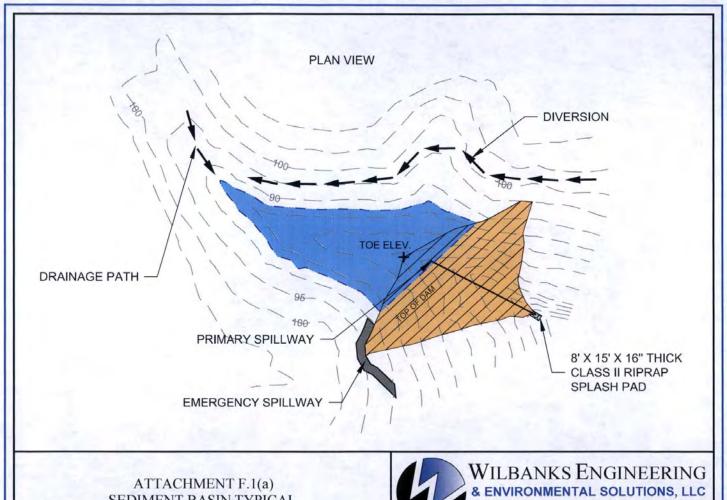
- 1. The top of the dam shall be no less than 12 feet wide.
- 2. See design sheet for maximum and minimum embankment slopes.
- 3. The foundation and abutments for the impounding structure shall be designed to be stable under all conditions of construction and operation of the impoundments, with a minimum static safety factor of 1.5 for the normal pool with steady seepage saturation conditions, and a seismic safety factor of at least 1.30.
- 4. The dam shall be constructed with a cutoff trench based upon prudent engineering practices for the site. The cutoff shall be located on the dam centerline and be of sufficient depth to extend into a relatively impervious material from which the core of the dam shall also be constructed.
- 5. The embankment foundation area shall be cleared of all organic matter, all surfaces sloped to no steeper than lv:lh, and the entire foundation surface scarified.
- 6. The entire embankment and cutoff trench shall be compacted to 95 percent density, based on standard proctor as outlined in ASTM.
- 7. The material placed in the embankment shall be free of sod, roots, stones over 6 inches in diameter, and other objectionable materials. The fill material shall be placed and spread over the entire fill area, starting at the lowest point of the foundation, in layers not to exceed 12 inches in thickness. Construction of the fill shall be undertaken only at such times that the moisture content of the fill material will permit satisfactory compaction in accordance with paragraph 5.
- 8. The pool area of the basin will be cleared of timber and large undergrowth.
- 9. The primary decant system when consisting of a pipe shall be installed according to Class C pipe installation for embankment bedding.
- 10. The primary decant system shall be equipped with a device, or constructed, such as to ensure that subsurface withdrawal is accomplished to prevent discharge of floating solids. If a channel is used as the primary decant a skimmer shall be installed to prevent floating solids from discharging.

ATTACHMENT F.1 (CONTINUED)

- 11. A splash pad or riprap may be required under the discharge of the primary decant system where necessary to ensure that the discharge does not erode the embankment.
- 12. The combination primary and secondary decant system shall be designed to safely carry the expected peak flow from a 25 year 6 hour storm. The entire emergency overflow spillway channel will be a stabilized channel and will be stabilized upon completion of construction as specified within the detailed design plans using prudent engineering measures. These measures may consist of lining the spillway with concrete or a durable rock riprap, or the spillway being constructed in consolidated non-erodible material and planted with a mixture or both annual and perennial grasses, or a combination of any or all of the above.
- 13. Sediment basins using a single spillway system shall be an open channel of non-erodible construction consisting of concrete, durable rock riprap or its being constructed in consolidated non-erodible material as specified in the detailed design plans.
- 14. The settled embankment for temporary impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year 6 hour, or a 10 year 24 hour precipitation event (whichever has the greatest runoff). The settled embankment for permanent impoundments shall be a minimum of 1.0 foot above the maximum water elevation for the runoff from a 25 year- 6 hour, or a 10 year- 24 hour precipitation event (whichever has the greatest runoff).
- 15. If basins are built in series, then the combined decant system for each shall be designed to accommodate the entire contributing drainage area.
- 16. The dam and all disturbed areas shall be seeded with both perennial and annual grasses, fertilized and mulched in order to insure erosion is minimized. Hay bales or riprap may be placed at the toe of the dam immediately upon completion of construction.
- 17. The constructed height of the dam shall be increased a minimum of 5 percent over the design height to allow for settlement over the life of the embankment.
- 18. Final graded slopes of the entire permanent water impoundment area shall not exceed 2.5H-l.0V to provide for adequate safety and access for proposed water users.
- 19. Prior to Phase II bond release, additional data concerning water quality, water quantity, depth, size, configuration, postmining land use, etc., for each proposed permanent water impoundment, shall be submitted to the Regulatory Authority for permanent water impoundment approval.

