LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov
1400 Coliseum Blvd. 36110-2400 ▪ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ▪ FAX (334) 271-7950

April 7, 2022

David Muncher
Vice President – Operations Support
Drummond Company, Inc.
P.O. Box 1549
Jasper, AL 35502

RE: Draft Permit
Short Creek Preparation Plant
NPDES Permit No. AL0043711
Jefferson County (073)

Dear Mr. Muncher:

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

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

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

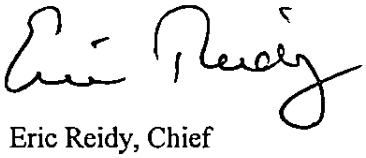
Please be aware that Part I.D of your permit requires participation in the Department's web-based electronic reporting system for submittal of DMRs upon issuance of this permit unless valid justification as to why you cannot participate is submitted in writing. The Department has transitioned from the E2 Reporting System to the Alabama Environmental Permitting and Compliance System (AEPACS) for the submittal of DMRs. AEPACS is an electronic system that allows facilities to apply for and maintain permits as well as submit other required applications, registrations, and certifications. In addition, the system allows facilities to submit required compliance reports or other information to the Department. The Department will be using the E2 User account information to set up a similar User Profile in AEPACS based on the following criteria:

1. The user has logged in to E2 since October 1, 2019; and
2. The E2 user account is set up using a unique email address.

E2 users that meet the above criteria will only need to establish an ADEM Web Portal account (https://prd.adem.alabama.gov/awp) under the same email address as their E2 account to have the same permissions in AEPACS as they did in E2. They will also automatically be linked to the same facilities they were in E2.

Should you have any questions concerning this matter, please contact Clint Dear by email at clint.dear@adem.alabama.gov or by phone at (334) 274-4238.

Sincerely,



Eric Reidy, Chief
Mining and Natural Resource Section
Stormwater Management Branch
Water Division

ER/cdd File: DPER/4112

Enclosure

cc: Clint Dear, ADEM
Environmental Protection Agency Region IV
Alabama Department of Conservation and Natural Resources
U.S. Fish and Wildlife Service
Alabama Historical Commission
Advisory Council on Historic Preservation
Alabama Surface Mining Commission

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDIVIDUAL PERMIT

PERMITTEE: Drummond Company, Inc.
P.O. Box 1549
Jasper, AL 35502

FACILITY LOCATION: Short Creek Preparation Plant
Short Creek Road
Mulga, AL 35502
Jefferson County
T16S R4W S18, 19, 30
T16S R5W S13, 23, 24, 25, 26

PERMIT NUMBER: AL0043711

DSN	RECEIVING STREAM
001-1	Locust Fork
011-1	Short Creek
014-1	Unnamed Tributary to Fishtrap Branch

DSN	RECEIVING STREAM
002-1	Unnamed Tributary to Locust Fork
013-1	Fishtrap Branch
015-1	Unnamed Tributary to Locust Fork

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

ISSUANCE DATE: March 8, 2019

EFFECTIVE DATE: April 1, 2019

EXPIRATION DATE: March 31, 2024

MODIFICATION ISSUANCE DATE:

MODIFICATION EFFECTIVE DATE:

****DRAFT****

Alabama Department of Environmental Management

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

TABLE OF CONTENTS

PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

1. Standard Limitations and Monitoring Requirements

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

Parameter	Discharge Limitations			Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Sample Type	Measurement Frequency[1]
Specific Conductance 00095	-------	Report µS/cm	Report µS/cm	Grab	2/Month
Sulfate (As S) 00154	-------	Report mg/L	Report mg/L	Grab	2/Month
pH 00400	6.0 s.u.	-------	9.0 s.u.	Grab	2/Month
pH[2] 00400	6.0 s.u.	-------	10.5 s.u.	Grab	2/Month
Solids, Total Suspended 00530	-------	35.0 mg/L	70.0 mg/L	Grab	2/Month
Iron, Total (As Fe) 01045	-------	3.0 mg/L	6.0 mg/L	Grab	2/Month
Manganese, Total (As Mn)[3] 01055	-------	2.0 mg/L	4.0 mg/L	Grab	2/Month
Flow, In Conduit or Thru Treatment Plant[4] 50050	-------	Report MGD	Report MGD	Instantaneous	2/Month
Toxicity, Ceriodaphnia Acute[5] 61425	-------	-------	0 pass(0)/fail(1)	Grab	1/Quarter
Toxicity, Pimephales Acute[5] 61427	-------	-------	0 pass(0)/fail(1)	Grab	1/Quarter
Solids, Total Dissolved (TDS) 70296	-------	Report mg/L	Report mg/L	Grab	1/Quarter
Mercury, Total Recoverable 71901 (Outfall 002-1)	-------	0.012 µg/L	2.4 µg/L	Grab	2/Month

[1] See Part I.C.2. for further measurement frequency requirements.
[2] See Part IV.C. for pH Exemption Discharge Limitations.
[3] See Part IV.D. for Manganese Exemption Discharge Limitations.
[4] Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.
[5] See Part IV.E. for Effluent Toxicity Limitations and Biomonitoring Requirements for Acute Toxicity.

