



Alabama Department of Environmental Management

adem.alabama.gov

1400 Coliseum Blvd. 36110-2059 ♦ Post Office Box 301463  
Montgomery, Alabama 36130-1463  
(334) 271-7700  
FAX (334) 271-7950

July 21, 2008

DONALD M. BAXTER  
SHEPHERD BEND, LLC  
PO BOX 2322  
JASPER AL 35502

Re: PERMIT ISSUANCE  
Shepherd Bend Mine

NPDES Permit AL0079162

Walker County (127)

Dear Mr. Baxter:

Enclosed is the issued National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. The issuance and expiration dates of the permit are specified on the cover page.

Part I of the permit requires that you monitor the discharge of pollutants from this facility and report the results of such monitoring to the Department not later than the 28th day of January, April, July, and October of each year on an approved Discharge Monitoring Report (DMR) form or a copy of the enclosed DMR form. The original DMR form should be retained for your records. While information listed on the DMR forms may be copied, the original signature of a principal executive officer or authorized agent must appear on all DMRs submitted to the Department. The principal executive officer must submit, in writing, authorization allowing the designated agent to sign DMR forms submitted to the Department. **Please discard all previously issued DMR forms and other reporting forms. NEW UPDATED ORIGINAL DMR forms and other updated reporting forms are enclosed. Use of these updated forms is required for future report submittals for this facility. In addition, you are requested to use these revised/updated formats when submitting DMR forms and other reporting forms for all other facilities.**

Please be advised that pursuant to Part II, A., 8., of the enclosed permit, you are allowed to continue with work related to the implementation of the Pollution Abatement/Prevention Plan for the proposed outfalls, including the construction of sedimentation basins. Any mining or processing activity 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 for the proposed outfalls 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. Your attention is also directed to the requirements of Part I, B., 9., Noncompliance Notification. The enclosed NPDES Permit Noncompliance Notification (5-Day Report) form and submission thereof to the Department within the prescribed time period will satisfy the written report requirement of this permit. All forms should be sent to the Department, Attn: Mining Unit. Please be advised that pursuant to ADEM Admin. Code R. 335-6-6-.05, this permit will automatically **expire eighteen (18) months** after the issuance date of this permit if construction, as defined by ADEM Admin. Code R. 335-6-6-.02(g), or mining has not commenced.

The Department encourages you to voluntarily consider additional pollution prevention practices/alternatives at your facility which may assist you in complying with effluent limitations, and possibly reduce or eliminate pollutant discharges. Should you have any questions concerning this matter, please contact **Brian Marshall, Industrial/Mining Section, by email at bmarshall@adem.state.al.us or by phone at (334) 271-7895.**

Sincerely,

Eric Sanderson, Chief  
Industrial/Mining Section  
Water Division

dc FPER/34990

Enclosures

c: Permits & Services, ADEM, via email  
EPA Region IV, via email  
Alabama Surface Mining Commission, via email  
Birmingham Branch, ADEM, via email

**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)



**Mobile Branch**  
2204 Perimeter Road  
Mobile, AL 36615-1131  
(251) 450-3400  
(251) 479-2593 (Fax)

**Mobile - Coastal**  
4171 Commanders Drive  
Mobile, AL 36615-1421  
(251) 432-6533  
(251) 432-6598 (Fax)



# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDIVIDUAL PERMIT

PERMITTEE: Shepherd Bend, LLC  
Shepherd Bend Mine

FACILITY LOCATION: Walker County  
T16S, R6W, S1, 2, 3, 10, 11, 12  
T15S, R6W, S34, 35

PERMIT NUMBER: AL0079162

DSN Receiving Water

001 Unnamed tributary to Barton Creek  
003 Unnamed tributary to Barton Creek  
005 Mulberry Fork Black Warrior River  
007 Mulberry Fork Black Warrior River  
009 Mulberry Fork Black Warrior River  
011 Mulberry Fork Black Warrior River  
013 Mulberry Fork Black Warrior River  
015 Mulberry Fork Black Warrior River  
017 Unnamed tributary to Mulberry Fork Black Warrior River  
019 Unnamed tributary to Mulberry Fork Black Warrior River  
021 Mulberry Fork Black Warrior River  
023 Mulberry Fork Black Warrior River  
025 Mulberry Fork Black Warrior River  
027 Mulberry Fork Black Warrior River  
029 Mulberry Fork Black Warrior River

DSN Receiving Water

002 Unnamed tributary to Barton Creek  
004 Mulberry Fork Black Warrior River  
006 Mulberry Fork Black Warrior River  
008 Unnamed tributary to Mulberry Fork Black Warrior River  
010 Mulberry Fork Black Warrior River  
012 Mulberry Fork Black Warrior River  
014 Mulberry Fork Black Warrior River  
016 Unnamed tributary to Mulberry Fork Black Warrior River  
018 Mulberry Fork Black Warrior River  
020 Unnamed tributary to Mulberry Fork Black Warrior River  
022 Unnamed tributary to Mulberry Fork Black Warrior River  
024 Unnamed tributary to Mulberry Fork Black Warrior River  
026 Mulberry Fork Black Warrior River  
028 Unnamed tributary to Mulberry Fork Black Warrior River

*In accordance with and subject to the provisions of the Federal Water Pollution Control Act, as amended, 33 U.S.C. §§1251-1378 (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-16, 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.*

ISSUANCE DATE: July 21, 2008

EFFECTIVE DATE: August 1, 2008

EXPIRATION DATE: July 31, 2013

  
Alabama Department of Environmental Management

# **New Source Coal Mine and Associated Areas**

## **TABLE OF CONTENTS**

### **PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS**

- A. Discharge Limitations
  - 1. Generally Applicable Discharge Limitations
  - 2. Post-Mining Discharge Limitations
  - 3. Precipitation Event Discharge Limitations
  
- B. Monitoring And Reporting
  - 1. Sampling Schedule and Frequency
  - 2. Sampling Location
  - 3. Representative Sampling
  - 4. Test Procedures
  - 5. Recording of Results
  - 6. Routine Inspection by Permittee
  - 7. Records Retention and Production
  - 8. Reporting
  - 9. Noncompliance Notification
  - 10. Reduction, Suspension or Termination of Monitoring and/or Reporting
  
- C. Schedule of Compliance
  
- D. Termination of Discharge

### **PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES**

- A. Management Requirements
  - 1. Facilities Operation and Management
  - 2. Best Management Practices
  - 3. Duty to Mitigate
  - 4. Bypass
  - 5. Upset
  - 6. Removed Substances

TABLE OF CONTENTS, Continued

7. Loss or Failure of Treatment Facilities
  8. Prohibition Against Discharge from Facilities Not Certified
  9. Facility Identification
- B. Responsibilities
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. Right of Entry and Inspection
  6. Updating Information
  7. Permit Modification, Suspension, Termination, Revocation, and Automatic Expiration
  8. Duty to Provide Information
  9. Transfer of Permit
  10. Duty to Reapply
  11. Groundwater

**PART III OTHER PERMIT CONDITIONS**

- A. Civil and Criminal Liability
1. Tampering
  2. False Statements
  3. Permit Enforcement
  4. Relief from Liability
- B. Oil and Hazardous Substance Liability
- C. Property and Other Rights
- D. Availability of Reports
- E. Definitions
- F. Severability
- G. Prohibitions and Activities Not Authorized

## PART I

### A. DISCHARGE LIMITATIONS

#### 1. Generally Applicable Discharge Limitations

a. Except as provided in 2. and 3. below, all discharges shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Generally Applicable Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Iron, Total	N/A	3.0 mg/l	6.0 mg/l
Manganese, Total <u>1/</u>	N/A	2.0 mg/l	4.0 mg/l
Total Suspended Solids	N/A	35.0 mg/l	70.0 mg/l
pH	6.0 s.u.	N/A	9.0 s.u. <u>2/</u>
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

Flow can be determined by direct measurement, calculation, or other method acceptable to the Department and must be reported in mgd.

#### 2. Post-Mining Discharge Limitations 3/

- a. Excluding discharges from the underground workings of an underground coal mine, any discharge shall be exempt from the discharge limitations specified in 1. provided that:
- (1) all mining in the drainage basin(s) associated with the discharge has ceased;
  - (2) revegetation has been established on all areas mined in the drainage basin(s) associated with the discharge;
  - (3) the permittee has applied for a Phase II Bond Release, if applicable, from the Alabama Surface Mining Commission for all areas mined in the drainage basin(s) associated with the discharge;
  - (4) the permittee has certified to the Director, in writing, its compliance with (1) through (3) above;

1/ 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.

2/ 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. Use of this exemption must be noted on the DMR form when submitted for each eligible outfall.

3/ Where waste streams from any facility covered by this permit are combined for treatment or discharge with waste streams from another facility covered by this permit, the concentration of each pollutant in the combined discharge may not exceed the most stringent limitations for that pollutant applicable to any component waste stream of the discharge.

- (5) the Director, or his designee, has not notified the permittee the request is incomplete, that additional time is needed by the Department to properly process the request, or that the request for post-mining discharge limitations has been disapproved, within 60 days after receipt of the above information and certification.
  - (6) the permittee has been granted, in writing, a Phase II Bond Release, if applicable, by the Alabama Surface Mining Commission for all areas mined in the drainage basin(s) associated with the discharge.
- b. Except as provided in 3. below, any discharge, which pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Post-Mining Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Settleable Solids	N/A	N/A	0.5 ml/l
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

**3. Precipitation Event Discharge Limitations 3/**

- a. 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 and which occurs during or within 24-hours after such event, shall be exempt from the discharge limitations specified in 1. and 2. provided that the permittee submits a written claim of exemption to the Director with the Discharge Monitoring Report required to be submitted by Part I, B.,8. of this permit, or within 14 days after notification of a violation of any discharge limitation specified in 1. or 2. by the Department, which shall contain:
- (1) persuasive evidence that the discharge or increase in the volume of a discharge was caused by an applicable 24-hour precipitation event;
  - (2) persuasive evidence of the amount of precipitation occurring during the applicable 24-hour precipitation event;
  - (3) the time at which the 24-hour precipitation event commenced and ceased;
  - (4) persuasive evidence demonstrating the origin of the drainage causing a discharge; and
  - (5) the results of monitoring conducted pursuant to Part I,B.,1. of this permit, if required thereby.
- b. Excluding the discharges of drainage from the underground workings of an underground coal mine, discharges of drainage from steep slope mining areas and mountain top removal areas, the following precipitation event discharge limitations apply to discharges of acid or ferruginous non-controlled surface mine drainage:
- (1) any discharge or increase in the volume of a discharge which pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. and which is caused by a 24-hour precipitation event less than or equal to a 2-year, 24-hour precipitation, shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Less than or equal to 2-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
	Settleable Solids	N/A	N/A
Iron, Total	N/A	N/A	7.0 mg/l
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

- (2) any discharge or increase in the volume of a discharge which, pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. and which is caused by a 24-hour precipitation event greater than a 2-year, 24-hour precipitation event, shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Greater than 2-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Settleable Solids	N/A	N/A	0.5 ml/l
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

- (3) any discharge or increase in the volume of a discharge which, pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. or 2. and which is caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event, shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Greater than 10-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

- c. Excluding discharges of drainage from steep slope mining areas, discharges of drainage from mountain top removal areas, and discharges of drainage from the underground workings of an underground coal mine which are not commingled with other discharges eligible for precipitation event discharge limitations, the following precipitation event discharge limitations apply to discharges of acid or ferruginous controlled surface mine drainage and to discharges of drainage from the underground workings of an underground coal mine which are commingled with other discharges eligible for precipitation event discharge limitations:

Any discharge or increase in the volume of a discharge which, pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. and 2. and which is caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Greater than 10-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>

pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

d. The following precipitation event discharge limitations apply to discharges of drainage from steep slope mining areas, discharges of drainage from mountain top removal areas, discharges of alkaline drainage from a surface coal mine, and discharges of alkaline drainage from coal refuse disposal piles:

- (1) any discharge or increase in the volume of a discharge which, pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. and which is caused by a 24-hour precipitation event less than or equal to a 10-year, 24-hour precipitation event, shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Less than or equal to 10-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Settleable Solids	N/A	N/A	0.5 ml/l
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

- (2) any discharge or increase in the volume of a discharge which, pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. or 2. and which is caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event, shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Greater than 10-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

e. The following precipitation event discharge limitations apply to discharges of acid or ferruginous drainage from coal refuse disposal piles:

- (1) any discharge or increase in the volume of a discharge which, pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. and, which is caused by a 24-hour precipitation event greater than a 1-year, 24-hour precipitation event, shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Greater than 1-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
Settleable Solids	N/A	N/A	0.5 ml/l
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

- (2) any discharge or increase in the volume of a discharge which, pursuant to the provisions of a., is exempt from the discharge limitations specified in 1. or 2. and which is caused by a 24-hour



precipitation event greater than a 10-year, 24-hour precipitation event, shall be limited by the permittee as follows:

<u>Effluent Characteristic</u>	<u>Greater than 10-year, 24-hour Precipitation Event Discharge Limitations</u>		
	<u>Daily Minimum</u>	<u>Daily Average</u>	<u>Daily Maximum</u>
pH	6.0 s.u.	N/A	9.0 s.u.
Flow (Instantaneous, determine at time of sample collection)	Monitor	Monitor	Monitor

**B. MONITORING AND REPORTING**

**1. Sampling Schedule and Frequency**

- a. (1) Except as provided in b. and c. below, the permittee shall collect at least one grab sample of the discharge from each point source identified on Page 1 of this permit and described more fully in the permittee's application, every other week but need not collect more than two samples per calendar month.
- (2) At least one grab sample shall be obtained and analyzed each quarterly (three month) monitoring period if a discharge occurs at any time during the quarterly (three month) monitoring period from each permitted 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 (incised ponds, old highwall cuts, old pit areas or depressions, etc.)
- (3) Except for discharges subject to the Post-Mining Discharge Limitations or Precipitation Event Discharge Limitations specified in Part I,A.,2. and Part I,A.,3. of this permit respectively, each sample collected shall be analyzed for each effluent characteristic, including flow, specified in Part I,A.,1. of this permit.
- b. The permittee shall collect at least one grab sample of the discharge from each point source identified on Page 1 of this permit and described more fully in the permittee's application every calendar month, but not less than 14 days after the last sampling, provided that the discharge is exempt from the discharge limitations specified in Part I,A.,1. of this permit pursuant to the provisions of Part I,A.,2. of this permit. Except for discharges subject to the Precipitation Event Discharge Limitations specified in Part I,A.,3. of this permit, each sample collected shall be analyzed for each effluent characteristic, including flow, specified in Part I,A.,2. of this permit.
- c. Any sample of a discharge collected in accordance with the provisions of a. or b. for which the permittee submits a claim of exemption pursuant to Part I,A., 3.,a. of this permit, shall be collected within 48 hours after the commencement of the 24-hour precipitation event and prior to cessation of the discharge or the increased discharge. The sample shall be analyzed for each effluent characteristic specified in Part I,A.,3.,b., Part I,A.,3.,c., or Part I,A.,3.,d. of this permit, whichever is applicable. The first time each calendar month the permittee collects such a sample, the permittee shall also collect a sample of the discharge within 24 to 36 hours after the cessation of the 24-hour precipitation event and shall analyze such sample for each effluent characteristic, including flow, specified in Part I,A.,1. or Part I,A.,2. of this permit, whichever is applicable.
- d. Notwithstanding the above provisions, the permittee's monitoring and reporting requirements contained in Part I,B.,1.,(a),(b), and (c) and Part I,B.,8. of this permit for any point source identified on Page 1 of this permit and described more fully in the permittee's application shall be terminated provided:

- (1) the permittee has received a 100% bond release from the Alabama Surface Mining Commission for all areas disturbed in the drainage basin(s) associated with the discharge;
- (2) 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;
- (3) 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 climatological conditions;
- (4) 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;
- (5) the permittee has stated that during the entire period covered by the monitoring data submitted, no chemical treatment of the discharge was provided;
- (6) the permittee's request has included the certification required by Part I,B.,8.,b. of this permit; and
- (7) the Director, or his designee, has not notified the permittee that the request is incomplete, that additional time is needed by the Department to properly process the request, or that the request for termination of the monitoring and reporting requirements contained in this permit has been disapproved, within 60 days after receipt of the above information and certification.