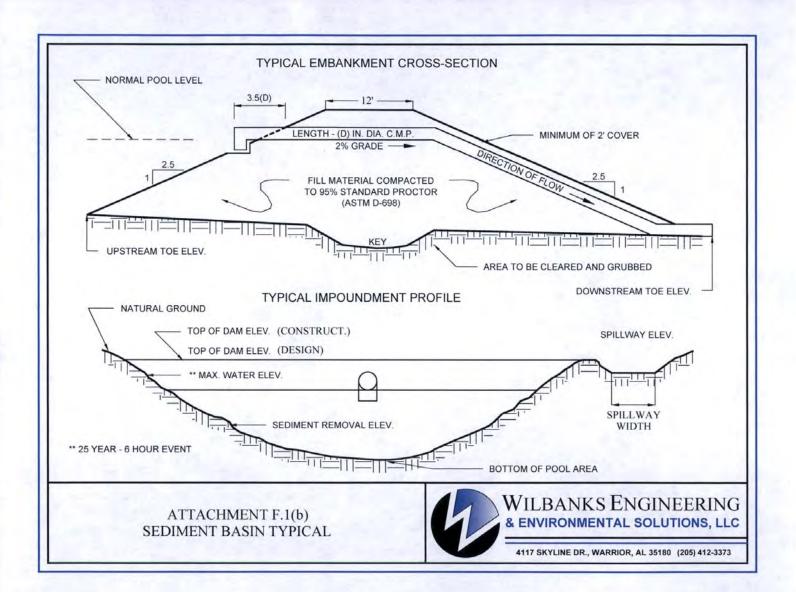
ATTACHMENT F.1 (CONTINUED)

- 20. All sediment basins will be inspected for stability, erosion, etc. two (2) times a month until removal of the structure or release of the reclamation bond.
- 21. The embankment and spillway will be maintained by repairing any damage such as erosion, slope failure or spillway damage until removal of the structure or release of the performance bond.
- 22. All ponds shall be examined quarterly for structural weakness, instability, erosion, or other hazardous conditions and maintenance performed as necessary. Formal inspections shall be made on an annual basis, including any reports or modifications, in accordance with 880-X -1 OC-.20 [[(i)]] of the Alabama Surface Mining Commission Regulations.
- 23. Sediment will be removed from each pond when the accumulated sediment reaches the sediment storage volume as shown on the detailed design sheet.
- 24. Upon completion of mining, successful reclamation and effluent standards being met, each sediment basin not remaining as a permanent water impoundment will be dewatered in an environmentally safe manner (such as siphoning, pumping, etc.) and reclaimed to approximate original contours by the following procedure: A permanent diversion channel (designed for a 10 year- 24 hour precipitation event) shall be cut along the outer edge of the basin to re-route drainage around the basin and back through the stabilized spillway to allow reclamation of the sediment basin. The diversion channel shall be designed and grassed as per enclosed information. (See permanent diversion for basin disposal). Upon completion of the diversion channel the back slope of the dam shall be graded to a minimum 3H to 1V slope. The dewatered sediment basin area shall be seeded with some combination of the following: Fescue, Bermuda, rye grass, canary grass and willows. After seeding the area shall be mulched. Any additional sediment or embankment material not used to meet original contour, if non-toxic, shall be spread in thin layers within the permit area and vegetated as stated in the approved reclamation plan. All toxic material encountered in the basin disposal shall be buried and covered with 4 feet of non-toxic material and vegetated as stated in the approved reclamation plan.
- 25. A qualified registered professional engineer or other qualified professional specialist, under the direction of the professional engineer shall conduct regular inspections during construction and upon completion shall inspect each basin for certification purposes.
- 26. Point source discharge embankments shall be constructed and abutments keyed into desirable material if at all possible. In the event that undesirable material is encountered, addition design and construction criteria shall be submitted prior to certification.