2. Precipitation Exemption Limitations and Monitoring Requirements[6]

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

Parameter	Discharge Limitations			Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Sample Type	Measurement Frequency[7]
Specific Conductance 00095	-------	Report µS/cm	Report µS/cm	Grab	2/Month
Sulfate (As S) 00154	-------	Report mg/L	Report mg/L	Grab	2/Month
pH 00400	6.0 s.u.	-------	9.0 s.u.	Grab	2/Month
Solids, Settleable[8] 00545	-------	-------	0.5 mL/L	Grab	2/Month
Iron, Total (As Fe)[9] 01045	-------	-------	7.0 mg/L	Grab	2/Month
Flow, In Conduit or Thru Treatment Plant[10] 50050	-------	Report MGD	Report MGD	Instantaneous	2/Month
Solids, Total Dissolved (TDS) 70296	-------	Report mg/L	Report mg/L	Grab	1/Quarter
Mercury, Total Recoverable 71901 (Outfall 002-1)	-------	Report µg/L	Report µg/L	Grab	2/Month

[6] See Part IV.B. for Precipitation Event Discharge Limitations.
[7] See Part I.C.2. for further measurement frequency requirements.
[8] The discharge limitation for Settable Solids is not applicable for precipitation events greater than a 10-year, 24-hour precipitation event.
[9] The discharge limitation for Total Iron (As Fe) is only applicable for precipitation events less than or equal to a 2-year, 24-hour precipitation event.
[10] Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.

B. REQUIREMENTS TO ACTIVATE A PROPOSED OUTFALL

1. Discharge from any point source identified on Page 1 of this Permit which is a proposed outfall is not authorized by this Permit until the outfall has been constructed and certification received by the Department from a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed in accordance with plans and specifications approved by the ASMC, if applicable. This requirement shall not apply to pumped discharges from the underground works of underground coal mines where no surface structure is required by the ASMC, provided the Department is notified in writing of the completion or installation of such facilities, and the pumped discharges will meet permit effluent limits without treatment.

2. Certification required by Part I.B.1. shall be submitted on a completed ADEM Form 432. The certification shall include the latitude and longitude of the constructed and certified outfall.

3. Discharge monitoring and Discharge Monitoring Report (DMR) reporting requirements described in Part I.C. of this Permit do not apply to point sources that have not been constructed and certified.

4. Upon submittal of the certification required by Part I.B.1. to the Department, all monitoring and DMR submittal requirements shall apply to the constructed and certified outfall.

C. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Sampling Schedule and Frequency

a. Except as provided in Parts IV.B, the Permittee shall collect samples of the discharge from each constructed and certified point source identified on Page 1 of this Permit and described more fully in the Permittee's application, at the frequency specified in Part I.A. Analysis of the samples shall be conducted for the parameters specified in Part I.A.

b. For each permitted, constructed, and certified point source which results from direct pumped drainage from the underground works of an underground coal mine or from surface drainage, if the final effluent is pumped in order to discharge (e.g. incised ponds, old highwall cuts, old pit areas or depressions), at least one grab sample from the permitted point source shall be obtained and analyzed each quarterly (three month) monitoring period if a discharge occurs at any time during the quarterly monitoring period.

c. The Permittee may increase the frequency of sampling listed in Parts I.C.1.a and I.C.1.b; however, all sampling results must be reported to the Department and included in any calculated results submitted to the Department in accordance with this Permit.

2. Measurement Frequency

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

a. A measurement frequency of one day per week shall mean sample collection on any day of discharge which occurs every calendar week.

b. A measurement frequency of two days per month shall mean sample collection on any day of discharge which occurs every other week, but need not exceed two sample days per month.

c. A measurement frequency of one day per month shall mean sample collection on any day of discharge which occurs during each calendar month.

d. A measurement frequency of one day per quarter shall mean sample collection on any day of discharge which occurs during each calendar quarter.

e. A measurement frequency of one day per six months shall mean sample collection on any day of discharge which occurs during the period of January through June and during the period of July through December.

f. A measurement frequency of one day per year shall mean sample collection on any day of discharge which occurs during each calendar year.