**2. Sampling Location**

Samples collected to comply with the monitoring requirements specified above shall be collected at the nearest accessible location just prior to discharge and after final treatment, or an alternate location approved in writing by the Department.

**3. Representative Sampling**

Samples and measurements 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.

**4. Test Procedures**

Test procedures for the analysis of pollutants shall conform to 40 CFR Part 136, 40 CFR §434.64 and guidelines published pursuant to Section 304(h) of the FWPCA U.S.C. §1314(h).

**5. 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; and
- f. the results of all required analyses.

**6. 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,B.,1. of this permit.
- b. If required by the Director or his designee, 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;
  - (5) the name and signature of the person performing the inspection of the point source and associated treatment or control facilities or systems.

**7. 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 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 or his designee, the permittee shall provide the Director with a copy of any record required to be retained by this paragraph.
- 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.

**8. Reporting**

- a. (1) 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 Director no later than the 28th day of January, April, July and October of each year. If the permittee, using approved analytical methods as specified in Part I,B.,4. monitors any discharge from a point source identified on Page 1 of this permit and described 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. 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; provided that, "No Discharge" reports need not be submitted for point sources from which discharges are prohibited by Part II,A.,8.

- (2) 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., B.,1.,a. provided that no discharge has occurred at any time during the entire quarterly (three month) monitoring period.
- b. 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 the Department's rules and regulations or a "duly authorized representative" of such official as defined in 40 C.F.R. §122.22(b) 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."

- c. All 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

PO Box 301463  
Montgomery, Alabama 36130-1463

1400 Coliseum Boulevard  
Montgomery, AL 36110-2059

Attention: Water Division

- d. 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.

**9. Noncompliance Notification**

- a. If for any reason, the permittee's discharge (1) does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Part I,A. of this permit which is denoted by an "(X)", (2) threatens human health or welfare, fish or aquatic life, or water quality standards, (3) 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), (4) 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 (5) exceeds any discharge limitation for an effluent characteristic as a result of an unanticipated bypass or upset, the permittee shall orally report the occurrence and circumstances of such discharge to the Director no later than 24-hours after the permittee becomes aware of the occurrence of such discharge. In addition to the oral report, the permittee shall submit to the Director a written report as provided in c. below, 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 daily maximum or minimum discharge limitation specified in Part I,A., of this permit, the permittee shall submit to the Director a written report as provided in c. below, no later than five (5) days after becoming aware of the occurrence of such discharge.
- c. Any written report required to be submitted to the Director by a. or b. shall include 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.

**10. Reduction, Suspension or Termination of Monitoring and/or Reporting**

- 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, supported by sufficient data as provided in applicable sections of Part I of this permit.
- b. Except as provided by Part I,B.,1.,d. of this permit, 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. 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.

**D. 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.

## PART II

### A. 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

- a. Unless otherwise authorized in writing by the Director or his designee, 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 or his designee has granted prior written authorization.
- c. 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 required by applicable state (ADEM Admin. Code 335-6-6-.12 (r) ) and federal (40 C.F.R. §§ 112.1-7) regulations. The permittee shall implement appropriate structural and/or non-structural spill prevention, control, and/or management 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. Careful consideration should be applied for tanks or containers located near treatment ponds, water bodies, or high traffic areas. In most situations this would require construction of a containment system if the cumulative storage capacity of petroleum products or other pollutants at the facility is greater than 1320 gallons. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and which shall prevent the contamination of groundwater and such containment system shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided. The applicant shall maintain onsite or have readily available flotation booms to contain and sufficient material to 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 an approved manner.

- d. 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.
- e. The permittee shall take all reasonable precautions to prevent any surface drainage or storm water runoff which originates without the permittee's premises and which contains any pollutants or other wastes from entering the permittee's premises; provided, however, that 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.

- f. 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, if so required by the Director or his designee.
- g. (1) The permittee shall notify the Director in writing not later than sixty (60) days prior to instituting use of any additional biocide corrosion inhibitor or chemical additive used in any cooling system(s) regulated by this permit. Such notification shall include:
  - (a) name and general composition of biocide or chemical,
  - (b) 96-hour median tolerance limit data for organisms representative of the biota of the water(s) which the discharge(s) enter(s),
  - (c) quantities to be used,
  - (d) frequencies of use,
  - (e) proposed discharge concentrations, and
  - (f) EPA registration number, if applicable.
- (2) The use of any biocide containing tributyltin, tributyltin oxide, zinc, chromium or related compounds in any cooling system(s) regulated by the permit is prohibited.

### 3. **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 as necessary to determine the nature and impact of the noncomplying discharge.

### 4. **Bypass**

- a. Any bypass is prohibited except as provided in b. and c. below.
- 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 b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in a. and an exemption, where applicable, from the discharge limitations specified in Part I.A. of this permit.

**5. Upset**

- a. Except as provided in b. below, 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 or his designee; and
  - (2) no later than five (5) days after becoming aware of the occurrence of the upset, the permittee furnishes the Director or his designee with evidence, including properly signed, contemporaneous operating logs, design drawings, construction certification, maintenance records, weir flow measurements, dated photographs, or other relevant evidence, demonstrating that (i) 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. The permittee has the burden of establishing that each of the conditions of a. have been met to qualify for an exemption from the discharge limitations specified in Part I.A. of this permit.

**6. 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.

**7. 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 all discharges until treatment is restored.

**8. 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 able to be operated to discharge within permit effluent limits, in accordance with the permit requirements, Departmental regulations, good engineering practices, and in accordance with plans and specifications reviewed by the Department is prohibited until the permittee submits to the Department a certification by the registered engineer who designed such facility(s) certifying that all such facility(s) have been designed, constructed, and are able to be operated to discharge within permit effluent limits, in accordance with the permit requirements, Departmental regulations, good engineering practices, and in accordance with plans and specifications reviewed by the Department with differences between the implemented pollution controls and minimum design guidelines in ADEM Admin. Code 335-6-9, including Appendix A & B, documented and justified by the design engineer, and a revised, "as-built" plan is submitted; 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.

## 9. 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.

## B. 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 Code of Alabama 1975, §§22-22A-1 et. seq., as amended, and/or a criminal penalty as authorized by Code of Alabama 1975, §22-22-1 et. seq., as amended.
- d. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce production or other activities in order to maintain compliance with the conditions of this permit.
- e. Nothing in this permit shall be construed to preclude nor 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.

## **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 or 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 or 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 Chapter 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 or 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,B.,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. 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.

**6. 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 or his designee, 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.

**7. Permit Modification, Suspension, Termination, Revocation, and Automatic Expiration**

- 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) violation of any term or condition of this permit;
  - (2) obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
  - (3) materially false or inaccurate statements or information in the permit application or the permit;

- (4) a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;
  - (5) errors in calculation of discharge limitations or typographical or clerical errors;
  - (6) the permittee's discharge threatens human health or welfare; or
  - (7) any other cause allowed by ADEM Administrative Code Rule 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.
  - c. Except as provided by ADEM Admin. Code. 335-6-6-.02 (g) and 335-6-6-.05 this permit shall automatically expire eighteen months after issuance, or applicable modified portions of this permit shall automatically expire eighteen months after modification.

**8. Duty to Provide Information**

- a. The permittee shall furnish to the Director or his designee, within a reasonable time, any information which the Director or his designee 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 or his designee upon request, copies of records required to be maintained by this permit.
- b. The permittee shall furnish to the Director or his designee 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.

**9. Transfer of Permit**

This permit may not be transferred without notice to the Director and subsequent modification or revocation and reissuance of this permit. In the case of a change in 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 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 ownership or control, he may require the submission of a new permit application.

**10. Duty to Reapply**

- 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. 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 Administrative Code Rule 335-6-6-.06.

**11. 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.

## PART III

### 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 punished as provided by applicable State and Federal law.

#### 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,A.,4. (Bypass) and Part II,A.,5. (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 under Section 311 of the FWPCA, 33 U.S.C. §1321.

### C. 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. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 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 Code of Alabama 1975, §22-22-14.

**E. DEFINITIONS**

1. Abandoned mine - means a mine where mining operations have occurred in the past and the applicable reclamation bond or financial assurance has been released or forfeited or if no reclamation bond or other financial assurance has been posted, and no mining operations have occurred for five years or more.
2. Acid or ferruginous drainage - means any drainage which is not alkaline drainage.
3. Alabama Environmental Management Act (AEMA) - means Code of Alabama 1975, §§22-22A-1 et. seq., as amended.
4. Alabama Water Pollution Control Act (AWPCA) - means Code of Alabama 1975, §§22-22-1 et. seq., as amended.
5. Alkaline drainage - means drainage which before any treatment has a pH equal to or greater than 6.0 s.u. and a total iron concentration of less than 10.0 mg/l.
6. Bypass - means the intentional diversion of waste streams from any portion of a treatment facility.
7. Coal mine - means an area, on or beneath land, used or disturbed in activity related to the extraction, removal, or recovery of coal from natural or artificial deposits, including active mining and reclamation.
8. 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.
9. Coal preparation plant associated areas - means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities.
10. 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.
11. 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 coal mine or coal refuse never removed from the coal mine.
12. Coal Remining Operation - means a coal mining operation which begins after the date of enactment of Section 301(p) of the FWPCA, 33 U.S.C. §1311(p), at a site on which coal mining was conducted before the effective date of the Federal Surface Mining Control and Reclamation Act of 1977.
13. Controlled surface mine drainage - means any surface mine drainage that is pumped or siphoned from a coal mine.
14. Daily average - means the arithmetic mean value of all sample results obtained during a calendar month. (Zero discharges shall not be included in the calculation of daily averages.)
15. Daily maximum - means the highest value of any individual sample result obtained during a day.
16. Daily minimum - means the lowest value of any individual sample result obtained during a day.
17. Day - means any consecutive 24-hour period.
18. Department - means the Alabama Department of Environmental Management.
19. Director - means the Director of the Department.
20. 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).



21. Discharge monitoring report (DMR) - means the form approved by the Director to accomplish monitoring report requirements of an NPDES permit.
22. Existing source coal mine - means a coal mine which is not a new source coal mine.
23. Existing source coal preparation plant - means a coal preparation plant which is not a new source coal preparation plant.
24. Federal Water Pollution Control Act (FWPCA) - means 33 U.S.C. §§1251 *et. seq.*, as amended.
25. Mountain top removal areas - means any surface coal mining area where the mining operation removes an entire coal seam or seams running through the upper fraction of a mountain, ridge, or hill by removing all of the overburden off of the bench, possibly excluding the toe of the lowest coal seam and associated overburden, and creating a level plateau or a gently rolling contour with no highwalls remaining and capable of supporting post-mining uses.
26. New source coal mine - means a coal mine including an abandoned mine which is being remined [excluding coal preparation plants and associated areas and coal remining operations which comply with the provisions of 301(p) of the FWPCA, 33 U.S.C. §1311(p)] the construction of which is commenced after May 24, 1984, or which has been subjected to a major alteration since May 24, 1984.
27. New source coal preparation plant - means a coal preparation plant the construction of which commenced after October 13, 1982.
28. Non-controlled surface mine drainage - means any surface mine drainage which is not controlled surface mine drainage.
29. 1-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 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.
30. Permit Application - means forms and additional information that are required by ADEM Admin. Code R. 335-6-6-.08 and applicable permit fees.
31. 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).
32. 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.
33. 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.
34. Steep slope mining areas - means any mining area with a slope greater than 20°, provided however an area on which an occasional steep slope is encountered through which the mining operation is to proceed may be excluded.
35. 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.

36. Treatment facility and treatment system - means all structures which contain, convey, and as necessary, chemically or physically treat coal mine drainage, coal preparation plant process wastewater, or drainage from coal preparation plant associated areas, 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.
37. 24-hour precipitation event - means that amount of precipitation which occurs within any 24-hour period.
38. 2-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 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.
39. 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 treatment facilities, lack of preventive maintenance, careless or improper operation, or a precipitation event.
40. Waters - mean "[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.
41. Week - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

#### **F. 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.

#### **G. PROHIBITIONS AND ACTIVITIES NOT AUTHORIZED**

1. Discharges from disposal or landfill activities as described in ADEM Admin Code R. 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. Discharge of process waters from, or conducting any wet preparation or processing is not authorized by this permit unless specifically approved by the Department.

**\* EXAMPLE DMR \***

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM) ADEM Form 351 8-02  
 MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

NPDES # AL0045678 Ptype 1 ABC Mining Company, Inc.  
 Tyler Mine 438 Georgia Street  
 OUTFALL NUMBER 001 Surface Mine Coal, AL 37850  
 Butler County ASMC Permit #  (555) 555-5555 [ ] = Data Not Required

Year  1st Qtr  2nd Qtr  3rd Qtr  4th Qtr   
Jan-Feb-Mar Apr-May-Jun Jul-Aug-Sep Oct-Nov-Dec

	STANDARD LIMITS				PRECIPITATION EVENT DISCHARGE LIMITS *				POST-MINING LIMITS **		FLOW ***	
	PARAM	pH	TSS	Fe	Mn	pH	SS	Fe	Rainfall	pH	SS	
	MIN	6.0				6.0			Report	6.0		
	AVG		35.0	3.0	2.0				Duration			
	MAX	9.0	70.0	6.0	4.0	9.0	0.5	7.0	And	9.0	0.5	
	UNITS	s.u.	mg/l	mg/l	mg/l	s.u.	ml/l	mg/l	Inches	s.u.	ml/l	mgd
	FREQ	2/mth	2/mth	2/mth	2/mth				Per Hr	1/mth	1/mth	2/mth
D A T E S	1/7/2005	NO DISCHARGE										
	1/19/2005	NO DISCHARGE										
	Mth Avg											
D A T E S	2/15/2005	NO DISCHARGE										
	2/27/2005	6.4	3.0	3.2	2.3							0.08
	Mth Avg		3.0	3.2	2.3							
D A T E S	3/10/2005	8.7	38.0	2.1	1.1							0.06
	3/24/2005	7.2	16.0	2.2	1.3							0.09
	Mth Avg		27.0	2.15	1.2							

Pump Discharge Point (Y/N)  pH Exemption Claimed (Y/N)  Mn Exemption Claimed (Y/N)

In accordance with Part I.B.,7. and Part II.B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Samples Collected By ABC Mining Company, Inc. Performed by Taylor Laboratories, Inc.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Georgia McKenize, President

*Georgia McKenize*

March 28, 2005

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I.A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 001

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

2nd Qtr [ ]

3rd Qtr [ ]

4th Qtr [ ]

Jan-Feb-Mar

Apr-May-Jun

Jul-Aug-Sep

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include Report Duration, And Inches Per Hr, and Mth Avg.

Table with columns: pH, SS. Rows include Mth Avg.

Table with column: FLOW. Row includes Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I.B.,7. and Part II.B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I.A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 002

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ and three DATE S rows with Mth Avg.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ and three DATE S rows with Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ and three DATE S rows with Mth Avg.

Table with column: FLOW. Rows include three DATE S rows with Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period.

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 003

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with column: FLOW. Rows include multiple DATE rows with Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 004

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 005

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with column: FLOW. Rows include multiple DATE rows with Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM) MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 006

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]  
Jan-Feb-Mar

2nd Qtr [ ]  
Apr-May-Jun

3rd Qtr [ ]  
Jul-Aug-Sep

4th Qtr [ ]  
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left and 'Mth Avg' rows at the bottom.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left and 'Mth Avg' rows at the bottom.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left and 'Mth Avg' rows at the bottom.

Table with column: FLOW. Row includes UNITS (mgd) and FREQ (2/mth). Includes 'D A T E S' labels on the left and 'Mth Avg' rows at the bottom.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 007

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".



ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 009

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and monthly data rows with Mth Avg.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and monthly data rows with Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and monthly data rows with Mth Avg.