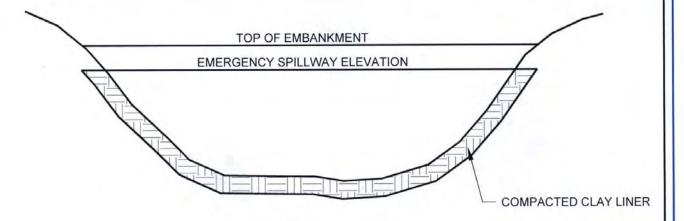


SEDIMENT BASIN TYPICAL





TYPICAL IMPOUNDMENT PROFILE CLAY LINER CROSS-SECTION



In the event that a sediment basin must be constructed in spoil material, the interior or wet area of the basin will be lined with a minimum of one (1') foot of clay material with a permeability no greater than 0.000001 cm./sec. up to the emergency spillway elevation. The clay liner material will be placed in lifts no greater than six inches (6") and compacted to ninety-five (95) percent of the standard proctor density.

> ATTACHMENT F.1(c) SEDIMENT BASIN TYPICAL



4117 SKYLINE DR., WARRIOR, AL 35180 (205) 412-3373

ATTACHMENT F.2

SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE AND RECLAMATION OF PRIMARY ROADS

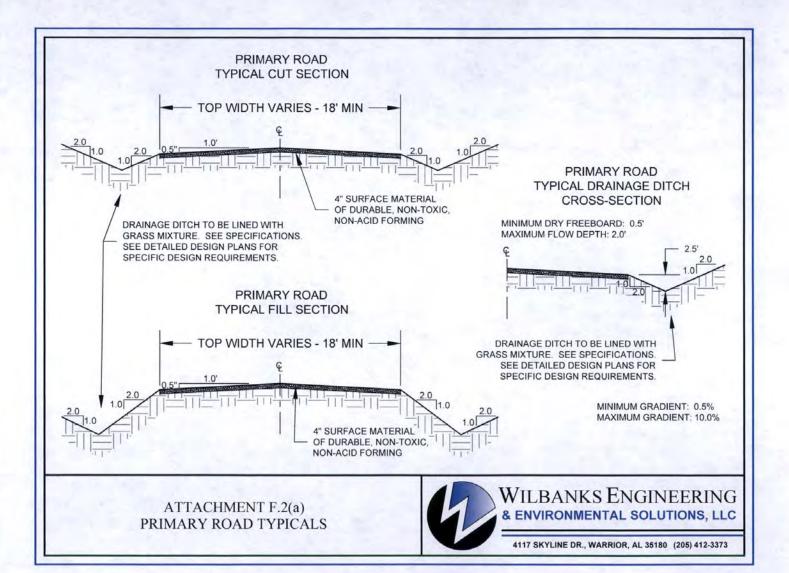
- 1. Primary roads shall be designed by or under the direction of a registered professional engineer in accordance with the Alabama Surface Mining Commission rules and regulations and prudent engineering practice.
- 2. Each roadway embankment will be designed and constructed so as to have a minimum static safety factor of 1.3.
- 3. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.
- 4. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality. No fording of intermittent or perennial streams will be conducted unless specifically approved by the Alabama Surface Mining Commission as temporary routes to be used during road construction.
- 5. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.
- 6. Roads will be constructed of suitable compacted subgrade material. The material will be free of sod, roots, stones over 12 inches in diameter, and other objectionable materials. The material will be placed and spread over the entire fill area, starting at the lowest point in layers not to exceed 12 inches in thickness. The material will be compacted to 95 percent of the density, based on standard proctor as outlined in ASTM.
- 7. Primary roads will have a minimum width of eighteen feet and a maximum width necessary to accommodate the largest equipment traveling the road.
- 8. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. The wearing surface will consist of durable sandstone, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, iron ore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority. The wearing surface will be placed on the roadbed to a depth of four inches.