3. Monitoring Schedule

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

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

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

c. SEMIANNUAL MONITORING shall be conducted at least once during the period of January through June and at least once during the period of July through December. The Permittee shall conduct the semiannual monitoring during the first complete semiannual calendar period following the effective date of this Permit and is then required to monitor once during each semiannual period thereafter. Semiannual monitoring may be done anytime during the semiannual period, unless restricted elsewhere in this Permit, but it should be reported on the last DMR due for the month of the semiannual period (i.e., with the June and December DMRs).

d. ANNUAL MONITORING shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first complete calendar annual period following the effective date of this Permit and is then required to monitor once during each annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this Permit, but it should be reported on the December DMR.

4. Sampling Location

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

5. Representative Sampling

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

6. Test Procedures

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

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

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

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

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

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

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

7. Recording of Results

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

a. The facility name and location, point source number, date, time, and exact place of sampling or measurements;

b. The name(s) of person(s) who obtained the samples or measurements;

c. The dates and times the analyses were performed;

d. The name(s) of the person(s) who performed the analyses;

e. The analytical techniques or methods used including source of method and method number; and

f. The results of all required analyses.

8. Routine Inspection by Permittee

a. The Permittee shall inspect all point sources identified on Page 1 of this Permit and described more fully in the Permittee's application and all treatment or control facilities or systems used by the Permittee to achieve compliance with the terms and conditions of this Permit at least as often as the applicable sampling frequency specified in Part I.C.1 of this Permit.

b. If required by the Director, the Permittee shall maintain a written log for each point source identified on Page 1 of this Permit and described more fully in the Permittee's application in which the Permittee shall record the following information:

(1) The date and time the point source and any associated treatment or control facilities or systems were inspected by the Permittee;

(2) Whether there was a discharge from the point source at the time of inspection by the Permittee;

(3) Whether a sample of the discharge from the point source was collected at the time of inspection by the Permittee;

(4) Whether all associated treatment or control facilities or systems appeared to be in good working order and operating as efficiently as possible, and if not, a description of the problems or deficiencies; and

(5) The name and signature of the person performing the inspection of the point source and associated treatment or control facilities or systems.

9. Records Retention and Production

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

b. All records required to be kept for a period of three (3) years shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

10. Monitoring Equipment and Instrumentation

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

D. DISCHARGE REPORTING REQUIREMENTS

1. Requirements for Reporting of Monitoring

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

b. The Department utilizes a web-based electronic reporting system for submittal of DMRs. **Except as allowed by Part I.D.1.c. or d., the Permittee shall submit all DMRs required by Part I.D.1.a. by utilizing the Department's current electronic reporting system.** The Department's current reporting system, Alabama Environmental Permitting and Compliance System (AEPACS), can be found online at https://aepacs.adem.alabama.gov/nviro/ncore/external/home.

c. If the electronic reporting system is down (i.e. electronic submittal of DMR data is unable to be completed due to technical problems originating with the Department's system; this could include entry/submittal issues with an entire set of DMRs or individual parameters), permittees are not relieved of their obligation to submit DMR data to the Department by the required submittal date. However, if the electronic reporting system is down on the 28th day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the electronic reporting system resuming operation, the Permittee shall enter the data into the reporting system unless an alternate timeframe is approved by the Department. An attachment should be included with the electronic DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date).

d. The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.

Permittees with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The Permittee shall submit the Department-approved DMR forms to the address listed in Part I.D.1.j.

e. If the Permittee, using approved analytical methods as specified in Part I.C.6., monitors any discharge from a point source identified on Page 1 of this Permit and describe more fully in the Permittee's application more frequently than required by this Permit; the results of such monitoring shall be included in the calculation and reporting of values on the DMR Form, and the increased frequency shall be indicated on the DMR Form.

f. In the event no discharge from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application occurs during a monitoring period, the Permittee shall report "No Discharge" for such period on the appropriate DMR Form.

g. Each DMR Form submitted by the Permittee to the Department in accordance with Part I.D.1. must be legible and bear an original signature or electronic signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this Permit.

h. All reports and forms required to be submitted by this Permit, the AWPCA, and the Department's rules and regulations, shall be signed by a "responsible official" of the Permittee as defined in ADEM Admin. Code r. 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Admin. Code r. 335-6-6-.09 and shall bear the following certification:

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

i. All DMRs, reports, and forms required to be submitted by this Permit, the AWPCA and the Department's rules and regulations, shall be submitted through the Department's electronic reporting system, AEPACS, or, if in hardcopy, shall be addressed to:

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

Certified and Registered Mail shall be addressed to:

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

j. 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.

k. If this Permit is a reissuance, then the Permittee shall continue to submit DMRs in accordance with the requirements of their previous permit until such time as DMRs are due as discussed in Part I.D.1.