Table with column: FLOW. Rows include monthly data and Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 010

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Table with column: FLOW. Rows include Mth Avg. Includes vertical label 'DATES' on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 011

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with column: FLOW. Rows include multiple DATE rows with Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 012

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit #

(205) 221-7747

= Data Not Required

Year

1st Qtr

2nd Qtr

3rd Qtr

4th Qtr

Jan-Feb-Mar

Apr-May-Jun

Jul-Aug-Sep

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES'.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg.

Table with column: FLOW. Rows include Mth Avg.

Pump Discharge Point (Y/N)

pH Exemption Claimed (Y/N)

Mn Exemption Claimed (Y/N)

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period.

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 013

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with column: FLOW. Rows include multiple DATE rows with Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".



5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 014

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with column: FLOW. Row includes MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 015

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 016

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 017

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

2nd Qtr [ ]

3rd Qtr [ ]

4th Qtr [ ]

Jan-Feb-Mar

Apr-May-Jun

Jul-Aug-Sep

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period.

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 018

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 019

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period.

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 020

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

2nd Qtr [ ]

3rd Qtr [ ]

4th Qtr [ ]

Jan-Feb-Mar

Apr-May-Jun

Jul-Aug-Sep

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period.

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 021

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".



5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 022

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' column for data entry.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 023

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with 5 columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Table with 4 columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Table with 2 columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Table with 1 column: FLOW. Rows include MIN, AVG, MAX, UNITS, FREQ, and Mth Avg. Includes vertical label 'DATES' on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 024

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left and 'Mth Avg' rows.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left and 'Mth Avg' rows.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left and 'Mth Avg' rows.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left and 'Mth Avg' rows.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 025

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, FREQ, and multiple DATE rows with Mth Avg.

Table with column: FLOW. Rows include multiple DATE rows with Mth Avg.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 026

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'D A T E S' labels on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period.

NPDES # AL0079162 Ptype 1 Shepherd Bend, LLC  
 Shepherd Bend Mine PO Box 2322  
 OUTFALL NUMBER 027 Surface Mine Jasper, AL 35502  
 Walker County ASMC Permit # [ ] (205) 221-7747

[ ] = Data Not Required

Year [ ] 1st Qtr [ ] 2nd Qtr [ ] 3rd Qtr [ ] 4th Qtr [ ]  
Jan-Feb-Mar Apr-May-Jun Jul-Aug-Sep Oct-Nov-Dec

DATE	STANDARD LIMITS				PRECIPITATION EVENT DISCHARGE LIMITS *				POST-MINING LIMITS **		FLOW ***	
	PARAM	pH	TSS	Fe	Mn	pH	SS	Fe	Rainfall	pH	SS	
	MIN	6.0	[ ]	[ ]	[ ]	6.0	[ ]	[ ]	Report	6.0	[ ]	[ ]
	AVG	[ ]	35.0	3.0	2.0	[ ]	[ ]	[ ]	Duration	[ ]	[ ]	[ ]
	MAX	9.0	70.0	6.0	4.0	9.0	0.5	7.0	And	9.0	0.5	[ ]
	UNITS	s.u.	mg/l	mg/l	mg/l	s.u.	ml/l	mg/l	Inches	s.u.	ml/l	mgd
	FREQ	2/mth	2/mth	2/mth	2/mth	[ ]	[ ]	[ ]	Per Hr	1/mth	1/mth	2/mth
	Mth Avg	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
	Mth Avg	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
	Mth Avg	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

Pump Discharge Point (Y/N) [ ] pH Exemption Claimed (Y/N) [ ] Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department. \*\* Refer to permit. Written approval must be obtained in advance from the Department.  
 \*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 028

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]

Jan-Feb-Mar

2nd Qtr [ ]

Apr-May-Jun

3rd Qtr [ ]

Jul-Aug-Sep

4th Qtr [ ]

Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes a vertical 'DATES' column on the left.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".

5/1/00

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
MINING & NONPOINT SOURCE SECTION DISCHARGE MONITORING REPORT (DMR)

ADEM Form 351 8-02

NPDES # AL0079162

Ptype 1

Shepherd Bend, LLC

Shepherd Bend Mine

PO Box 2322

OUTFALL NUMBER 029

Surface Mine

Jasper, AL 35502

Walker County

ASMC Permit # [ ]

(205) 221-7747

[ ] = Data Not Required

Year [ ]

1st Qtr [ ]
Jan-Feb-Mar

2nd Qtr [ ]
Apr-May-Jun

3rd Qtr [ ]
Jul-Aug-Sep

4th Qtr [ ]
Oct-Nov-Dec

Table with columns: PARAM, pH, TSS, Fe, Mn. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' and 'Mth Avg' rows.

Table with columns: pH, SS, Fe, Rainfall. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' and 'Mth Avg' rows.

Table with columns: pH, SS. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' and 'Mth Avg' rows.

Table with column: FLOW. Rows include MIN, AVG, MAX, UNITS, and FREQ. Includes 'DATES' and 'Mth Avg' rows.

Pump Discharge Point (Y/N) [ ]

pH Exemption Claimed (Y/N) [ ]

Mn Exemption Claimed (Y/N) [ ]

In accordance with Part I,B.,7. and Part II,B.,8. of the referenced NPDES permit, if the permittee claims either the Mn or pH exemption(s), detailed documentation sufficient to prove eligibility must be retained on file and be available for review by ADEM until the permit is properly terminated.

Name of Permittee and/or Company(s) Collecting Samples And Performing Analyses.

I certify under penalty of law that this document and all attachments were prepared under my direction/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.

Name & Title of Responsible Official

Signature

Date

\* Refer to permit. A written claim of exemption must be submitted in a form acceptable to the Department.

\*\* Refer to permit. Written approval must be obtained in advance from the Department.

\*\*\* Instantaneous measure. Flow must be monitored in mgd each time sample is obtained.

Refer to Part I,A. of the permit. At least one sample must be obtained and analyzed for pumped or mechanical discharges if a discharge occurred at any time during the quarterly (three month) monitoring period. If applicable, list minimum of two required inspection dates for each month and report "No Discharge During Entire Quarter".



**FIELD OPERATIONS DIVISION  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**INDIVIDUAL NPDES PERMIT NONCOMPLIANCE NOTIFICATION (5-DAY REPORT)**

Please Type or Print In Ink

**Instructions:** Your NPDES permit requires that certain information be provided in writing to the Alabama Department of Environmental Management (ADEM) within five (5) days after learning or being advised that you failed to comply with or will be unable to comply with any daily maximum or minimum effluent limitation specified in your permit. Completion of this form and submission thereof to the ADEM at PO Box 301463, Montgomery, AL 36130-1463 within the prescribed time period will satisfy this permit requirement. A detailed explanation must be attached for any "No" or blank responses or as necessary to explain any unusual circumstances.

1. Name of Permittee: \_\_\_\_\_

2. Postal Address of Permittee: \_\_\_\_\_

3. Facility Name: \_\_\_\_\_

4. NPDES/SID Permit Number: \_\_\_\_\_

5. Phone: (     ) \_\_\_\_\_ Fax: (     ) \_\_\_\_\_ Email Address: \_\_\_\_\_

6. Point Source (Outfall) Number: \_\_\_\_\_

7. If the discharge was to a water of the State through a location not permitted as a point source identified on page 1 of the NPDES permit, provide a detailed description of circumstances and location of the discharge (i.e., pipeline break, breached berm, ruptured containment, etc.).

\_\_\_\_\_  
\_\_\_\_\_

8. Location of Facility (use same description as in your permit):

County \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section(s) \_\_\_\_\_

9. For each pollutant discharged in excess of a daily maximum or minimum effluent limitation specified in your permit, describe the pollutant (i.e., identify the effluent characteristic) and the amount discharged (express in the same units as utilized for that characteristic in your permit):

\_\_\_\_\_  
\_\_\_\_\_

10. Describe who obtained the sample(s) (e.g., permittee, consultant, ASMC, etc.) and state the exact date and time the discharge of the pollutant(s) which exceeded the daily maximum or minimum effluent limitation commenced:

\_\_\_\_\_  
\_\_\_\_\_

**INDIVIDUAL NPDES PERMIT NONCOMPLIANCE NOTIFICATION (5-DAY REPORT), Continued**

11. State the duration (in hours) of the discharge of the pollutant(s) which exceeded the daily maximum or minimum effluent limitation:

---

---

12. If the discharge of the pollutant(s) which exceeded the daily maximum or minimum effluent limitation is expected to continue, state the time you anticipate it to continue:

---

---

13. State the name of the water receiving the discharge of the pollutant(s) which exceeded the daily maximum or minimum effluent limitation (if unnamed, so state and state the name of the water into which it flows) **and** describe any violations of applicable State water quality standards that the non-compliant discharge(s) caused or may have contributed to the water quality violation:

---

---

14. Identify all causes contributing to the discharge of the pollutant(s) which exceeded the daily maximum or minimum effluent limitation:

---

---

15. Describe the steps being taken to reduce, eliminate and prevent the discharge of the pollutant(s) which exceeded the daily maximum or minimum effluent limitation and state when you anticipate that those steps will be fully implemented:

---

---

16. Print or type the name and title of the principal executive officer or authorized agent whose signature appears below:

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

I understand that it is the permittee's responsibility to ensure and verify receipt of this report by the Department, submit any additional information or explanation requested by the Department, and that the permittee is required to immediately notify the Department in writing should conditions or information provided in this report, change."

---

Date

---

Name and Title of principal executive officer or authorized agent

---

Signature

**FIELD OPERATIONS DIVISION  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**REQUEST FOR RELEASE FROM MONITORING AND REPORTING REQUIREMENTS**

Please Type or Print In Ink. Use One Form for each Outfall. Please Complete All Responses. Use "N/A" Where Appropriate. Incorrect/Incomplete Forms Will Be Returned And May Delay Approval. Please attach a detailed explanation for any "No" or blank responses or as necessary to explain any unusual circumstances.

**Instructions:** Your NPDES permit requires that certain information be provided in writing to the Alabama Department of Environmental Management (ADEM) in order to obtain approval to terminate monitoring and reporting requirements for a permitted outfall and its associated drainage area. You are advised that you must continue monitoring and reporting until the Department grants approval of your request in writing. Complete this form and submit to ADEM at PO Box 301463, Montgomery, AL 36130-1463.

1. Name of Permittee: \_\_\_\_\_
2. Postal Address of Permittee: \_\_\_\_\_
3. Facility Name: \_\_\_\_\_
4. NPDES/SID Permit Number: \_\_\_\_\_
5. ASMC Permit Number(s): \_\_\_\_\_
6. Phone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_ Email Address: \_\_\_\_\_
7. Point Source (Outfall) Number: \_\_\_\_\_
8. Location of Outfall:  
County \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

**ASMC PERMITTED OR BONDED FACILITIES**

9.  Yes  No The permittee has received a 100% Phase III bond release from the Alabama Surface Mining Commission (ASMC) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ASMC release(s) is attached.
10.  Yes  No The permittee has received approval from ASMC to remove and mine through the outfall(s), and the drainage previously treated by the mined-through outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: \_\_\_\_\_

**NON-ASMC PERMITTED OR BONDED FACILITIES**

11.  Yes  No The permittee has received a 100% bond release from the Alabama Department of Industrial Relations (DIR) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable DIR reclamation release(s) is attached.
12.  Yes  No Unless waived by the Department, the permittee, in order to expedite review/approval of this request, has attached inspection reports prepared and certified by 1) a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction, or 2) a Certified Professional in Sediment And Erosion Control (CPESC), which certify that the facility has been fully reclaimed or that water quality remediation has been achieved. The first inspection should be conducted approximately one year prior to and the second inspection should be conducted within thirty days of the permittee's request for termination of monitoring and reporting requirements. Permanent, perennial vegetation has been re-established on all areas mined or disturbed for at least one year since mining has ceased in the drainage basin(s) associated with the surface discharge, or all areas have been permanently graded such that all drainage is directed back into the mined pit to preclude any surface discharges. Responding "No" may significantly delay approval until an inspection can be performed by Department personnel.

**REQUEST FOR RELEASE FROM MONITORING AND REPORTING REQUIREMENTS, Continued**

**ALL FACILITIES**

13. Yes  No  All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted, controlled, or regularly monitored to prevent unpermitted and unauthorized mining, processing, transportation, or associated operations/activity.
14. Yes  No  The outfall is a pumped discharge and, (1) the pump has been removed and piping has been removed or effectively closed/sealed to prevent future discharge, or (2) the pump has been removed and the pumped drainage previously treated by the outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: \_\_\_\_\_
15. Yes  No  All surface effects of the mining activity such as fuel or chemical tanks/containers, wet preparation equipment (washers), old tools or equipment, junk, garbage, debris, fuel/chemical spills, contaminated soils, etc. have been removed/remediated and disposed of according to applicable State and federal regulations.
16. Yes  No  The permittee's request for termination of monitoring and reporting requirements contained in this permit is 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 climatological conditions. Please attach copies of the last twelve (12) months of DMRs previously submitted to the Department to expedite the review/approval process.
17. Yes  No  The permittee hereby certifies 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.
18. Yes  No  The permittee hereby certifies that during at least the previous twelve (12) months prior to this request, there was no chemical treatment in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall.
19. Yes  No  Additional information is attached to 1) further support this request, 2) provide pertinent additional information, as required by the permit, that is not requested on this form that may impact the Department's determination regarding this request, or 3) explain a "no" response on this form, or 4) provide an explanation for circumstances which may potentially result in delay or non-approval of this request.
20. Print or type the name and title of the principal executive officer or authorized agent whose signature appears below:

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

I understand that monitoring/reporting may be terminated sixty (60) days after permittee verification of receipt by the Department of the above complete and correct information and certification, unless the Director, or his designee, has notified the permittee that the request is incomplete, that additional time is needed by the Department to properly process the request, or that the request for termination of the monitoring and reporting requirements contained in this permit has been disapproved.

I understand that it is the permittee's responsibility to ensure and verify receipt of this request by the Department and that the permittee is required to immediately notify the Department in writing should conditions or information provided in this request, upon which approval may be granted, change."

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title of Responsible Corporate Official or Authorized Agent

\_\_\_\_\_  
Signature

**FIELD OPERATION DIVISION  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**REQUEST TO REMOVE SUBSURFACE WITHDRAWAL FROM DISCHARGE STRUCTURE**

Please Type or Print In Ink. Use One Form Per Outfall. Please Complete All Responses. Use "N/A" Where Appropriate. Incorrect/Incomplete Forms Will Be Returned And May Delay Approval. Please attach a detailed explanation for any "No" or blank responses or as necessary to explain any unusual circumstances.

**Instructions:** Part II.A.,2. of the permit requires an existing outfall to be constructed with effective subsurface withdrawal. Certain information must be provided in writing to the Alabama Department of Environmental Management (ADEM) in order to obtain approval to remove subsurface withdrawal from an existing treatment basin/pond or other approved discharge structure for a permitted outfall and its associated drainage area. Complete this form and submit to ADEM at PO Box 301463, Montgomery, AL 36130-1463.

1. Name of Permittee: \_\_\_\_\_
2. Postal Address of Permittee: \_\_\_\_\_
3. Facility Name: \_\_\_\_\_
4. NPDES/SID Permit Number: \_\_\_\_\_
5. ASMC Permit Number(s): \_\_\_\_\_
6. Phone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_ Email Address: \_\_\_\_\_
7. Point Source (Outfall) Number: \_\_\_\_\_
8. Location of Outfall:  
County \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

**ASMC PERMITTED OR BONDED FACILITIES**

9. 

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	The permittee has received a 60% Phase I bond release from the Alabama Surface Mining Commission (ASMC) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. <u>Please ensure that a copy(s) of the applicable ASMC release(s) is attached.</u>
10. 

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Vegetative cover has been established and/or disturbed areas have been otherwise stabilized, and potential sources of floating solids have been covered or removed, and there are no active mining areas as defined by 40CFR 434.11(b) draining to the outfall.

**NON-ASMC PERMITTED OR BONDED FACILITIES**

11. 