ATTACHMENT F.2 (CONTINUED)

- 9. No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drainways will be located at a minimum distance of three-hundred feet.
- 10. Roads will be constructed so as to have adequate drainage utilizing ditches, culverts, cross drains and ditch relief drains designed to safely pass the peak runoff from a ten year, six hour precipitation event. Drainage pipes and culverts shall be installed as designed and will be maintained in a free and operating condition to prevent and control erosion at inlets and outlets. Culverts have been designed to support the load of the heaviest equipment to travel the road and are based on the Handbook of Steel Drainage and Highway Construction Products by the American Iron and Steel Institute and the equipment specifications. Drainage ditches will be constructed and maintained in accordance with the approved design to prevent uncontrolled drainage over the road surface and embankment. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial stream, the structure will be designed and constructed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: Bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application. Upon completion of construction of each phase of the roadway the construction will be certified to the Alabama Surface Mining Commission as having been done in accordance with the approved plans for the roadway and associated facilities.
- 11. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.

ATTACHMENT F.2 (CONTINUED)

- 12. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:
 - a. The road will be closed to traffic.
 - b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.
 - c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.
 - d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.
 - e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.
 - f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.
- 13. The drawings and data contained in the specific design plans illustrate typical roadbed configurations for primary roads as well as site specific design of drainage structures, stability analysis and ditch sections.



ATTACHMENT F.3

SPECIFICATIONS FOR THE CONSTRUCTION, MAINTENANCE AND RECLAMATION OF ANCILLARY ROADS

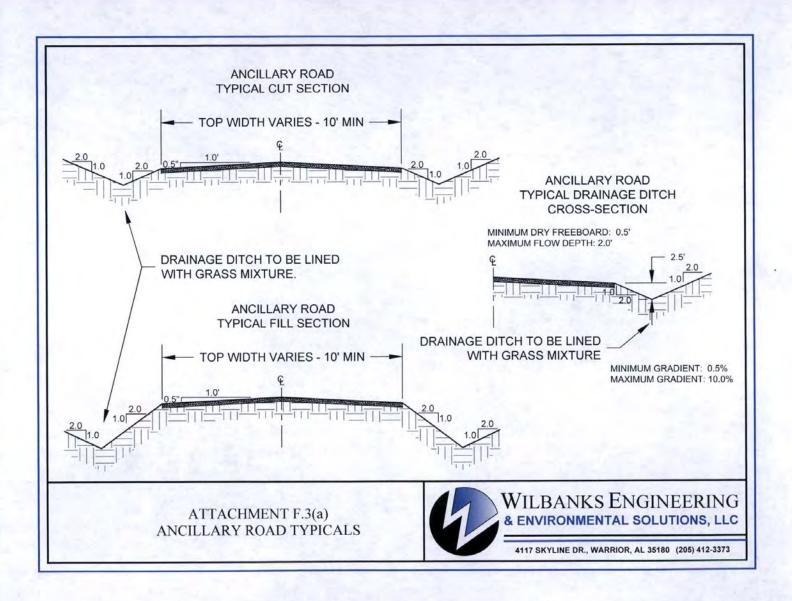
- 1. To the extent possible, roads will be located on ridges or on the most stable available slopes to prevent or minimize erosion, downstream sedimentation and flooding in an effort to prevent adverse effects to fish, wildlife and related environmental values.
- 2. To the extent possible, roads will be located above the sediment basins to be constructed for the mining operation in an effort to control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area and to comply with State and Federal water quality standards applicable to receiving waters and avoid the alteration of the normal flow of water in streambeds or drainage channels while preventing or controlling damage to public or private property. Where it is not possible or is impractical to locate roads in this manner, sediment control devices such as silt fencing, hay bale check dams and rock filter check dams will be used as necessary to maintain water quality.
- 3. Prior to construction, the roadway will be cleared, grubbed and will have the topsoil removed. The clearing limits will be kept to the minimum necessary to accommodate the roadbed and associated ditch construction.
- 4. Roads will be constructed of suitable compacted subgrade material. The material will be free of sod, roots, stones over 12 inches in diameter, and other objectionable materials. The material will be placed and spread over the entire fill area, starting at the lowest point in layers not to exceed 12 inches in thickness. The material will be compacted to 95 percent of the density, based on standard proctor as outlined in ASTM.
- 5. Ancillary roads will have a minimum width often feet and a maximum width necessary to accommodate the largest equipment traveling the road.
- 6. Roadbeds will be cut to consolidated non-erodible material or will be surfaced with durable non-toxic, non-acid forming substances. It is anticipated that durable sandstone overburden on site will be utilized as surfacing material. If there should not be adequate sandstone on site, then a durable sandstone material, chert, crushed limestone, crushed concrete, crushed asphalt, red rock, iron ore refuse, gravel, or other durable non-toxic, non-acid forming material approved by the Regulatory Authority will be hauled in from off site and placed on the roadbed to a depth of two inches.
- 7. No sustained grades will exceed ten percent unless deemed necessary, in which case appropriate sediment control facilities will be constructed. If grades in excess of fifteen percent are required, cross drains, ditch relief drains and road drain ways will be located at a minimum distance of three-hundred feet.