2. Noncompliance Notification

a. The Permittee must notify the Department if, for any reason, the Permittee's discharge:

(1) Potentially threatens human health or welfare;

(2) Potentially threatens fish or aquatic life;

(3) Causes an in-stream water quality criterion to be exceeded;

(4) Does not comply with an applicable toxic pollutant effluent standard or prohibition established under Section 307(a) of the FWPCA, 33 U.S.C. §1317(a);

(5) Contains a quantity of a hazardous substance which has been determined may be harmful to the public health or welfare under Section 311(b)(4) of the FWPCA, 33 U.S.C. §1321(b)(4); or

(6) Exceeds any discharge limitation for an effluent parameter as a result of an unanticipated bypass or upset.

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

b. If for any reason, the Permittee's discharge does not comply with any limitation of this Permit, the Permittee shall submit a written report to the Director, as provided in Part I.D.3.c. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Part I.D.1. of this Permit after becoming aware of the occurrence of such noncompliance.

c. Form 401 or Form 421 must be submitted to the Director in accordance with Parts I.D.3.a. and b. The completed form must document the following information:

(1) A description of the discharge and cause of noncompliance;

(2) The period of noncompliance, including exact dates, times, and duration of the noncompliance. If not corrected by the due date of the written report, then the Permittee is to state the anticipated timeframe that is expected to transpire before the noncompliance is resolved; and

(3) A description of the steps taken and/or being taken to reduce or eliminate the noncomplying discharge and to prevent its recurrence.

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

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

(1) All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted or controlled to preclude unpermitted and unauthorized mining, processing, transportation, or associated operations/activity;

(2) Unless waived in writing by the Department, the Permittee has been granted, in writing, a 100% Bond Release, by the Alabama Surface Mining Commission for all areas mined or disturbed in the drainage basin(s) associated with the discharge.

(3) The Permittee has certified to the Director that the 100% Bond Release has been granted by the Alabama Surface Mining Commission for all areas disturbed in the drainage basin(s) associated with the discharge;

(4) All surface effects of the mining activity such as fuel or chemical tanks, preparation plants or equipment, old tools or equipment, junk or debris, etc., must be removed and disposed of according to applicable state and federal regulations;

(5) The Permittee's request for termination of monitoring and reporting requirements contained in this Permit has been supported by monitoring data covering a period of at least six consecutive months or such longer period as is necessary to assure that the data reflect discharges occurring during varying seasonal climatological conditions;

(6) The Permittee has stated in its request that the samples collected and reported in the monitoring data submitted in support of the Permittee's request for monitoring termination or suspension are representative of the discharge and were collected in accordance with all Permit terms and conditions respecting sampling times (e.g., rainfall events) and methods and were analyzed in accordance with all Permit terms and conditions respecting analytical methods and procedures;

(7) The Permittee has certified that during the entire period covered by the monitoring data submitted, no chemical treatment of the discharge was provided;

(8) The Permittee's request has included the certification required by Part I.D.1.e. of this Permit; and

(9) The Permittee has certified to the Director in writing as part of the request, its compliance with (1) through (8) above.

b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this Permit until written authorization to reduce, suspend, or terminate such monitoring and/or reporting is received by the Permittee from the Director.

E. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Anticipated Noncompliance

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

2. Termination of Discharge

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

3. Updating Information

a. The Permittee shall inform the Director of any change in the Permittee's mailing address or telephone number or in the Permittee's designation of a facility contact or officer(s) having the authority and responsibility to prevent and abate violations of the AWPCA, the AEMA, the Department's rules and regulations, and the terms and conditions of this Permit, in writing, no later than ten (10) days after such change. Upon request of the Director, the Permittee shall furnish the Director with an update of any information provided in the permit application.

b. If the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information with a written explanation for the mistake and/or omission.