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	The permittee, in order to <u>expedite</u> review/approval of this request, <u>has attached</u> inspection report(s) prepared and certified by 1) a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction, or 2) a Certified Professional in Sediment And Erosion Control (CPESC), which certifies that the facility has been fully regraded and vegetative cover has been established.

# REQUEST TO REMOVE SUBSURFACE WITHDRAWAL FROM DISCHARGE STRUCTURE, Continued

## ALL FACILITIES

12.    Yes    No    All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted, controlled, or regularly monitored to prevent unpermitted and unauthorized mining, processing, transportation, or associated operations/activity.
13.    Yes    No    All surface effects of the mining activity such as fuel or chemical tanks/containers, wet preparation equipment (washers), old tools or equipment, junk, garbage, debris, fuel/chemical spills, contaminated soils, etc. have been removed/remediated and disposed of according to applicable State and federal regulations.
14.    Yes    No    Additional information is attached to 1) further support this request, 2) provide pertinent additional information, as required by the permit, that is not requested on this form that may impact the Department's determination regarding this request, or 3) explain a "no" response on this form, or 4) provide an explanation for circumstances which may potentially result in delay or non-approval of this request.
15.    Print or type the name and title of the principal executive officer or authorized agent whose signature appears below:

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

I understand that subsurface withdrawal can not be removed from the treatment structure until the Department grants approval of this request in writing.

I understand that if after removal of subsurface withdrawal from the treatment structure, effluent quality can not be maintained within permit limits or significant levels of floating pollutants that could be prevented by subsurface withdrawal still occur, reconstruction of subsurface withdrawal may be required.

I understand that it is the permittee's responsibility to ensure and verify receipt of this request by the Department and that the permittee is required to immediately notify the Department in writing should conditions or information provided in this request, upon which approval may be granted, change."

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title of Responsible Corporate Official or authorized agent

\_\_\_\_\_  
Signature

**FIELD OPERATIONS DIVISION  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**REQUEST TO REMOVE TREATMENT BASIN/POND OR OTHER DISCHARGE STRUCTURE**

In Lieu of This Form, ASMC Permitted Facilities May Submit Written Approval From ASMC To Remove The Treatment Structure.

Please Type or Print In Ink. Use One Form Per Outfall. Please Complete All Responses. Use "N/A" Where Appropriate. Incorrect/Incomplete Forms Will Be Returned And May Delay Approval. Please attach a detailed explanation for any "No" or blank responses or as necessary to explain any unusual circumstances.

**Instructions:** Certain information must be provided in writing to the Alabama Department of Environmental Management (ADEM) in order to obtain approval to remove an existing treatment basin/pond or other approved discharge structure for a permitted outfall and its associated drainage area. Submit written approval from ASMC or complete this form and submit to ADEM at PO Box 301463, Montgomery, AL 36130-1463.

1. Name of Permittee: \_\_\_\_\_
2. Postal Address of Permittee: \_\_\_\_\_
3. Facility Name: \_\_\_\_\_
4. NPDES/SID Permit Number: \_\_\_\_\_
5. ASMC Permit Number(s): \_\_\_\_\_
6. Phone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_ Email Address: \_\_\_\_\_
7. Point Source (Outfall) Number: \_\_\_\_\_
8. Location of Outfall:  
County \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

**ASMC PERMITTED OR BONDED FACILITIES**

9.    Yes    No    The permittee has received a 85% Phase II bond release from the Alabama Surface Mining Commission (ASMC) for all areas disturbed in the drainage area(s), including the treatment basin (if a Phase II release from ASMC for the treatment pond(s) cannot be obtained prior to removal of the treatment pond(s), the permittee must attach a copy of their pond removal/reclamation plan to this request), associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ASMC release(s) is attached.
- 

**NON-ASMC PERMITTED OR BONDED FACILITIES**

10.    Yes    No    The permittee, in order to expedite review/approval of this request, has attached inspection report(s) prepared and certified by 1) a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction, or 2) a Certified Professional in Sediment And Erosion Control (CPESC), which certifies that the facility has been fully regraded and perennial vegetative cover has been planted and established.
- 

**ALL FACILITIES**

11.    Yes    No    All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted, controlled, or regularly monitored to prevent unpermitted and unauthorized mining, processing, transportation, or associated operations/activity.
-

**REQUEST TO REMOVE TREATMENT BASIN/POND OR OTHER DISCHARGE STRUCTURE, Continued**

12. Yes  No  All surface effects of the mining activity such as fuel or chemical tanks/containers, wet preparation equipment (washers), old tools or equipment, junk, garbage, debris, fuel/chemical spills, contaminated soils, etc. have been removed/remediated and disposed of according to applicable State and federal regulations.
13. Yes  No  The permittee's request for removal of the treatment structure is 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 climatological conditions. Please attach copies of the last twelve (12) months of DMRs previously submitted to the Department to expedite the review/approval process.
14. Yes  No  The permittee hereby certifies that the samples collected and reported in the monitoring data submitted in support of the permittee's request for treatment structure removal 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.
15. Yes  No  The permittee hereby certifies that during at least the previous twelve (12) months prior to this request, there was no chemical treatment in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall.
16. Yes  No  Additional information is attached to 1) further support this request, 2) provide pertinent additional information, as required by the permit, that is not requested on this form that may impact the Department's determination regarding this request, or 3) explain a "no" response on this form, or 4) provide an explanation for circumstances which may potentially result in delay or non-approval of this request.
17. Attach a copy of the pond removal plan which details the procedures and Best Management Practices (BMPs) that will be implemented and maintained during and after removal to ensure protection of water quality.
18. Print or type the name and title of the principal executive officer or authorized agent whose signature appears below:

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

I understand that the treatment structure can not be removed until the Department grants approval of this request in writing. I understand that pursuant to Part I, B. of the permit, monitoring and reporting of discharges must continue after the structure is removed. Representative samples will be taken at the end of the ditch, channel, swale, etc. or other acceptable discharge conveyance which remains after removal of the treatment structure.

I understand that if effluent quality can not be maintained within permit limits after removal of the treatment structure, reconstruction of the treatment structure may be required.

I understand that it is the permittee's responsibility to ensure and verify receipt of this request by the Department and that the permittee is required to immediately notify the Department in writing should conditions or information provided in this request, upon which approval may be granted, change."

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name and Title of Responsible Corporate Official or authorized agent

\_\_\_\_\_  
Signature



**FIELD OPERATIONS DIVISION  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

**REQUEST FOR COAL PERMIT POST-MINING DISCHARGE LIMITATIONS**

Please Type or Print In Ink. Use One Form Per Outfall. Please Complete All Responses. Use "N/A" Where Appropriate.  
Incorrect/Incomplete Forms Will Be Returned And May Delay Approval. Please attach a detailed explanation for any "No" or blank responses or as necessary to explain any unusual circumstances.

**Instructions:** Your NPDES permit requires that certain information be provided in writing to the Alabama Department of Environmental Management (ADEM) in order to obtain approval for post-mining discharge limitations for a permitted outfall and its associated drainage area. You are advised that you must continue monitoring and reporting using standard limitations until the Department grants approval of your request in writing. Complete this form and submit to ADEM at PO Box 301463, Montgomery, AL 36130-1463.

1. Name of Permittee: \_\_\_\_\_
2. Postal Address of Permittee: \_\_\_\_\_
3. Facility Name: \_\_\_\_\_
4. NPDES/SID Permit Number: \_\_\_\_\_
5. ASMC Permit Number(s): \_\_\_\_\_
6. Phone: (\_\_\_\_) \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_ Email Address: \_\_\_\_\_
7. Point Source (Outfall) Number: \_\_\_\_\_
8. Location of Outfall:  
County \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section \_\_\_\_\_

9. 

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	The permittee has received a 85% Phase II bond release from the Alabama Surface Mining Commission (ASMC) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. <u>Please ensure that a copy(s) of the applicable ASMC release(s) is attached.</u>
10. 

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted, controlled, or regularly monitored to prevent unpermitted and unauthorized mining, processing, transportation, or associated operations/activity.
11. 

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	All surface effects of the mining activity such as fuel or chemical tanks/containers, wet preparation equipment (washers), old tools or equipment, junk, garbage, debris, fuel/chemical spills, contaminated soils, etc. have been removed/remediated and disposed of according to applicable State and federal regulations.
12. 

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Additional information <u>is attached</u> to 1) further support this request, 2) provide pertinent additional information, as required by the permit, that is not requested on this form that may impact the Department's determination regarding this request, or 3) explain a "no" response on this form, or 4) provide an explanation for circumstances which may potentially result in delay or non-approval of this request.

**REQUEST FOR COAL PERMIT POST-MINING DISCHARGE LIMITATIONS, Continued**

13. Print or type the name and title of the principal executive officer or authorized agent whose signature appears below:

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

I understand that discharges are eligible for post-mining limitations sixty (60) days after permittee verification of receipt by the Department of the above complete and correct information and certification, unless the Director, or his designee, has notified the permittee that the request is incomplete, that additional time is needed by the Department to properly process the request, or that the request for post-mining limitations contained in this permit has been disapproved.

I understand that it is the permittee's responsibility to ensure and verify receipt of this request by the Department and that the permittee is required to immediately notify the Department in writing should conditions or information provided in this request, upon which approval may be granted, change."

\_\_\_\_\_

Date

\_\_\_\_\_

Name and Title of Responsible Corporate Official or authorized agent

\_\_\_\_\_

Signature

**FIELD OPERATIONS DIVISION  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

Please Type or Print In Ink

**COAL PERMIT PRECIPITATION EVENT ALTERNATIVE DISCHARGE LIMITATIONS REPORT**

**Instructions:** Your NPDES permit requires that certain information be provided in writing to the Alabama Department of Environmental Management (ADEM) to claim eligibility for precipitation event discharge limitations pursuant to Part I, A., 3. of the permit. Completion of this form and submission thereof to the ADEM at P. O. Box 301463, Montgomery, AL 36130-1463 with your DMRs and within the prescribed time period will satisfy this permit requirement. A detailed explanation **must be** attached for any "No" or blank responses or as necessary to explain any unusual circumstances.

1. Name of Permittee: \_\_\_\_\_

2. Mailing Address: \_\_\_\_\_

3. Facility Name: \_\_\_\_\_

4. NPDES #: \_\_\_\_\_ 5. DSN: \_\_\_\_\_

6. Phone: ( ) \_\_\_\_\_ Fax: ( ) \_\_\_\_\_ Email Address: \_\_\_\_\_

7. Location of Facility (use same description as in your permit):  
                   County \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ Section(s) \_\_\_\_\_

8. List and explain persuasive evidence that the discharge or increase in the volume of a discharge was caused by an applicable precipitation event.

\_\_\_\_\_

9. List and explain persuasive evidence of the amount of precipitation occurring during the applicable 24-hour event.

\_\_\_\_\_

10. Origin of Drainage Eligible For Precipitation Event Limits - Please check the appropriate box

<input type="checkbox"/>	Alkaline mine drainage
<input type="checkbox"/>	Steep slope areas as defined in 515(d)(4) of SMCRA
<input type="checkbox"/>	Mountaintop removal operations conducted pursuant to 515(c) of SMCRA
<input type="checkbox"/>	Coal preparation plant and associated areas excluding acid and/or ferruginous drainage from coal refuse piles
<input type="checkbox"/>	Acid and/or ferruginous drainage from coal refuse piles
<input type="checkbox"/>	Acid and/or ferruginous mine drainage excluding drainage from mountaintop removal operations, steep slope areas, controlled surface mine drainage, and discharges from underground workings of underground mines
<input type="checkbox"/>	* Acid and/or ferruginous mine drainage from underground workings of underground mines which commingle with other discharges eligible for precipitation event limits
<input type="checkbox"/>	controlled acid and/or ferruginous surface mine drainage
<input type="checkbox"/>	reclamation Areas
<input type="checkbox"/>	Other - Explain in detail: _____

\* Discharges of drainage from underground workings of underground mines that do not commingle with other discharges eligible for precipitation event limits are not eligible for precipitation event limits.



# Shepherd Bend Mine Draft Permit Comments

## The Birmingham Water Works Board

**Comment (1):** *The proximity of the mining operation to Board's intake poses a potential hazard to drinking water uses:* The Board's drinking water intake is within approximately 800 feet of the mining operation outfalls. Because the intake is so close to the proposed outfalls, the mining discharges may not evenly mix with the full stream flow prior to reaching the intake. The proximity and configuration of the proposed operation could result in a bank-entrained plume of mining-related pollutants traveling directly to the intake and into the Board's treatment facilities.

**Comment (2):** *The permit gives no indication that the proximity of the drinking water intake was considered:* The proposed permit appears to have been developed primarily from federal effluent guidelines for coal mining operations (40 CFR Part 434). These guidelines were developed for use in permitting typical mining operations across the entire nation, not for the extraordinary circumstance where a surface mining operation would be conjoined with a major municipal water supply intake. A review of these guidelines and their supporting documents reveal that protection of major public water supplies was not explicitly considered. This is not surprising, given that surface mining and major municipal water withdrawals would, in most circumstances be considered incompatible uses of the same river bend. The proposed permit is therefore not protective of the existing use of Mulberry Fork.

**Response to Comments (1) & (2):** Using available water quality data for Mulberry Fork and the Western Filter Plant intake, and Shepherd Bend LLC permit conditions, the Department developed mass balance equations to determine expected contaminant levels under critical conditions. This analysis demonstrates that the proposed NPDES limitations will be protective of the water quality standards for the Mulberry Fork designated uses, including the Public Water Supply use. However, as stipulated in Part II.B.4.a of the draft permit the permit does not relieve the permittee from compliance with applicable State water quality standards established in ADEM Admin. Code Chapter 335-6-10, and does not preclude the Department, if deemed necessary in the future, 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.

**Comment (3):** *The iron and manganese limits are not protective of drinking water uses:* The proposed NPDES permit limitations include daily average total iron concentrations of 3.0 mg/L (with a daily maximum of 6.0 mg/L), daily average total manganese concentrations of 2.0 mg/L (with a daily maximum of 4.0 mg/L), daily average total suspended solids (TSS) of 35.0 mg/L (with a daily maximum of 70.0 mg/L) and pH ranging from 6.0 to 9.0 (daily minimum and maximum, respectively). The permit also notes that the total manganese limitations are not applicable if pH is 6.0 or higher and total iron is less than 10 mg/L. The Safe Drinking Act includes secondary maximum contaminant levels (MCLs) for total iron concentrations of 0.3 mg/L and total manganese

concentrations of 0.050 mg/L. The average concentrations that would be allowed by this NPDES Permit are ten times the secondary MCL for iron and forty times the secondary MCL for manganese.

The Safe Drinking Water Act includes secondary maximum contaminant levels (MCLs) for total iron concentrations of 0.3 mg/L and total manganese concentrations of 0.05 mg/L. The average concentrations that would be allowed by this NPDES Permit are ten times the secondary MCL for iron and forty times the secondary MDL for manganese. By comparison, the daily average raw water concentrations for iron and manganese for the Western Filtration Plant in 2007 were 0.057 mg/L and 0.079 mg/L, respectively. Iron and manganese can cause significant aesthetic problems in drinking water, including consumers' perceptions of the quality of the drinking water, staining of clothes and basins, and taste of the water.

The proposed NPDES permit specifies discharge limits for total iron and manganese concentrations. However, the speciation of the iron and manganese (i.e., whether Fe and Mn are in reduced or oxidized states) will significantly impact the ability of the existing Board's treatment facilities to remove the iron and manganese. For example, if  $\text{Fe}^{2+}$  and  $\text{Mn}^{2+}$  are primarily present in the discharge waters and enter the plant in the reduced oxidation states rather than as a particulate iron and manganese, the current treatment process train will not be able to remove them. Speciation of iron and manganese in the discharges is needed to assess whether additional treatment would be required to oxidize the  $\text{Fe}^{2+}$  and  $\text{Mn}^{2+}$  and then remove the precipitates. However, even if the iron and manganese is present in particulate form in the discharge waters, opportunities may exist for the particulate iron and manganese to become reduced either in the riverbed sediments or in the treatment plant. Costly operational changes to the treatment plant may be required if iron and manganese precipitation and subsequent reduction occurs in the raw water storage tanks or the sedimentation basins.