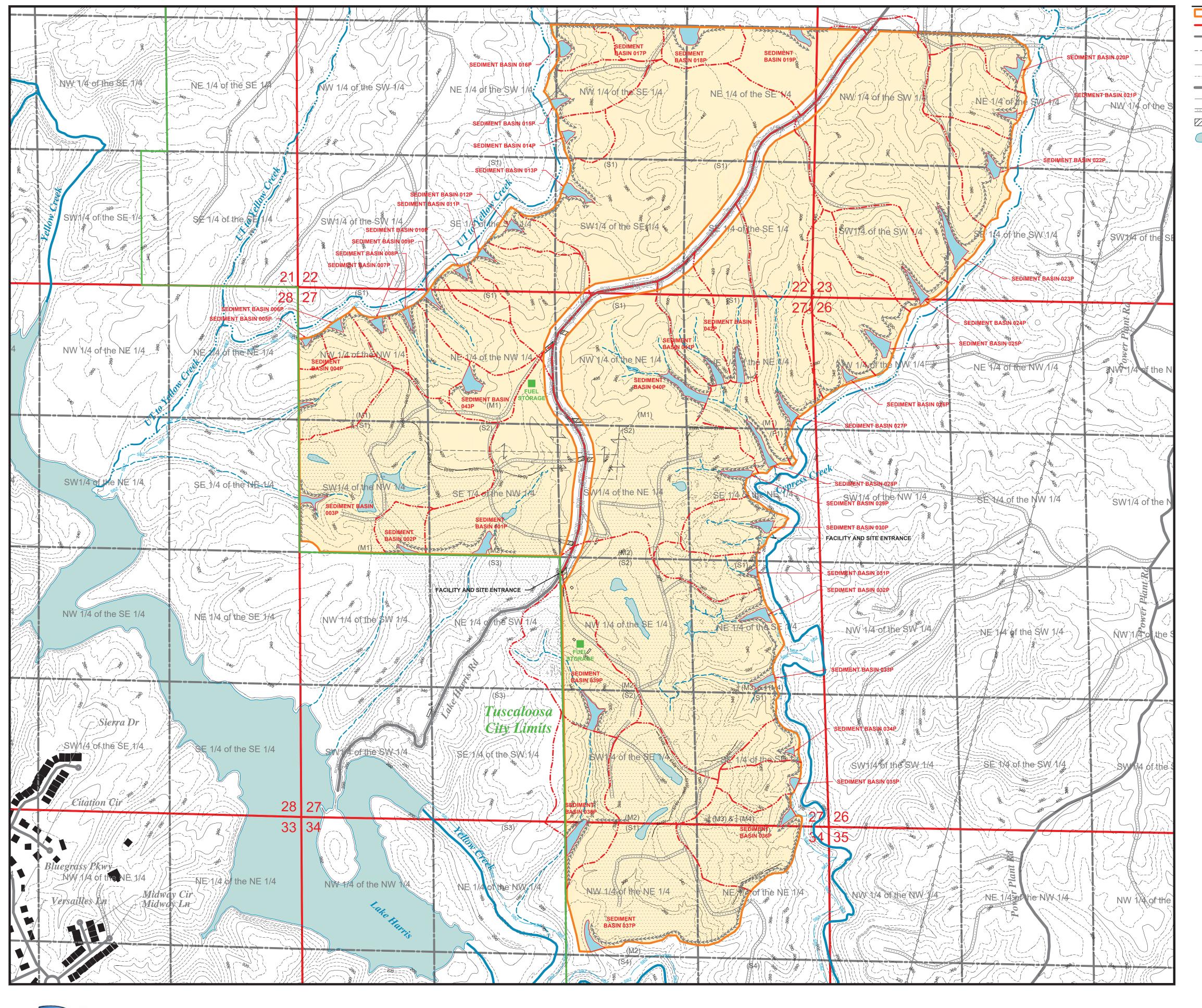
ATTACHMENT F.3 (CONTINUED)