4. Duty to Provide Information

a. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, terminating, or revoking and reissuing this Permit, in whole or in part, or to determine compliance with this Permit. The Permittee shall also furnish to the Director upon request, copies of records required to be maintained by this Permit.

b. The Permittee shall furnish to the Director upon request, within a reasonable time, available information (name, phone number, address, and site location) which identifies offsite sources of material or natural resources (mineral, ore, or other material such as iron, coal, coke, dirt, chert, shale, clay, sand, gravel, bauxite, rock, stone, etc.) used in its operation or stored at the facility.

F. SCHEDULE OF COMPLIANCE

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

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

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Management

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

2. Best Management Practices (BMPs)

a. Unless otherwise authorized in writing by the Director, the Permittee shall provide a means of subsurface withdrawal for any discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application. Notwithstanding the above provision, a means of subsurface withdrawal need not be provided for any discharge caused by a 24-hour precipitation event greater than a 10-year, 24-hour precipitation event.

b. Dilution water shall not be added to achieve compliance with discharge limitations except when the Director has granted prior written authorization for dilution to meet water quality requirements.

c. The Permittee shall minimize the contact of water with overburden, including but not limited to stabilizing disturbed areas through grading, diverting runoff, achieving quick growing stands of temporary vegetation, sealing acid-forming and toxic-forming materials, and maximizing placement of waste materials in back-fill areas.

d. The Permittee shall prepare, submit to the Department for approval, and implement a Best Management Practices (BMPs) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a potential for discharge, if so required by the Director. When submitted and approved, the BMP Plan shall become a part of this Permit and all requirements of the BMP Plan shall become requirements of this Permit.

e. Spill Prevention, Control, and Management

The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan acceptable to the Department that is prepared and certified by a Professional Engineer (PE), registered in the State of Alabama, for all onsite petroleum product or other pollutant storage tanks or containers as required by applicable state (ADEM Admin. Code r. 335-6-6-.12 I) 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 shall prevent the contamination of

groundwater. Such containment systems shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided. The 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.

f. All surface drainage and storm water runoff which originate within or enters the Permittee's premises and which contains any pollutants or other wastes shall be discharged, if at all, from a point source identified on Page 1 of this Permit and described more fully in the Permittee's application.

g. The Permittee shall take all reasonable precautions to prevent any surface drainage or storm water runoff which originates outside the Permittee's premises and which contains any pollutants or other wastes from entering the Permittee's premises. At no time shall the Permittee discharge any such surface drainage or storm water runoff which enters the Permittee's premises if, either alone or in combination with the Permittee's effluent, the discharge would exceed any applicable discharge limitation specified in Part I.A. of this Permit.

3. Biocide Additives

a. The Permittee shall notify the Director in writing not later than sixty (60) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in any cooling or boiler system(s) regulated by this Permit. Notification is not required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the Permittee. Such notification shall include:

(1) Name and general composition of biocide or chemical;

(2) 96-hour median tolerance limit data for organisms representative of the biota of the water(s) which the discharge(s) enter(s);

(3) Quantities to be used;

(4) Frequencies of use;

(5) Proposed discharge concentrations; and

(6) EPA registration number, if applicable.

b. The use of any biocide or chemical additive containing tributyl tin, tributyl tin oxide, zinc, chromium, or related compounds in any cooling or boiler system(s) regulated by the Permit is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this Permit or in the application for this Permit or not exempted from notification under this Permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

4. Facility Identification

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

5. Removed Substances

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

6. Loss or Failure of Treatment Facilities

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

7. Duty to Mitigate

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

B. BYPASS AND UPSET

1. Bypass

a. Any bypass is prohibited except as provided in Parts II.B.1.b. and c.

b. A bypass is not prohibited if:

(1) It does not cause any applicable discharge limitation specified in Part I.A. of this Permit to be exceeded;

(2) The discharge resulting from such bypass enters the same receiving water as the discharge from the permitted outfall;

(3) It is necessary for essential maintenance of a treatment or control facility or system to assure efficient operation of such facility or system; and

(4) The Permittee monitors the discharge resulting from such bypass at a frequency, at least daily, sufficient to prove compliance with the discharge limitations specified in Part I.A. of this Permit.

c. A bypass is not prohibited and need not meet the discharge limitations specified in Part I.A. of this Permit if:

(1) It is unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the Permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The Permittee submits a written request for authorization to bypass to the Director at least ten (10) days, if possible, prior to the anticipated bypass or within 24 hours of an unanticipated bypass, the Permittee is granted such authorization, and Permittee complies with any conditions imposed by the Director to minimize any adverse impact to waters resulting from the bypass.

d. The Permittee has the burden of establishing that each of the conditions of Parts II.B.1.b. or c. have been met to qualify for an exception to the general prohibition against bypassing contained in Part II.B.1.a. and an exemption, where applicable, from the discharge limitations specified in Part I.A. of this Permit.