The board's Western Filter Plant may also be impacted by higher particle loading from TSS, iron, and manganese, which would require additional operations and maintenance (e.g., removing solids from the raw water storage tanks, increasing coagulant dosages to remove the additional turbidity, more frequent backwashing of filters due to reduced filter run times, and generation of more wastewater) and may reduce the overall treatment flow rating of the plant.

**Response (3):** Permitted treated discharges from this type facility are limited primarily to discharges associated with wet weather runoff. The treatment basins, which are designed for expected precipitation events to ensure compliance with permit requirements, are not expected to discharge during 7Q10 low flow or zero flow conditions. Experience has shown through evaluating stream hydrographs that a precipitation event resulting in an eventual wet weather discharge from a mining facility will also increase stream flow in the receiving water. The limits in the draft permit for treated discharges from the mining treatment basins are indicative or predictive of the pollutant constituents expected to be potentially present in significant concentrations in wet weather runoff from this type of facility.

EPA's Development Document for Final Effluent Limitations Guidelines New Source Performance Standards, and Pre-Treatment Standards for the Coal Mining Point Source Category, 1982 indicates that toxic metal concentrations from mine discharges are expected to be at or below the detection limit, and concentrations of iron and manganese are expected to be at or below BPT and BAT levels during precipitation events. Therefore, the Department expects the proposed limitations to be protective of water quality during wet weather events. For this reason establishment of specific effluent limitations for iron and manganese have been determined not to be applicable during precipitation events.

However, utilizing available water quality data for Mulberry Fork and the Western Filter Plant intake, and Shepherd Bend LLC permit conditions, the Department developed mass balance equations to determine expected contaminant levels under critical conditions. This analysis demonstrates that the proposed NPDES limitations will be protective of the water quality standards for the Mulberry Fork designated uses, including the Public Water Supply use.

**Comment (4):** *The proposed permit does not protect the public water supply from pollution by many other mining-related pollutants, including toxic metals:* Of significant concern is the potential presence of other contaminants in the discharge waters that may impact the source water. Coal in this region of Alabama has been associated with other elements that may impact water treatment, including arsenic, (described by the USGS as "well above the average for all U.S. coal"), sulfur, salinity, mercury and others. Drainage from coal mines often has elevated concentrations of not just iron and manganese, but many other metals including lead, zinc, copper, and cadmium.

If the permit would allow discharges of iron and manganese concentrations over 10-40 times higher than maximum contaminant levels, it is reasonable to presume that other pollutants associated with coal mine drainage could also greatly exceed levels necessary to protect aquatic life and drinking water. These elements, which are not currently included in the discharge permit, could significantly impact the treatment process needs of the water supply and drastically increase costs of treatment and potentially impact public health. For example, arsenic removal would require additional processes, and demand and require increased chemical dosages. Further, the presence of ammonia would significantly complicate the disinfection strategy employed at the Western Filter Plant. Additional discharge limitations on the range of elements found in the coal that could impact the Board drinking water source should be established. Further, total dissolved solids (TDS) may be high in the coal beds and should be limited by the discharge permit to avoid exceeding the 500 mg/L TDS secondary MCL; if high TDS levels are observed at the Western Filtration Plant intake, the only (and very costly) option for reducing TDS is reverse osmosis.

To better evaluate the probable impacts of these discharges on operations at the Board's Western Filtration Plant, additional analysis is needed beyond what is included in the proposed NPDES permit. The impact of the flow rates at the various outfalls should be evaluated on a seasonal basis relative to river flows to estimate the anticipated

concentrations of iron, manganese, and TSS at elements/compounds may occur in the discharges and additional costs of treatment associated with those discharges.

**Response (4)** Utilizing available water quality data for Mulberry Fork and the Western Filter Plant intake, and Shepherd Bend LLC permit conditions, the Department developed mass balance equations to determine expected contaminant levels under critical conditions. This analysis demonstrates that the proposed NPDES limitations will be protective of the water quality standards for the Mulberry Fork designated uses, including the Public Water Supply use.

Furthermore, EPA's Development Document for Final Effluent Limitations Guidelines New Source Performance Standards, and Pre-Treatment Standards for the Coal Mining Point Source Category, 1982 indicates that due to the infrequent occurrence of toxic metals and the low concentrations encountered when detection does occur, toxic metal monitoring associated with coal mines are deemed to be unnecessary.

**Comment (5):** The maximum pH limit is not protective of designated uses: The permit includes a provision that would allow a maximum daily pH of 10.5 standard units. This is well outside the range of water quality criteria deemed protective of aquatic life uses. Additionally, this pH level would exacerbate the toxicity of other constituents. The solubility of many toxic metals (for which the permit includes no limits) would increase. At this pH, even extremely low concentrations of ammonia could be toxic to aquatic life.

**Response (5):** The US Environmental Protection Agency (EPA) promulgated effluent limitations for the coal mining industry in 40 CFR 434. EPA's rationale for developing the present effluent limitations for the coal mining industry is summarized in EPA's Development Document for Final Effluent Limitations Guidelines New Source Performance Standards, and Pre-Treatment Standards for the Coal Mining Point Source Category, 1982. The limitations in the proposed draft permit are consistent with regulations promulgated by EPA in 40 CFR 434. These limitations have been used for similar discharges and have been found to be protective of applicable State water quality standards. In addition, as stated in Part II.B.4.a. of the draft NPDES permit, the permit does not relieve the permittee from compliance with applicable State water quality standards established in ADEM Admin. Code Chapter 335-6-10.

**Comment (6):** The permit provides inadequate controls on metals in stormwater runoff from mining operations: The metals limits on stormwater runoff are even less protective than for the non-precipitation-related discharges. No limits are included for any metals except iron for small precipitation events, and these iron limits are over 20 times the MCL. Larger storm events have no metals limits at all. Of special note, runoff of acid or ferruginous drainage from coal refuse disposal piles include no metals limits at all, even for 1-year, 24-hour storm events.

**Response (6):** See response to Comment (4)



**Comment (7):** *The proposed permit could allow large slugs of suspended solids to Mulberry Fork:* The permit includes no limits for total suspended solids in stormwater runoff (only settleable solids), essentially allowing unlimited discharges of fine, non-settleable suspended solids such as clays and fine silts. Given the extreme land disturbance associated with surface mining—and high rate of erosion expected—this could allow large slugs of suspended solids in runoff from even small precipitation events. This in turn could have deleterious effects on aquatic life and greatly increase solids removals costs in the water treatment plant.

Of special concern is the potential for catastrophic movement of solids into the stream during large storm events, either as the result of impoundment failure or precipitation-induced mass wastage of mining materials on high slopes. The permit includes no limits on solids for >10-year storm events, essentially providing no protection from such events. Similarly, the permit includes no hard requirement for the permittee to develop BMP plan to contain solids, and no such plan was available to the reviewers. Catastrophic solids loading events could not only affect the water quality at the intake, it could endanger the intake itself by burial, clogging, or other damage.

**Response (7):** Using available water quality data for Mulberry Fork and the Western Filter Plant intake, and Shepherd Bend LLC permit conditions, the Department developed mass balance equations to determine expected contaminant levels under critical conditions. This analysis demonstrates that the proposed NPDES limitations will be protective of the water quality standards for the Mulberry Fork designated uses, including the Public Water Supply use. Based on EPA's Development Document for Final Effluent Limitations Guidelines New Source Performance Standards, and Pre-Treatment Standards for the Coal Mining Point Source Category, 1982, it is expected that during wet weather events the control of settleable solids in lieu of total suspended solids is a more effective control strategy.

Furthermore, the Pollution Abatement/Prevention (PAP) plan for this facility has been prepared by a professional engineer (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 treated discharge will not contribute to or cause a violation of applicable State water quality standards. 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 reduction of pollutants in the waste stream to a level that the treated discharge will not contribute to or cause a violation of applicable State water quality standards.

**Comment (8):** *The permit provides little protection from post-mining impacts:* According to section I.A.2 of the draft permit, permit limits would cease to apply upon revegetation of the site and Phase II bond release. This provides no long-term protection of the drinking water intake from potential post-mining drainage problems such as failure of vegetation, acid mine seepage, or other inadequacies of post-mining reclamation.

**Response (8):** The Alabama Surface Mining Commission (ASMC) regulates reclamation of surface coal mines and places specific requirements on companies

regarding the condition of reclaimed mining sites. An NPDES permit is required during the reclamation process until the ASMC requirements have been satisfied and the mining company has been released from its reclamation obligations.

### **The Black Warrior River Keeper**

**Comment (1):** Although I'm sure it's not new information, we feel it is absolutely necessary to point out that the location of the proposed Shepherd Bend Mine is directly across from the Birmingham Water Works Board's drinking water intake on the Mulberry Fork. Of the 29 outfalls proposed by the permit, 10 will be located upstream of the intake within 3 miles, and an 11<sup>th</sup> is located almost directly across the river. Discharges from the mining operations are often high in concentrations of suspended solids and metals such as iron, manganese and aluminum. While the discharge limitations in the permit are intended to be protective of water quality, there is no guarantee that they actually will be protective. (As I have already noted, the applicant has a history of noncompliance at other mines). The potential this mine poses to contaminate the drinking water of over a million people in greater Birmingham Area is completely unacceptable.

**Response (1):** Please refer to the Department's Response to The Birmingham Water Works Board Comments (1) & (2):

**Comment (2):** This particular section of the Mulberry Fork has a water use classification of Public Water Supply (PWS) and that some sections are also classified for Swimming and Other Whole Body Contact Sports (S) do not seem to have been considered when ADEM wrote this permit. Although the water use classifications are addressed with boilerplate language in the permit rationale, none of the provisions of the permit are any more restrictive or protective of water quality than the hundreds of permits we have reviewed giving authorization to discharge to streams classified for use as only Limited Warmwater Fisheries (LWF) or Fish and Wildlife (F/W).

**Response (2):** Water quality criteria associated with the Public Water Supply (PWS) use classification are the same as those for the Fish and Wildlife (F&W) and Swimming and Other Whole Body Water-Contact Sports (S) use classifications with a couple of exceptions. First, the bacteria criteria for the S use classification are applied as a geometric mean concentration of 200 colonies/100 ml on a year round basis. The mining operation is not expected to be a source of bacteria. Secondly, human health water quality criteria for certain toxics are more stringent for the PWS use classification than for other classifications. However, based on information submitted by the applicant, these compounds are not expected to be present in discharges from the mining operation. It should be noted that Part II.B.4.a. of the draft permit states that "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 Chapter 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.”

**Comment (3):** We must take issue with the fact that the proposed permit makes absolutely no reference to aluminum as a potential contaminant, nor does it list any effluent limitations on aluminum. By some estimates, aluminum comprises as much as 7.5 to 8.1% of the earth’s crust, and is often found in close proximity to coal seams. In fact, the whitish/blueish color in coal mine sediment ponds and acid mine drainage is often attributed to the presence of high concentrations of aluminum. Humans and wildlife can be exposed to aluminum through ingestion, inhalation, and skin contact. Some of the health effects of exposure to aluminum include nervous system damage, dementia, and loss of memory. It can also be extremely toxic to fish. If aluminum from this coal mine is allowed to reach the Mulberry Fork, which, once again, is classified for use as a public water supply and for swimming, it could put the health and safety of people using the river and the surrounding fish and wildlife at risk. The permit rationale states, “representative sampling data was submitted as required for proposed and existing discharge points for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc, cyanide, and phenols. The data indicated that none of the analyzed parameters were present at potential levels of concern”. Why was aluminum not included in this list of potential contaminants?

**Response (3):** The metals of highest concentration in surface coal mine operations are commonly iron (Fe) and manganese (Mn). It is expected that achieving the total iron and manganese allocations provided for in the subject permit will also address aluminum, if present. This approach is considered to be protective of the water quality standards for the Mulberry Fork designated uses, including the Public Water Supply use.

Furthermore, EPA’s *Development Document for Final Effluent Limitations Guidelines New Source Performance Standards, and Pre-Treatment Standards for the Coal Mining Point Source Category*, 1982 indicates that due to the infrequent occurrence of toxic metals and the low concentrations encountered when detection does occur, toxic metal monitoring associated with coal mines are deemed to be unnecessary.

**Comment (4):** Extremely concerned about the applicant’s history of previous violations.

**Response (4):** Alabama law and Departmental regulations do not allow the Department to deny an NPDES permit due to past violations unless the applicant is currently in significant noncompliance with the AWPCA or Departmental regulations at facilities within the State of Alabama. To ADEM’s knowledge at this time, the applicant is not in significant noncompliance of either the AWPCA or ADEM regulations. Conditions in the proposed draft issuance permit are designed to ensure compliance with applicable ADEM regulations. A decision relative to an NPDES permit application is not a discretionary action taken by the Department. Section 22-22-9(g) of the AWPCA states that it shall be the duty of ADEM to “receive and examine applications, plans, specifications and other data and to issue permits for the discharge of pollutants, industrial wastes entering directly or through a municipal or private treatment facility and other wastes into the waters of the state, stipulating in each

permit the conditions under which such discharge may be permitted". If an applicant submits a complete and correct application that indicates it can comply with all the specific NPDES technical and administrative requirements applicable to their operation, the Department cannot arbitrarily delay or deny permit coverage. The purpose of an NPDES permit is to assure that treated water discharges from the permitted facility do not cause or contribute to a violation of applicable State water quality standards.

**Comment (5):** Applicant's failure to show compliance at other mines

**Response (5):** See response for #4 above

**Alabama Historical Commission (AHC 08-0251)**

**Comment (1):** It had come to our attention that logging activities have commenced in anticipation of mining operations at Shepherd Bend (listed as *Shepherd Bend* on the topographic map) on Mulberry Fork of the Warrior River. We would like to alert ADEM, the Alabama Surface Mining Commission, and the applicant to the presence of six known archeological sites in this vicinity. The project area possesses a high probability for the presence of additional archaeological sites, and such sites may contain human burials. The specific project area has never been surveyed for cultural resources.

Due to the sensitive nature and potential significance of the known adjacent sites, we request that all logging activities cease and the project area be surveyed by a professional archeologist. The archeologist's report should be submitted to our office for review and determination prior to further ground disturbing activities. The report should include photographs and approximate construction dates for any structures at least 50 years old within or adjacent to the project area. Upon review of the report, we would appreciate the opportunity to advise ADEM, the Alabama Surface Mining Commission, and your applicant as to the most appropriate manner in which to proceed with project activities while preserving Alabama's non-renewable resources.

**Response (1):** The Department does not have the statutory authority to require NPDES applicants or permittees to conduct archeological reviews or cultural resource assessments. ADEM is not funded nor authorized to conduct this type of survey. If the proposed activities have the potential to result in an impact to historical, archaeological, or burial sites, that potential impact can be appropriately addressed by the Alabama Historical Commission. A copy of the application and proposed draft permit which contains detailed information relative to the operation of the facility was provided to the Alabama Historical Commission to evaluate the facility, conduct any necessary surveys, cooperate with other entities as appropriate to have surveys performed, communicate directly with the applicant/permittee to require the applicant/permittee to conduct surveys as appropriate, and take enforcement action as appropriate to ensure full compliance with applicable requirements to protect historical, archaeological, and burial sites.

However, the facility completed a Phase I Cultural Resource Assessment on the area and no significant evidence of cultural artifacts or cultural zones were found. Copies of the

assessment were submitted to the Alabama Historical Commission on December 10, 2007.