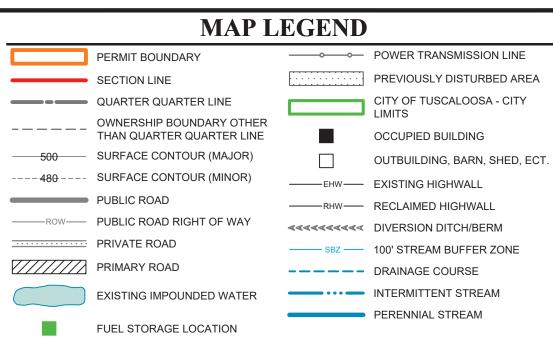
- 8. Roads will be constructed so as to have adequate drainage utilizing ditches, cross drains and ditch relief drains. Roads will not be located in the channel of an intermittent or perennial stream unless specifically approved by the Alabama Surface Mining Commission. Additionally, no relocation and/or alteration of an intermittent or perennial stream will be done unless specifically approved by the Alabama Surface Mining Commission. In the event that it becomes evident that any drainage structures including culverts, bridges and/or low water crossings will be required in order to cross an intermittent or perennial stream, the structure will be designed in accordance with Alabama Surface Mining Commission requirements and prudent engineering practice and the approval of the design(s) will be acquired prior to the commencement of construction. Hay bale check dams and silt fences will be used at strategic locations when necessary to control sediment runoff. Immediately upon completion of construction, the side slopes of the road embankments and/or cuts will be fertilized, seeded with annual and perennial grasses and mulch will be added to aid in the prevention of erosion and to enhance seed germination. The seed mix will consist of, but is not limited to, some combination of the following species: Bermuda grass, fescue, lespedeza, rye grass, brown top millet, clover and vetch. The particular species to be planted will vary with the planting season at the time of seed application.
- 9. Routine maintenance will be required to assure that the road continually meets performance standards and will consist of periodic grading, resurfacing, dust suppression and maintenance of sediment control facilities. Dust suppression will consist of the application of water, chemical binders and/or other dust suppressants. No oil will be utilized in this process. Spot seeding, fertilizing and mulching will be performed as necessary to improve vegetative cover on roadway slopes. A road damaged by a catastrophic event shall be repaired as soon as practicable after the damage has occurred.
- 10. Roads not to be retained as part of the post mine land use shall be reclaimed in accordance with the approved reclamation plan for this permit as soon as practicable after they are no longer needed as part of the mining and reclamation operation, using the following procedures:
 - a. The road will be closed to traffic.
 - b. All bridges, culverts and other drainage structures not approved as part of the post mine land use will be removed.
 - c. All road surfacing materials that are not compatible with the post mine land use or revegetation requirements will be properly disposed of on-site or removed from the site for re-use.
 - d. Roadway cut and fill slopes shall be regraded and reshaped to be compatible with the post mine land use and to compliment the natural drainage pattern of the surrounding terrain.
 - e. The natural drainage patterns shall be protected from surface runoff and erosion utilizing the installation of dikes and/or cross drains as necessary.