2. Upset

a. The Permittee may seek to demonstrate that noncompliance with technology-based effluent limits occurred as a result of an upset if the conditions of Part II.B.2.b are met and if the Permittee complies with the conditions provided in Part II.B.2.c.

b. If the Permittee wishes to establish the affirmative defense of an upset for technology-based effluent limit noncompliance, the Permittee must demonstrate through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the Permittee can identify the specific cause(s) of the upset;

(2) The wastewater treatment facility was at the time being properly operated in accordance with Part II.B.d.

(3) The Permittee submitted notice of the noncompliance during the upset as required by Part II.B.2.c; and

(4) The Permittee complied with any remedial measures required under Part II.A.7. of this Permit.

c. If the Permittee wishes to establish the affirmative defense of an upset for technology-based effluent limit noncompliance, the Permittee shall:

(1) No later than 24-hours after becoming aware of the occurrence of the upset, orally report the occurrence and circumstances of the upset to the Director in accordance with Part I.G.2.; and

(2) No later than five (5) days after becoming aware of the occurrence of the upset, furnish the Director with evidence, including properly signed, contemporaneous operating logs, design drawings, construction certification, maintenance records, weir flow measurements, dated photographs, rain gauge measurements, or other relevant evidence, demonstrating that:

(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.

d. A discharge which is an overflow from a treatment facility or system, or an excess discharge from a point source associated with a treatment facility or system and which results from a 24-hour precipitation event larger than a 10-year, 24-hour precipitation event is not eligible to be considered as a result of an upset unless:

(1) The treatment facility or system is designed, constructed, and maintained to contain the maximum volume of wastewater which would be generated by the facility during a 24-hour period without an increase in volume from precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event or to treat the maximum flow associated with these volumes. In computing the maximum volume of wastewater which would result from a 10-year, 24-hour precipitation event, the volume which would result from all areas contributing runoff to the individual treatment facility must be included (i.e., all runoff that is not diverted from the mining area and runoff which is not diverted from the preparation plant area); and

(2) The Permittee takes all reasonable steps to maintain treatment of the wastewater and minimize the amount of overflow or excess discharge.

e. The Permittee has the burden of proof in defense of any enforcement action as a result of noncompliance of technology-based effluent limits the Permittee proposes to attribute to an upset.

C. PERMIT CONDITIONS AND RESTRICTIONS

1. Prohibition against Discharge from Facilities Not Certified

a. Notwithstanding any other provisions of this Permit, if the permitted facility has not obtained or is not required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which was not certified to the Department on a form approved by the Department by a professional engineer, registered in the State of Alabama, as being designed, constructed, and in accordance with plans and specifications reviewed by the Department is prohibited; or

b. Notwithstanding any other provisions of this Permit, if the permitted facility has obtained or is required to obtain a permit from the Alabama Surface Mining Commission, any discharge(s) from any point or nonpoint source(s) from the permitted facility which is associated with a treatment facility which was not constructed and certified to the Alabama Surface Mining Commission pursuant to applicable provisions of said Commission's regulations, is prohibited until the Permittee submits to the Alabama Surface Mining Commission, certification by a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed in accordance with plans and specifications approved by the Alabama Surface Mining Commission. This

requirement shall not apply to pumped discharges from the underground works of underground coal mines where no surface structure is required by the Alabama Surface Mining Commission, provided the Department is notified in writing of the completion or installation of such facilities, and the pumped discharges will meet permit effluent limits without treatment.

2. Permit Modification, Suspension, Termination, and Revocation

a. This Permit may be modified, suspended, terminated, or revoked and reissued, in whole or in part, during its term for cause, including but not limited to, the following:

(1) The violation of any term or condition of this Permit;

(2) The obtaining of this Permit by misrepresentation or the failure to disclose fully all relevant facts;

(3) The submission of materially false or inaccurate statements or information in the permit application or reports required by the Permit;

(4) The need for a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

(5) The existence of any typographical or clerical errors or of any errors in the calculation of discharge limitations;

(6) The existence of material and substantial alterations or additions to the facility or activity generating wastewater which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit;

(7) The threat of the Permittee's discharge on human health or welfare; or

(8) Any other cause allowed by ADEM Admin. Code ch. 335-6-6.

b. The filing of a request by the Permittee for modification, suspension, termination, or revocation and reissuance of this Permit, in whole or in part, does not stay any Permit term or condition of this Permit.