Dale Maggo

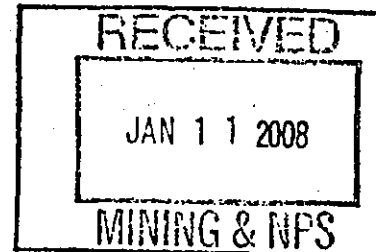
ADEM-P&S

2007 JAN -9 PM 1:40

Shepherd Bend, LLC  
P.O. Box 2322  
Jasper, AL 35502

December 18, 2007

Mr. Russell A. Kelly  
Permits and Services Division  
ADEM  
1400 Coliseum Blvd.  
PO Box 301463  
Montgomery, AL 36110-2059



Dear Mr. Kelly:

Shepherd Bend, LLC is submitting this letter as response to the opposition and concerns of our ADEM permit application for Shepherd Bend Mine, and more particularly, the three letters received in your office from Black Warrior Riverkeeper, Miss Elizabeth Brown of the Alabama Historical Commission, and the Birmingham Water Works Board. Several items presented in these letters are inaccurate, and we would like to take this opportunity to correct them.

Letter from Black Warrior Riverkeeper

First, it has come to our attention that the names included in the petition letter to ADEM from Black Warrior Riverkeeper were citizens who signed an attendance sheet at a recent community meeting regarding the proposed Shepherd Bend Mine. Several of those citizens in attendance were there in support of approval for this permit and recognize the positive economic impact the proposed mine will have on their community. These citizens did not intend for their names to be included in a letter to ADEM protesting the permit and requesting a public hearing. As support of this permit application, we have personally received letters stating these citizens objection to the use of their names. We can supply copies of these letters when necessary.

Second, the violation history of affiliated operations to Shepherd Bend, LLC was totally exaggerated by Black Warrior Riverkeeper in order to suit their organization's agenda. In fact, Sloan Mountain, LLC, Dorsey Creek, LLC, Horse Creek Mining, LLC, and Quinton Mining, LLC dedicated and continue to dedicate today substantial resources to insuring water quality measurements meet or exceed all federal and state standards required of our operations.

Approximately 6,800 self-reported water quality measurements have been taken at these operations over the past four years. This number does not include additional measurements that may have been taken by our regulatory authorities such as; ADEM, ASMC, OSM, or MSHA. Of these samples, only those noted in our permit application for Shepherd Bend Mine did not meet our permit standards. However none of these instances were to the point of being considered a violation. In all instances where water quality was below permit standards, the impounded waters were immediately treated to correct the temporary excursion.

Black Warrior Riverkeeper has used an absurd method for calculating "their" 244 purported violations for Quinton Mine, LLC. The excursions used in their calculations were for a total of 6 measurements from our 6,800 samples. However, should one calculate the compliance performance for our operations using the same methodology utilized by Black Warrior Riverkeeper in deriving their number, Baxter Co., Inc. operations have been in compliance in excess of 67,000 individual measurement days. While we totally object to their absurd calculations and statement, even using their own rational Baxter Co., Inc. operations have a compliance record of over 99.9% of every minute of operation.

December 18, 2007

Page 2

Third, despite assertions by the Black Warrior Riverkeeper organization to the contrary, the Shepherd Bend Mine will have a **significant** economic impact on the local, county, and state economy. The financial benefits stated in the proposed ADEM permit application are sound auditable financial expectations based on actual historical numbers for a mine as proposed at Shepherd Bend. Also, these are YEARLY numbers.

In addition to the financial numbers provided in our permit request, indirectly there is every reason to expect this mine will support trade commerce with local firms for the necessary materials, supplies, and service contract agreements to support this operation. All of these jobs will provide compensation above the average compensation level for employment in the region. Additionally conservative estimates for the indirect employment levels will add to our estimate of minimum employment in the region.

Walker County and the State of Alabama will receive the severance tax payment for every ton of coal mined. This is a substantial new source of cash flow for this area. Also, there will be a financial transaction for the ultimate purchase of the surface and mineral rights for this property. This will be private negotiations with both public and private institutions. These proceeds will have a financial impact through reinvestment in the area by the surface and mineral owners who are community members and/or stakeholders.

Fourth, in response to comments on the lack of effluent limitations for aluminum, thoroughly studied background information showing there to be no rationale for inclusion of aluminum monitoring substantiates your agency not requiring the monitoring aluminum for this type of permit. This has been borne out by the EPA when that agency did not include aluminum guidance for new permits and/or renewals. This is another thinly disguised attempt of an environmental group to propagate their agenda in lieu of existing science and regulatory laws.

Finally, in regards to Mr. Don Baxter's status as an officer with Drummond Company, Inc., Mr. Baxter retired from Drummond Company, Inc. on December 18<sup>th</sup>, 2001. This date is more than sixty months prior to submission of the permit application for Shepherd Bend Mine. Therefore, no affiliation with Drummond Company, Inc. should be included on the permit application.

#### Letter from Miss Elizabeth Brown of the Alabama Historical Commission

Shepherd Bend, LLC has no involvement in the timber cutting operations taking place within the proposed permit area. The property is owned by multiple landowners (Alawest, Soterra, University of Alabama, etc.) who are involved in the timber business. These property owners engage in proper cutting and thinning of timber as is required for asset enhancement and harvesting as is their legal right as owner of the property.

In addition, Shepherd Bend, LLC hired P.E. LaMoreaux & Associates and has completed a Phase I Cultural Resource Assessment on the area encompassing an initial three year mining area and the associated infrastructure areas. The report was prepared on November 27<sup>th</sup>, 2007. The report found no significant evidence of cultural artifacts or cultural zones in the area examined. Two copies of the report were sent to the Alabama Historical Commission on December 10<sup>th</sup>, 2007. Ms. Brown must not have been aware of or known of our submittal of this document which should have been in their office prior to her letter.

#### Letter from Birmingham Water Works Board

Item 1 and 2 - The proximity of any proposed mining operations to the Birmingham Water Boards Mulberry Fork intake plant, as well as other surrounding infrastructure, was and will be continually taken into consideration by Shepherd Bend. The boundary and outfall locations provided in the proposed ADEM permit were selected in consideration to ANY potential surface disturbance requiring drainage control, not necessarily proposed mining disturbance.

Item 3 - The iron and manganese limits are set by ADEM and are in compliance with all State and Federal Regulations. It is without evidence and unreasonable to assume that any impact would occur at the board's filtration plant because of our proposed outfall location than what occurs naturally in this area.

December 18, 2007

Page 3

The potential for the Board's Western Filtration Plant to receive higher particle loading from TSS, Iron, and Manganese will not be increased from current load levels. In fact, the potential construction of these outfalls will mitigate existing and/or future particle loading levels due to its operation as a detention structure.

Item 4 – This seems to be an attempt to extend water quality standards above that which exceeds both State and Federal water quality standards. It is without evidence and unreasonable to make assumptions that present water quality standards issued by EPA and ADEM are not adequate.

Item 5 - The maximum pH limit of 10.5 standard units allowed by ADEM is for treatment for Manganese if it becomes necessary. Past experience of mine operations in this area indicate this will not be necessary. However, this was included as required by ADEM permits.

Item 6 – This is the same statement as in Item 4. All permitting requirements by both State and Federal guidelines are being met with our proposed permits. These limits are set by EPA and ADEM in the permit and we will follow those as stated.

Item 7 – All outfall structures will be designed to meet effluent standards and structural integrity standards set forth by EPA, ADEM, and ASMC. This statement is without evidence and is unreasonable.

Item 8 – This statement is without merit. This proposed site will be monitored and measured by EPA, ADEM, OSM, and ASMC. In order to receive post-mining bond release, all required regulatory post-mining water quality and land use vegetation must be met. These minimums are determined by the state and federal regulatory agencies listed above.

Item 9 – This statement is without merit. The Spill Prevention, Control, and Countermeasures Plan provided in the permit met and/or exceeded all requested information inclusive of maps, diagrams, and countermeasures. This material was reviewed by an initial and then secondary permit review manager of ADEM.

Item 10 – The draft permit posted on the ADEM website was minimum information provided in this internet forum. The information posted is not all inclusive, but is determined by ADEM as adequate for public review.

The statement of the location of this proposed mine as being "unprecedented" is unfounded. Mines have been located along the Mulberry Fork of the Warrior River for decades. In particular, there presently exists an active mine upstream from the water board pumping station and immediately adjacent to this proposed permit area. This statement is without merit, without evidence, and is unreasonable.

We appreciate the opportunity to comment on the letters received by ADEM. Shepherd Bend, LLC will comply with all laws of the State of Alabama in obtaining permitting for Shepherd Bend Mine. We respectfully state that no salient point was made in any of the letters that should have any bearing on the timely review and approval of our permit application. Furthermore, there is no rationale for extending the comment period as requested because the proposed mining will have no adverse effect on the potential receiving streams in the area.

Thank you for your attention to this matter.

Sincerely,



David Muncher  
President, Baxter Company  
Member, Shepherd Bend, LLC



John Kinney  
Legal Program Coordinator  
Black Warrior RIVERKEEPER®  
712 37<sup>th</sup> Street South  
Birmingham, AL 35222  
Phone: (205) 458-0095  
Fax: (205) 458-0094  
jkinney@blackwarriorriver.org  
www.blackwarriorriver.org



December 13, 2007

Russell A Kelly, Chief  
Permits and Services Division  
Alabama Department of Environmental Management  
1400 Coliseum Blvd  
Montgomery, AL 36110

Via email and fax

RE: NPDES Permit Number AL0079162 Public Comments

Dear Mr. Kelly,

I am writing on behalf of Black Warrior Riverkeeper and would like to thank you for this opportunity to comment on the proposal to issue NPDES Permit Number AL0079162 to Shepherd Bend, LLC for the proposed Shepherd Bend Mine in Walker County. First, however, I would like to formally request an extension of the comment period to further study the potential effects of this mine on the River and its ecosystem. I would also like to formally request a public hearing on proposed NPDES Permit Number AL0079162 on behalf of Black Warrior Riverkeeper as well as all of the following individuals:

Todd Hyche  
15 Riverfront Dr.  
Cordova, AL 35550

Harold and Stacy Sickles  
671 Underwood Ferry  
Cordova, AL 35550

Teresa Robbins  
751 Underwood Ferry  
Cordova, AL 35550

Ray Robbins  
751 Underwood Ferry  
Cordova, AL 35550

Kate Preston  
872 Jent Rd  
Cordova, AL 35550

James M. Preston  
907 Jent Rd  
Cordova, AL 35550

Billy Wylie  
1104 Reeds Ferry Rd  
Cordova, AL 35550

Karen Wylie  
1104 Reeds Ferry Rd  
Cordova, AL 35550

Milton Banks  
1170 Sanders Rd  
Jasper, AL 35504

Dan Holliman  
2170 Highland Ave South Suite 250  
Birmingham, AL 35205

Susan Hurst  
1000 Hunter Valley Rd  
Cordova, AL 35550

Kenny Brand  
210 Alexander Rd  
Cordova, AL 35550

Greta Brand  
210 Alexander Rd  
Cordova, AL 35550

Betty Franklin  
776 Underwood Ferry Rd  
Cordova, AL 35550

Josh and Tabatha Pugh  
754 Underwood Ferry Rd  
Cordova, AL 35550

Gerald Hyché  
2040 Underwood Ferry Rd  
Cordova, AL 35550

Russell Oliver  
338 River Dr  
Quinton, AL 35130

Ed Lowe  
490 Pine Lane  
Quinton, AL 35130

Phillip Ware  
152 Gurgans Rd  
Cordova, AL 35550

Herbert Cordell  
1135 Reeds Ferry Rd  
Cordova, AL 35550

Joe K. Faught  
PO Box 610488  
Birmingham, AL 35261

Mike Hitchcock  
176 Alex Ln  
Cordova, AL 35550

Billy and Debra Ford  
2547 Underwood Ferry Rd  
Cordova, AL 35550

Howard Gamble  
55 Myers Rd  
Nauvoo, AL 35528

Kathy Gamble  
55 Myers Rd  
Nauvoo, AL 35528

Mack O'Rear  
1101 5th St W  
Jasper, AL 35501

Ann C. Smith

Glendon Hyche  
2040 Underwood Ferry Rd  
Cordova, AL 35550

Dorothy Bullocks  
1037 Reeds Ferry Rd  
Cordova, AL 35550

Linda Minor  
51 Spring Brook Dr  
Dora, AL 35062

James Weaver  
76 Skeeter Creek Dr  
Cordova, AL 35550

John Underwood  
169 Skeeter Creek Rd  
Cordova, AL 35550

Carl Whisenhunt  
813 Reeds Ferry Rd  
Cordova, AL 35550

Bonnie Whisenhunt  
813 Reeds Ferry Rd  
Cordova, AL 35550

Leathan Waid  
757 Reeds Ferry Rd  
Cordova, AL 35550

Karen Hendon  
837 Big Hollow Rd  
Cordova, AL 35550

Robert Hendon  
837 Big Hollow Rd  
Cordova, AL 35550

Bill Lollar  
898 Big Hollow Rd  
Cordova, AL 35550

Josh Aaron  
2994 Underwood Ferry Rd  
Cordova, AL 35550

Emons Thomas  
3356 Underwood Ferry Rd  
Cordova, AL 35550

Jack Scott  
196 Gregory St  
Cordova, AL 35550

Drayton Wear  
PO Box 1452  
Tuscaloosa, AL 35403

Dennis E. Cooper  
125 Amory Dr.  
Cordova, AL 35550

JB Weaver, M.D.  
PO Box 31  
35 Amory Dr  
Cordova, AL 35550

Hank Vines  
330 Pine Dr  
Cordova, AL 35550

Carl Thompson  
948 Hunter Valley Rd  
Cordova, AL 35550

Vonnie Thompson  
948 Hunter Valley Rd  
Cordova, AL 35550

Harold Hyché  
3 Plywood Plant Rd  
Dovertown, AL 35550

Grady Arps  
168 Skeeter Creek  
Cordova, AL 35550

David Whiteside  
4703 Round Forest Dr  
Birmingham, AL 35213

Elizabeth Salter  
321 Red Oak Rd  
Birmingham, AL 35206

Randy Fielding  
115 North St  
Cordova, AL 35550

Kenny and Rachel Rowell  
1076 Hunter Valley Rd  
Cordova, AL 35550

Ruthie Wylie  
1076 Hunter Valley Rd  
Cordova, AL 35550

Charlotte Cordell  
1135 Reeds Ferry Rd  
Cordova, AL 35550.

Please let us know as soon as possible when and where the public hearing will be held. We would like to discuss several issues related to permit deficiencies and water quality including, but not limited to, the mine's potential effects on the public water supply for Birmingham, the permit's absence of limitations on discharges containing Aluminum, and the applicant's extensive history of noncompliance at other facilities.

Although I'm sure it's not new information, we feel it is absolutely necessary to point out that *the location of the proposed Shepherd Bend Mine is directly across river from the Birmingham Water Works Board's drinking water intake on the Mulberry Fork.* Of the 29 outfalls proposed by this permit, 10 will be located upstream of the intake within 3 miles, and an 11<sup>th</sup> is to be located almost directly across the river. Discharges from mining operations are often high in concentrations of suspended solids and metals such as iron, manganese and aluminum. While the discharge limitations in the permit are *intended* to be protective of water quality, there is no guarantee that they actually will be protective. (As I have already noted, the applicant has a history of noncompliance at other mines.) The potential this mine poses to contaminate the drinking water of over a million people in the greater Birmingham Area is completely unacceptable.

Even if the mine somehow manages to stay in compliance with its permit, the elevated levels of metals and suspended solids in the water at the intake resulting from legal discharges would mean that

treatment plants could be forced to work harder to reach drinking water quality standards. Related increases in treatment costs could then potentially be passed on to the ratepayers negating any supposed economic benefits of the mining activity to the community.

Also, the facts that this particular section of the Mulberry Fork has a water use classification of Public Water Supply (PWS) and that some sections are also classified for Swimming and Other Whole Body Water Contact Sports (S) do not seem to have been considered when ADEM wrote this permit. Although the water use classifications are addressed with boilerplate language in the permit rationale, none of the provisions of the permit are any more restrictive or protective of water quality than the hundreds of permits we have reviewed giving authorization to discharge to streams classified for use as only Limited Warmwater Fisheries (LWF) or Fish and Wildlife (F/W).