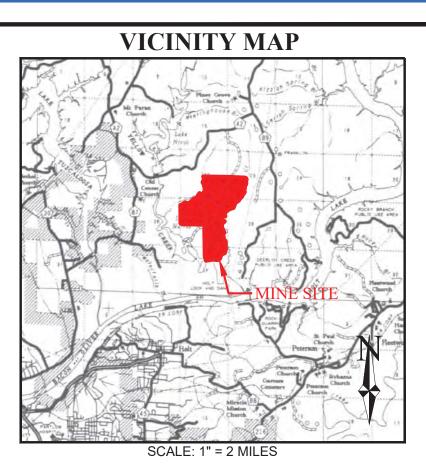
ATTACHMENT F.3 (CONTINUED)

- f. The roadbed shall be ripped or scarified as necessary, the topsoil or substitute or approved growing medium shall be replaced and revegetated in accordance with the approved reclamation plan for this permit.
- 11. The following drawings illustrate typical roadbed configurations for ancillary roads.









OWNERSHIP LEGEND

SURFACE & MINERAL OWNERSHIP (FEE) (F1) RAMSEY MCCORACK LAND CO., INC.

SURFACE OWNERSHIP THE WESTERVELT COMPANY, INC.

X-RING PROPERTY MANAGEMENT, LLC

THE CITY OF TUSCALOOSA

RAMSEY MCCORACK LAND CO., INC.

MINERAL OWNERSHIP

(M1) WESLEY WEST MINERAL, LTD.

RAMSEY MCCORMACK LAND CO., INC. THE BOARD OF TRUSTEES OF THE UNIVERSITY OF

(M4) KAREN J. COLWELL

ADEM NPDES DETAILED FACILITY MAP

SHEET:

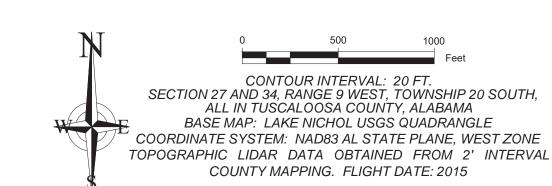
1 OF 1

CAHABA RESOURCES, LLC

DEERLICK WEST MINE

DATE: SCALE: DRAWN BY: 1/25/19 1" = 500' J.W.L.

WILBANKS ENGINEERING & ENVIRONMENTAL SOLUTIONS, LLC
4117 SKYLINE DR., WARRIOR, AL 35180 (205) 412-3373



September 27, 2017

Water Division

Attn: Jasmine Martin

Alabama Department of Environmental Management

Post Office Box 301463

Montgomery, Alabama 36130-1463

Phone: (334) 270-5622 Fax: (334) 279-3051

jasmine.martin@adem.alabama.gov

www.adem.alabama.gov

RE: Cahaba Resources, LLC - Lake Harris Mine - Tuscaloosa, AL

Initial NDPES Permit Application for New Facility

Dear Ms. Martin:

Please find enclosed the necessary documentation for the initial permit application of the above referenced project. This project has a total acreage of 747.4 acres and a total of fourty-three (43) proposed outfalls.

The appropriate application fee of \$5,820.00 is attached to this letter. If you have any questions regarding this information, or want to reach me please contact me at (205) 412-3373 or via email at zach@wilbankseng.com.

Sincerely,

John Llorens

Assistant Engineer