3. Automatic Expiration of Permits for New or Increased Discharges

a. Except as provided by ADEM Admin. Code r. 335-6-6-.02(g) and 335-6-6-.05, if this Permit was issued for a new discharger or new source, it shall expire eighteen months after the issuance date if construction has not begun during that eighteen month period.

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

c. Construction has begun when the owner or operator has:

(1) Begun, or caused to begin as part of a continuous on-site construction program:

(i) Any placement, assembly, or installation of facilities or equipment; or

(ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

(2) Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.

d. The automatic expiration of this Permit for new or increased discharges if construction has not begun within the eighteen month period after the issuance of this Permit may be tolled by administrative or judicial stay.

4. Transfer of Permit

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

5. 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.

6. Property and Other Rights

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

D. RESPONSIBILITIES

1. Duty to Comply

a. The Permittee must comply with all terms and conditions of this Permit. Any permit noncompliance constitutes a violation of the AWPCA, AEMA, and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.

b. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the FWPCA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the effluent standard, prohibition or requirement.

c. For any violation(s) of this Permit, the Permittee is subject to a civil penalty as authorized by the AWPCA, the AEMA, the FWPCA, and 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. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of this Permit shall not be a defense for a Permittee in an enforcement action.

e. Nothing in this Permit shall be construed to preclude or negate the Permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, Federal, State, or local government permits, certifications, licenses, or other approvals.

f. The discharge of a pollutant from a source not specifically identified in the permit application for this Permit and not specifically included in the description of an outfall in this Permit is not authorized and shall constitute noncompliance with this Permit.

g. The Permittee shall take all reasonable steps, including cessation of production or other activities, to minimize or prevent any violation of this Permit or to minimize or prevent any adverse impact of any permit violation.

2. Change in Discharge

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

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

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

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

effluent standard or prohibition and the Permittee shall be notified of such modification. If this Permit has not been modified to conform to the toxic or other pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the authorization to discharge in this Permit shall be void to the extent that any discharge limitation on such pollutant in Part I.A. of this Permit exceeds or is inconsistent with the established toxic or other pollutant effluent standard or prohibition.

4. Compliance with Water Quality Standards and Other Provisions

a. On the basis of the Permittee's application, plans, or other available information, the Department has determined that compliance with the terms and conditions of this Permit will assure compliance with applicable water quality standards. However, this Permit does not relieve the Permittee from compliance with applicable State water quality standards established in ADEM Admin. Code ch. 335-6-10, and does not preclude the Department from taking action as appropriate to address the potential for contravention of applicable State water quality standards which could result from discharges of pollutants from the permitted facility.

b. Compliance with Permit terms and conditions notwithstanding, if the Permittee's discharge(s) from point source(s) identified on Page 1 of this Permit cause(s) or contribute(s) to a condition in contravention of State water quality standards, the Department may require abatement action to be taken by the Permittee, modify the Permit pursuant to the Department's rules and regulations, or both.

c. If the Department determines, on the basis of a notice provided pursuant to Part II.C.2. of this Permit or any investigation, inspection, or sampling, that a modification of this Permit is necessary to assure maintenance of water quality standards or compliance with other provisions of the AWPCA or FWPCA, the Department may require such modification and, in cases of emergency, the Director may prohibit the noticed act until the Permit has been modified.

5. Compliance with Statutes and Rules

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

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

6. Right of Entry and Inspection

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

a. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the Permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

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

a. If the Permittee intends to continue to discharge beyond the expiration date of this Permit, the Permittee shall file with the Department a complete permit application for reissuance of this Permit at least 180 days prior to its expiration. **Applications must be submitted electronically via the Department's current electronic permitting system. The Department's current online permitting system, Alabama Environmental Permitting and Compliance System (AEPACS), can be found online at https://aepacs.adem.alabama.gov/nviro/ncore/external/home.**

b. If the Permittee does not desire to continue the discharge(s) allowed by this Permit, the Permittee shall notify the Department at least 180 days prior to expiration of this Permit of the Permittee's intention not to request reissuance of this Permit. This notification must include the information required in Part I.D.4.a and be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Admin. Code r. 335-6-6-.09.

c. Failure of the Permittee to submit to the Department a complete application for reissuance of this Permit at least 180 days prior to the expiration date of this Permit will void the automatic continuation of this Permit as provided by ADEM Admin. Code r. 335-6-6-.06, and should this Permit not be reissued for any reason, any discharge after the expiration of this Permit will be an unpermitted discharge.