We must also take issue with the fact that the proposed permit makes absolutely no reference to aluminum as a potential contaminant, nor does it list any effluent limitations on aluminum. By some estimates, aluminum comprises as much as 7.5 to 8.1% of the earth's crust, and is often found in close proximity to coal seams. In fact, the whitish/blueish color in coal mine sediment ponds and acid mine drainage is often attributed to the presence of high concentrations of aluminum. Humans and wildlife can be exposed to aluminum through ingestion, inhalation and skin contact. Some of the health effects of exposure to aluminum include central nervous system damage, dementia, and loss of memory. It can also be extremely toxic to fish. If aluminum from this coal mine is allowed to reach the Mulberry Fork, which, once again, is classified for use as a public water supply and for swimming, it could put the health and safety of people using the river and the surrounding fish and wildlife at risk. The permit rationale states, "representative sampling data was submitted as required for proposed and existing discharge points for antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc, cyanide and phenols. The data indicated that none of the analyzed parameters were present at potential levels of concern." Why was aluminum not included in this list of potential contaminants?

We are also extremely concerned about the applicant's history of previous violations. Section II of the permit application lists Donald M. Baxter as the Managing Member of Sloan Mountain Mining, LLC., Dorsey Creek Mining, LLC., Horse Creek Mining, LLC., and Quinton Mining, LLC. Section IV of the permit lists the violation history of these corporations, showing significant violations. In fact, Black Warrior Riverkeeper was compelled to file a Notice of Intent to Sue Quinton Mining, LLC for at least 244 violations of their NPDES Permit AL0076538 from March, 2005 to February, 2006. These violations are listed below.

<b>Quinton Mine (Quinton Mining, LLC) - NPDES Permit Violations</b>					
<b>Date</b>	<b>Outfall #</b>	<b>Parameter</b>	<b>Permit Limit</b>	<b>Discharge</b>	<b># of Violations</b>
Feb '06	041	pH DAILY MIN	6.0 s.u.	5.66 s.u.	1
Feb '06	042	TSS Maximum Concentration DAILY MAX	70 mg/L	177 mg/L	1
Feb '06	042	TSS Maximum Concentration MONTHLY AVERAGE	35 mg/L	73.00 mg/L	28
Feb '06	042	Iron (Fe) Maximum Concentration DAILY MAX	6.0 mg/L	7.48 mg/L	1
Feb '06	042	Iron (Fe) Maximum Concentration MONTHLY AVERAGE	3.0 mg/L	3.15 mg/L	28
Feb '06	065	Iron (Fe) Maximum Concentration MONTHLY AVERAGE	3.0 mg/L	3.51 mg/L	28
Jan '06	042	TSS Maximum Concentration DAILY MAX	70 mg/L	141 mg/L	1
Jan '06	042	TSS Maximum Concentration MONTHLY AVERAGE	35 mg/L	74.50 mg/L	31
Dec '05	042	Iron (Fe) Maximum Concentration DAILY MAX	6.0 mg/L	7.15 mg/L	1
Dec '05	042	Iron (Fe) Maximum Concentration MONTHLY AVERAGE	3.0 mg/L	3.83 mg/L	31
Apr '05	065	TSS Maximum Concentration DAILY MAX	70 mg/L	127 mg/L	1
Apr '05	065	TSS Maximum Concentration MONTHLY AVERAGE	35 mg/L	127 mg/L	30
Apr '05	065	Iron (Fe) Maximum Concentration DAILY MAX	6.0 mg/L	7.10 mg/L	1
Apr '05	065	Iron (Fe) Maximum Concentration MONTHLY AVERAGE	3.0 mg/L	7.10 mg/L	30
Mar '05	065	Iron (Fe) Maximum Concentration MONTHLY AVERAGE	3.0 mg/L	3.64 mg/L	31
				<b>Total</b>	<b>244</b>

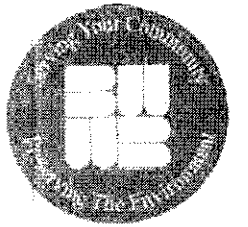


Also, in Horse Creek Mining, LLC's NPDES Permit application for permit number AL0076554 for the Horse Creek Mine in 2005, Mr. Baxter was listed as the Director, President of Mining Operations for Drummond Company, Inc. However, there is no mention of Mr. Baxter holding this position in the Shepherd Bend Mine permit application, which requires an applicant to release the names of companies and positions held with those companies during the 60 month period prior to the application. This would also mean that the applicant should be required to list all of Drummond Company's permit violations (which would assuredly be numerous) in section IV of the Shepherd Bend Mine permit application. If the applicant has shown an inability to maintain compliance at other mines, while failing to fully disclose their corporate affiliations (and related noncompliance issues), what assurance does ADEM have that the applicant will comply with the provisions of this permit, which happens to affect a particularly sensitive area?

Thank you for your time and attention to these matters. We look forward to ADEM's response to these comments and would like to reiterate our request for notice as soon as a decision is made regarding a public hearing on this permit.

For the River,

John Kinney  
Legal Program Coordinator  
Black Warrior Riverkeeper  
712 37<sup>th</sup> St South  
Birmingham, AL 35222



THE BIRMINGHAM  
WATER WORKS BOARD

December 14, 2007

MR. STEVE JENKINS  
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
FIELD OPERATIONS DIVISION  
1400 COLISEUM BLVD.  
MONTGOMERY, AL 36110

Re: **Shepherd Bend Mine Draft Permit Comments**

**Directors/Officers**

Anthony L. Barnes  
*Chairman/President*

The Honorable  
Jim H. Lowery  
*First Vice Chairman/  
First Vice President*

Juanita S. Jones  
*Second Vice Chairman/  
Second Vice President*

David S. Herring  
*Secretary-Treasurer*

Herschell L. Hamilton  
*Assistant Secretary-Treasurer*

Mac Underwood  
**General Manager**

**Assistant  
General Managers**

Darryl R. Jones, P.E.  
*Operations and Technical  
Services*

T. M. Jones, P.E.  
*Engineering and Maintenance*

Byron J. Taylor,  
*Finance & Administration*

Dear Mr. Jenkins:

The Water Works and Sewer Board of the City of Birmingham (Board) would like to provide the following comments regarding the draft permit issued by the Department for the Shepherd Bend Mine (AL0079162) located in Walker County. This facility would discharge to the Mulberry Fork of the Black Warrior River, including discharges immediately upstream of the Board's primary drinking water intake on Mulberry Fork. In general, it can be concluded that the Shepherd Bend operation has the potential to adversely impact the Birmingham area drinking water supply, and that the proposed permit is not protective of designated uses of Mulberry Fork. Our comments for the draft permit are summarized below.

1. The proximity of the mining operation to Board's intake pose a potential hazard to drinking water uses. The Board's drinking water intake is within approximately 800 feet of the mining operation outfalls. Because the intake is so close to the proposed outfalls, the mining discharges may not evenly mix with the full stream flow prior to reaching the intake. The proximity and configuration of the proposed operation could result in a bank-entrained plume of mining-related pollutants traveling directly to the intake and into the Board's treatment facilities.

2. The permit gives no indication that the proximity of the drinking water intake was considered. The proposed permit appears to have been developed primarily from federal effluent guidelines for coal mining operations (40 CFR Part 434). These guidelines were developed for use in permitting typical mining operations across the entire nation, not for the extraordinary circumstance where a surface mining operation would be conjoined with a major municipal water supply intake. A review of these guidelines and their supporting documents reveal that protection of major public water supplies was not explicitly considered. This is not surprising, given that surface mining and major municipal water withdrawals would, in most circumstances, be considered incompatible uses of the same river bend. The proposed permit is therefore not protective of the existing use of Mulberry Fork. Concerns regarding specific pollutants are outlined in more detail in comments below.

3. The iron and manganese limits are not protective of drinking water uses: The proposed NPDES permit limitations include daily average total iron concentrations of 3.0 mg/L (with a daily maximum of 6.0 mg/L), daily average total manganese concentrations of 2.0 mg/L (with a daily maximum of 4.0 mg/L), daily average total suspended solids (TSS) of 35.0 mg/L (with a daily maximum of 70.0 mg/L) and pH ranging from 6.0 to 9.0 (daily minimum and maximum, respectively). The permit also notes that the total manganese limitations are not applicable if pH is 6.0 or higher and total iron is less than 10 mg/L

The Safe Drinking Water Act includes secondary maximum contaminant levels (MCLs) for total iron concentrations of 0.3 mg/L and total manganese concentrations of 0.050 mg/L. The average concentrations that would be allowed by this NPDES Permit are ten times the secondary MCL for iron and forty times the secondary MCL for manganese. By comparison, the daily average raw water concentrations for iron and manganese for the Western Filtration Plant in 2007 were 0.057 mg/L and 0.079 mg/L, respectively. Iron and manganese can cause significant aesthetic problems in drinking water, including consumers' perceptions of the quality of the drinking water, staining of clothes and basins, and taste of the water.

The proposed NPDES permit specifies discharge limits for total iron and manganese concentrations. However, the speciation of the iron and manganese (i.e., whether Fe and Mn are in reduced or oxidized states) will significantly impact the ability of the existing Board's treatment facilities to remove the iron and manganese. For example, if  $Fe^{2+}$  and  $Mn^{2+}$  are primarily present in the discharge waters and enter the plant in the reduced oxidation states rather than as particulate iron and manganese, the current treatment process train will not be able to remove them. Speciation of iron and manganese in the discharges is needed to assess whether additional treatment would be required to oxidize the  $Fe^{2+}$  and  $Mn^{2+}$  and then remove the precipitates. However, even if the iron and manganese is present in particulate form in the discharge waters, opportunities may exist for the particulate iron and manganese to become reduced either in the riverbed sediments or in the treatment plant. Costly operational changes to the treatment plant may be required if iron and manganese precipitation and subsequent reduction occurs in the raw water storage tanks or the sedimentation basins.

The Board's Western Filtration Plant may also be impacted by higher particle loading from TSS, iron, and manganese, which would require additional operations and maintenance (e.g., removing solids from the raw water storage tanks, increasing coagulant dosages to remove the additional turbidity, more frequent backwashing of filters due to reduced filter run times, and generation of more wastewater) and may reduce the overall treatment flow rating of the plant.

4. The proposed permit does not protect the public water supply from pollution by many other mining-related pollutants, including toxic metals: Of significant concern is the potential presence of other contaminants in the discharge waters that may impact the source water. Coal in this region of Alabama has been associated with other elements that may impact water treatment, including arsenic, (described by the USGS as "well above the average for all U.S. coal"), sulfur, salinity, mercury and others.<sup>1</sup> Drainage from coal mines often has elevated concentrations of not just iron and manganese, but many other metals including lead, zinc, copper, and cadmium.

If the permit would allow discharges of iron and manganese concentrations over 10-40 times higher than maximum contaminant levels, it is reasonable to presume that other pollutants associated with coal mine drainage could also greatly exceed levels necessary to protect aquatic life and drinking water. These elements, which are not currently included in the discharge permit, could significantly impact the treatment process needs of the water supply and drastically increase costs of treatment and potentially impact public health. For example, arsenic removal would require additional processes, and demand and require increased chemical dosages. Further, the presence of ammonia would significantly complicate the disinfection strategy employed at the Western Filtration Plant. Additional discharge limitations on the range of elements found in the coal that could impact the Board drinking water source should be established. Further, total dissolved solids (TDS) may be high in the coal beds and should be limited by the discharge permit to avoid exceeding the 500 mg/L TDS secondary MCL; if high TDS levels are observed at the Western Filtration Plant intake, the only (and very costly) option for reducing TDS is reverse osmosis.

---

<sup>1</sup> Goldhaber, M.H., Bigelow, R.C., Hatch, J.R., and Pashin, J.C. (2000). Distribution of a Suite of Elements Including Arsenic and Mercury in Alabama Coal. <http://pubs.usgs.gov/mf/2000/mf-2333/mf2333so.pdf>

To better evaluate the probable impacts of these discharges on operations at the Board's Western Filtration Plant, additional analysis is needed beyond what is included in the proposed NPDES permit. The impact of the flow rates at the various outfalls should be evaluated on a seasonal basis relative to river flows to estimate the anticipated concentrations of iron, manganese, and TSS at the Mulberry Fork intake. Further study is also required to determine what other elements/compounds may occur in the discharges and additional costs of treatment associated with those discharges.

5. The maximum pH limit is not protective of designated uses: The permit includes a provision that would allow a maximum daily pH of 10.5 standard units. This is well outside the range of water quality criteria deemed protective of aquatic life uses. Additionally, this pH level would exacerbate the toxicity of other constituents. The solubility of many toxic metals (for which the permit includes no limits) would increase. At this pH, even extremely low concentrations of ammonia could be toxic to aquatic life.

6. The permit provides inadequate controls on metals in stormwater runoff from mining operations: The metals limits on stormwater runoff are even less protective than for the non-precipitation-related discharges. No limits are included for any metals except iron for small precipitation events, and these iron limits are over 20 times the MCL. Larger storm events have no metals limits at all. Of special note, runoff of acid or ferruginous drainage from coal refuse disposal piles include no metals limits at all, even for 1-year, 24-hour storm events.

7. The proposed permit could allow large slugs of suspended solids to Mulberry Fork: The permit includes no limits for totals suspended solids in stormwater runoff (only settleable solids), essentially allowing unlimited discharges of fine, non-settleable suspended solids such as clays and fine silts. Given the extreme land disturbance associated with surface mining—and high rate of erosion expected—this could allow large slugs of suspended solids in runoff from even small precipitation events. This in turn could have deleterious effects on aquatic life and greatly increase solids removals costs in the water treatment plant.

Of special concern is the potential for catastrophic movement of solids into the stream during large storm events, either as the result of impoundment failure or precipitation-induced mass wastage of mining materials on high slopes. The permit includes no limits on solids for >10-year storm events, essentially providing no protection from such events. Similarly, the permit includes no hard requirement for the permittee to develop BMP plan to contain solids, and no such plan was available to the reviewers. Catastrophic solids loading events could not only affect the water quality at the intake, it could endanger the intake itself by burial, clogging, or other damage.

8. The permit provides little protection from post-mining impacts: According to section I.A.2 of the draft permit, permit limits would cease to apply upon revegetation of the site and the Phase II bond release. This provides no long-term protection of the drinking water intake from potential post-mining drainage problems such as failure of vegetation, acid mine seepage, or other inadequacies of post-mining reclamation.

9. The Spill Prevention, Control, and Countermeasure (SPCC) plan: Since a spill from the fuel storage area at the Shepherd Bend Mine could shut down the Mulberry Fork intake, the Board contends that it is critical to have an adequate SPCC plan for this facility. The SPCC plan for the Shepherd Bend Mine does not provide adequate detail as required by 40 CFR 112. The following issues were noted with the proposed plan:

- 40 CFR 112.4
  - Facility maps and diagrams were not provided.
  - Failure analysis was not provided.
- 40 CFR 112.7
  - Countermeasures for discharge discovery, response, and cleanup were not provided.

- A prediction of potential discharge's direction, rate of flow, and potential quantity of material that could be discharged was not provided.
- An oil spill contingency plan following 40 CFR 109 was not provided.
- A written commitment of manpower, equipment, and materials was not provided.
- Inspection procedures were not clearly defined in the plan.
- Personnel, Training, and Discharge Prevention procedures were not provided.
- 40 CFR 112.8/112.12
  - Facility drainage was not provided.
  - Procedures for inspection and discharge of rainwater from containment areas were not provided.


*10. The draft permit posted on the ADEM website was incomplete.* The permit application requires a pollution abatement plan, which was not included in the information posted on the ADEM website. Sections twelve and thirteen of ADEM Form 315 require a topographic map submittal and a detailed facility map submittal, and this information was not posted on the ADEM website.

The proximity of the proposed mining operation to such a major municipal water supply intake is unprecedented to our knowledge, and represents an incompatible use. This operation could result in discharge of mining-related pollutants directly to the intake. The draft permit does not appear to have explicitly considered the drinking water use, and is wholly inadequate to protect the Board and its customers from many pollutants commonly associated with mining activities.

In light of the concerns and deficiencies listed above the Board request a forty-five day extension for the comment period for this permit application. The Board also request that a public hearing be held for this permit application.

Please email me at [munderwood@bwvsh.com](mailto:munderwood@bwvsh.com) or Darryl Jones at [djones@bwvsh.com](mailto:djones@bwvsh.com) or call one of us 205-244-4403 you have any questions or comments.

Very Truly Yours,

  
Mac Underwood  
General Manager

Mayor Jack Scott  
196 McGregory Street  
Cordova, AL 35550

January 2, 2008

Mr. Russell A. Kelly  
Permits and Services Division - ADEM  
1400 Coliseum Blvd  
PO Box 301463  
Montgomery, AL 36110-2059

Dear Mr. Kelly:

Concerned citizens of Cordova recently held a meeting to discuss the possibility of a new coal mine that is being permitted by Shepherd Bend Mining, LLC. As Mayor of Cordova, I was present at the meeting but was in full favor of the possibility of this project. At the end of the meeting I was informed that the sign-in sheet was going to be sent to your office to be used as a request for a public hearing to oppose the permit. I wanted to make it perfectly clear that I do not oppose this permit and would recommend that this permit be issued.

Sincerely,

A handwritten signature in cursive script that reads "Jack Scott". The signature is written in black ink and is positioned above the typed name.

Mayor Jack Scott

Howard and Kathy Gamble  
55 Myers Road  
Nauvoo, AL 35528

January 2, 2008

Mr. Russell A. Kelly  
Permits and Services Division - ADEM  
1400 Coliseum Blvd  
PO Box 301463  
Montgomery, AL 36110-2059

Dear Mr. Kelly:

We are writing to inform you that our names were included on a letter to your office from Black Warrior Riverkeeper stating that we are opposed to issuance of a permit from your office to Shepherd Bend Mining, LLC. We recently attended a meeting of concerned citizens regarding the proposed permit to voice our support for the project. We signed an attendance sheet at this meeting, but we did not intend for our names to be included in any opposition letters to your office.

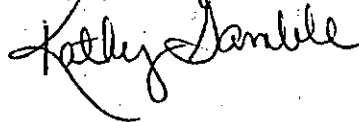
Thank you for your attendance to this matter.

Sincerely,

Howard Gamble



Kathy Gamble



Mack O'Rear  
1101 5<sup>th</sup> Street West  
Jasper, AL 35501

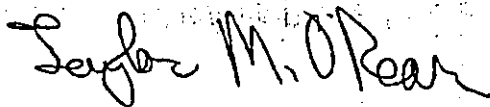
January 2, 2008

Mr. Russell A. Kelly  
Permits and Services Division - ADEM  
1400 Coliseum Blvd  
PO Box 301463  
Montgomery, AL 36110-2059

Dear Mr. Kelly:

Recently I attended a meeting to discuss the possibility of new coal mine currently being permitting by Shepherd Bend Mining, LLC. My presence at the meeting was intended as a show of support for the project. I signed an attendance sheet that was passed around at the beginning of the meeting. I have been informed that my name was included in a letter to your office expressing opposition to issuance of a permit. I would like to inform you that my name was incorrectly included on that letter. Please strike my name from the letter you received.

Sincerely,

A handwritten signature in cursive script that reads "Mack O'Rear". The signature is written in black ink and is positioned above the printed name.

Mack O'Rear



## **Birmingham News**

### **Letters, faxes, and e-mail**

*Tuesday, March 04, 2008*

Shepherd Bend Mine, a proposed coal mine along the Mulberry Fork of the Black Warrior River, is right across the river from the Birmingham Water Works Board's drinking water intake. Putting a massive, 1,773-acre strip mine near one of Birmingham's major drinking water intakes is ludicrous.

This mine is proposing 29 wastewater outfalls into the river and its tributaries. The entity applying for this mine's wastewater discharge permit through the **Alabama Department of Environmental Management** violated its discharge permit at another mine in the same area more than 200 times in 2005 and 2006. **ADEM's** fine for these violations was a mere slap on the wrist, as usual. Paying **ADEM's** meager fines is a small cost of doing business when compared to the cost of installing proper pollution controls. There is every reason to believe permit compliance will be an issue at Shepherd Bend Mine as well.

When a coal strip mine violates its permit, high amounts of muddy water and heavy metals such as iron, aluminum and manganese, among other pollutants, are discharged. If there is a location where a coal mine should be denied a permit, this is it. Our drinking water is too precious a resource.

*Nelson Brooke*

*Riverkeeper/ executive director, Black Warrior Riverkeeper*

December 13, 2007

Richard Hulcher, Chief  
Mining & Nonpoint Source Section  
Field Operations Division  
ADEM  
P.O. Box 301463

Re: AHC 08-0251  
NPDES Permit No. AL0079162  
Shepherd Bend Mine  
Shepherd Bend, LLC  
Walker County

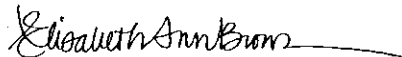
Dear Mr. Hulcher:

It has come to our attention that logging activities have commenced in anticipation of mining operations at Shepherd Bend (listed as *Sheperd Bend* on the topographic map) on Mulberry Fork of the Warrior River. We would like to alert ADEM, the Alabama Surface Mining Commission, and the applicant to the presence of six known archaeological sites in this vicinity. The project area possesses a high probability for the presence of additional archaeological sites, and such sites may contain human burials. The specific project area has never been surveyed for cultural resources.

Due to the sensitive nature and potential significance of the known adjacent sites, we request that all logging activities cease and the project area be surveyed by a professional archaeologist. The archaeologist's report should be submitted to our office for review and determination prior to further ground disturbing activities. The report should include photographs and approximate construction dates for any structures at least 50 years old within or adjacent to the project area. Upon review of the report we would appreciate the opportunity to advise ADEM, the Alabama Surface Mining Commission, and your applicant as to the most appropriate manner in which to proceed with project activities while preserving Alabama's non-renewable resources.

We appreciate your efforts on this issue. Should you have any questions, the point of contact for this matter is Amanda Hill at 334-230-2692. Please have the AHC tracking number referenced above available and include it with any correspondence while preserving Alabama's non-renewable resources.

Truly yours,



Elizabeth Ann Brown  
Deputy State Historic Preservation Officer

EAB/AMH/amh

Cc: Alabama Surface Mining Commission      Donald M. Baxter      Randall Palmer

STATE OF ALABAMA  
ALABAMA HISTORICAL COMMISSION  
468 SOUTH PERRY STREET  
MONTGOMERY, ALABAMA 36130-0900

COLONEL (RET.) JOHN A. NEUBAUER  
EXECUTIVE DIRECTOR

TEL: 334-242-3164  
FAX: 334-240-3477

January 11, 2008

Mr. David Muncher  
Shepherd Bend, LLC  
P. O. Box 2322  
Jasper, AL 35502

Re: AHC 08-0251  
Shepherd Bend Mine  
Walker County, AL

Dear Mr. Muncher:

Upon review of the cultural resource assessment conducted by P. E. LaMoreaux, we have determined that project activities will have no adverse effect on cultural resources eligible for or listed on the National Register of Historic Places. Therefore, we concur with the proposed project activities.

However, should artifacts or archaeological features be encountered during project activities, work shall cease and our office shall be consulted immediately. Artifacts are objects made, used or modified by humans. These include but are not limited to arrowheads, broken pieces of pottery or glass, stone implements, metal fasteners or tools, etc. Archaeological features are stains in the soil that indicate disturbance by human activity. Some examples are post holes, building foundations, trash pits and even human burials. This stipulation shall be placed on the construction plans to insure contractors are aware of it.

We appreciate your commitment to helping us preserve Alabama's non-renewable resources. Should you have any questions, the point of contact for this matter is Amanda Hill at 334-230-2692. Please have the AHC tracking number referenced above available and include it with any correspondence.

Sincerely,



Elizabeth Ann Brown  
Deputy State Historic Preservation Officer

MEMORANDUM

July 18, 2008

TO: Glenda Dean  
Chief, NPDES Permit Branch

FROM: Lynn Sisk  
Chief, Water Quality Branch

SUBJECT: Response to Comments Regarding the Shephard Bend Draft NPDES Permit

The Water Quality Branch, in coordination with the Drinking Water Branch, has completed its review of comments submitted by the Birmingham Water Works Board and the Black Warrior Riverkeeper, Inc. regarding the draft NPDES permit prepared by the Department for the Shephard Bend surface coal mine to be located adjacent to the Mulberry Fork of the Black Warrior River in Walker County. In addition, an analysis of potential impacts of the permitted discharges from the mining activities has also been completed. The analysis and responses to all comments received during the comment period are attached to this memo.

The water quality analysis was completed using information from the permit application, water quality data for Mulberry Fork collected by the Department, and Mulberry Fork water intake data for the Western Filter Plant submitted to the Department by the Birmingham Water Works Board. The analysis considered a range of river water quality conditions, intake volumes, and mining discharge conditions. A conservative approach was used to estimate the maximum likely impact of the permitted discharges on the quality of water entering the water intake structure.

The analysis assumes that all of the permitted discharges from the mining operation which discharge to the Mulberry Fork upstream or adjacent to the water intake are located at the water intake structure and are mixed directly with upstream river water entering the intake. A mass balance calculation was performed to determine the increase in total suspended solids (TSS), iron (Fe), and manganese (Mn) resulting from various mining discharge conditions, background river water quality, and intake rates. Information used in the calculations is summarized in the following tables. A background TSS value was estimated from a sampling station located downstream near the confluence with Locust Fork (BANT-4).

quality shows that the quality of water will not be significantly affected by the proposed permit. The range of concentrations for total suspended solids, iron, and manganese are comparable to values which occur naturally in response to normal rainfall and runoff events.

### Mass Balance Calculation Results

#### Iron

		Mining Discharge Concentration	River Concentration	Resulting Intake Concentration
Qdis, MGD	Qriv, MGD	Fe, mg/l	Fe, mg/l	Fe, mg/l
1.385	17	3	0.14	0.36
1.385	27	3	0.14	0.28
1.385	60	3	0.14	0.20
2.770	17	3	0.14	0.54
2.770	27	3	0.14	0.41
2.770	60	3	0.14	0.27
1.385	17	6	0.14	0.58
1.385	27	6	0.14	0.43
1.385	60	6	0.14	0.27
2.770	17	6	0.14	0.96
2.770	27	6	0.14	0.69
2.770	60	6	0.14	0.40

### Mass Balance Calculation Results

#### Manganese

		Mining Discharge Concentration	River Concentration	Resulting Intake Concentration
Qdis, MGD	Qriv, MGD	Mn, mg/l	Mn, mg/l	Mn, mg/l
1.385	17	3	0.14	0.36
1.385	27	3	0.14	0.28
1.385	60	3	0.14	0.20
2.770	17	3	0.14	0.54
2.770	27	3	0.14	0.41
2.770	60	3	0.14	0.27
1.385	17	6	0.14	0.58
1.385	27	6	0.14	0.43
1.385	60	6	0.14	0.27
2.770	17	6	0.14	0.96
2.770	27	6	0.14	0.69
2.770	60	6	0.14	0.40

In the above tables the mining discharge flow rate of 1.385 MGD is the sum of the average daily discharges for outfalls 1 through 10 and 23 reported in the permit application. The mining discharge rate of 2.770 MGD is twice average daily rate. For the mining discharge concentrations, both the daily maximum and monthly average values from the draft permit were used. Total suspended solids concentrations in the river are averages calculated from the data available at station BANT-4. Iron and manganese concentrations in the river are averages calculated using the Birmingham Water Works Board Mulberry Fork intake data. Intake flows ranging from a low of 17 MGD to the intake capacity of 60 MGD were used in the analyses.

In conclusion, the conservative mass balance analysis employed to evaluate the potential impact discharges from the proposed mining activity at Shephard Bend may have on water quality in Mulberry Fork and the Birmingham Water Works Board intake water

**Birmingham Water Works Board**  
**Western Filter Plant – Mulberry Fork Intake Water Quality Data**  
**Iron and Manganese**

Date	Intake Flow, MGD	Fe, mg/l	Mn, mg/l
Jan-05	27.494	0.1	0.03
Feb-05	23.346	0.19	0.03
Mar-05	22.832	0.21	0.03
Apr-05	23.751	0.14	0.05
May-05	26.655	0.11	0.05
Jun-05	26.771	0.24	0.04
Jul-05	27.791	0.17	0.04
Aug-05	28.894	0.05	0.05
Sep-05	36.206	0.09	0.05
Nov-05	38.065	0.07	0.03

The following equation computes the pollutant concentration in the intake water after the mining discharge is mixed with the background conditions of the river.

$$C_{int} = \frac{(C_{dis})(Q_{dis}) + (C_{riv})(Q_{riv})}{Q_{dis} + Q_{riv}}$$

Where:  $C_{int}$  = Pollutant concentration in the intake water, mg/l  
 $C_{dis}$  = Pollutant concentration in the mining discharge, mg/l  
 $Q_{dis}$  = Flow rate of the mining discharge, MGD  
 $Q_{riv}$  = Flow rate of the river = flow rate of the intake (all river flow enters intake)

The following tables summarize the results of calculating the concentrations of TSS, Fe, and Mn in the intake water after mixing various mining discharge concentrations with various background water quality conditions at different discharge and intake flow rates.

**Mass Balance Calculation Results**  
**Total Suspended Solids**

Q <sub>dis</sub> , MGD	Q <sub>riv</sub> , MGD	Mining Discharge	River	Resulting Intake Concentration
		TSS, mg/l	TSS, mg/l	TSS, mg/l
1.385	17	35	8	10.03
1.385	27	35	8	9.32
1.385	60	35	8	8.61
2.770	17	35	8	11.78
2.770	27	35	8	10.51
2.770	60	35	8	9.19
1.385	17	70	8	12.67
1.385	27	70	8	11.03
1.385	60	70	8	9.40
2.770	17	70	8	16.69
2.770	27	70	8	13.77
2.770	60	70	8	10.74

**Mining Discharge Summary Data from Permit Application**

Outfall #	Flow (MGD)	TSS, mg/l		Fe, mg/l		Mn, mg/l	
		AVG	MAX	AVG	MAX	AVG	MAX
1	0.179	35	70	3	6	2	4
2	0.179	35	70	3	6	2	4
3	0.179	35	70	3	6	2	4
4	0.0163	35	70	3	6	2	4
5	0.179	35	70	3	6	2	4
6	0.064	35	70	3	6	2	4
7	0.064	35	70	3	6	2	4
8	0.295	35	70	3	6	2	4
9	0.064	35	70	3	6	2	4
10	0.1017	35	70	3	6	2	4
23	0.064	35	70	3	6	2	4
Total Q	1.385						

**ADEM Reservoir Water Quality Monitoring Data for Station BANT-4  
Mulberry Fork upstream of Locust Fork  
Total Suspended Solids**

Reservoir	Station ID	Date	TSS, mg/l
Bankhead	BANT-4	4/21/1998	22.0
Bankhead	BANT-4	5/19/1998	4.0
Bankhead	BANT-4	6/24/1998	3.0
Bankhead	BANT-4	7/21/1998	4.0
Bankhead	BANT-4	8/25/1998	4.0
Bankhead	BANT-4	9/22/1998	1.0
Bankhead	BANT-4	10/21/1998	3.0
Bankhead	BANT-4	8/16/2000	5.0
Bankhead	BANT-4	4/16/2002	20.0
Bankhead	BANT-4	5/21/2002	
Bankhead	BANT-4	6/17/2002	4.0
Bankhead	BANT-4	7/23/2002	8.0
Bankhead	BANT-4	8/21/2002	9.0
Bankhead	BANT-4	9/18/2002	8.0
Bankhead	BANT-4	10/22/2002	19.0
Bankhead	BANT-4	4/23/2003	13.0
Bankhead	BANT-4	5/29/2003	7.0
Bankhead	BANT-4	6/25/2003	8.0
Bankhead	BANT-4	7/23/2003	5.0
Bankhead	BANT-4	8/28/2003	4.0
Bankhead	BANT-4	9/24/2003	8.0
Bankhead	BANT-4	10/29/2003	10.0