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

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

2. False Statements

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

3. Permit Enforcement

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

4. Relief From Liability

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

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

C. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, §22-22-9I, 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.

D. DEFINITIONS

1. Acid or ferruginous mine drainage – means mine drainage which, before any treatment, either has a pH of less than 6 or a total iron concentration equal to or greater than 10 mg/l.

2. Alabama Environmental Management Act (AEMA) – means Code of Alabama 1975, §§22-22A-1 et. Seq., as amended.

3. Alabama Water Pollution Control Act (AWPCA) – means Code of Alabama 1975, §§22-22-1 et. Seq., as amended.

4. Alkaline mine drainage – means mine drainage which, before any treatment, has a pH equal to or greater than 6.0 and total iron concentration of less than 10 mg/l.

5. Average monthly discharge limitation – means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

6. Arithmetic Mean – means the summation of the individual values of any set of values divided by the number of individual values.

7. BOD – means the five-day measure of the pollutant parameter biochemical oxygen demand

8. Bypass – means the intentional diversion of waste streams from any portion of a treatment facility.

9. CBOD – means the five-day measure of the pollutant parameter carbonaceous biochemical oxygen demand.

10. Coal Mine – means an area, on or beneath land, used or disturbed in activities related to the extraction, removal, or recovery of coal from natural or artificial deposits, including active mining and reclamation.

11. Coal Preparation Plant – means a facility where coal is subjected to cleaning, concentrating, or other processing or preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility.

12. Coal Preparation Plant Associated Areas – means the coal preparation plant yards, immediate access roads, coal refuse piles and coal storage piles and facilities.

13. Coal Preparation Plant Water Circuit – means all pipes, channels, basins, tanks, and all other structures and equipment that convey, contain, treat, or process any water that is used in coal preparation processes within a coal preparation plant.

14. Coal Refuse Disposal Pile – means any coal refuse deposited on the earth and intended as permanent disposal or long-term storage (greater than 180 days) of such material, but does not include coal refuse deposited within the active mining area or coal refuse never removed from the active mining area.

15. Controlled Surface Mine Drainage – means any surface mine drainage that is pumped or siphoned from the active mining area.

16. Daily discharge – means the discharge of a pollutant measured during any consecutive 24-hour period in accordance with the sample type and analytical methodology specified by the discharge permit.

17. Daily maximum – means the highest value of any individual sample result obtained during a day.

18. Daily minimum – means the lowest value of any individual sample result obtained during a day.

19. Day – means any consecutive 24-hour period.

20. Department – means the Alabama Department of Environmental Management.

21. Director – means the Director of the Department or his authorized representative or designee.

22. Discharge – means "[t]he addition, introduction, leaking, spilling or emitting of any sewage, industrial waste, pollutant or other waste into waters of the state." Code of Alabama 1975, §22-22-1(b)(8).

23. Discharge monitoring report (DMR) – means the form approved by the Director to accomplish monitoring report requirements of an NPDES permit.

24. DO – means dissolved oxygen.

25. E. coli – means the pollutant parameter Escherichia coli.

26. 8HC – means 8-hour composite sample, including any of the following:

    a. The mixing of at least 5 equal volume samples collected at constant time intervals of not more than 2 hours over a period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.

    b. A sample continuously collected at a constant rate over period of not less than 8 hours between the hours of 6:00 a.m. and 6:00 p.m. If the sampling period exceeds 8 hours, sampling may be conducted beyond the 6:00 a.m. to 6:00 p.m. period.

27. EPA – means the United States Environmental Protection Agency.

28. Federal Water Pollution Control Act (FWPCA) – means 33 U.S.C. §§1251 et. Seq., as amended.

29. Flow – means the total volume of discharge in a 24-hour period.

30. Geometric Mean – means the Nth root of the product of the individual values of any set of values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered one (1).

31. Grab Sample – means a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the discharge.

32. Indirect Discharger – means a nondomestic discharger who discharges pollutants to a publicly owned treatment works or a privately owned treatment facility operated by another person.

33. Industrial User – means those industries identified in the Standard Industrial Classification manual, Bureau of the Budget 1967, as amended and supplemented, under the category "Division D – Manufacturing" and such other classes of significant waste producers as, by regulation, the Director deems appropriate.

34. mg/L – means milligrams per liter of discharge.

35. MGD – means million gallons per day.

36. Monthly Average – means, other than for E. coli bacteria, the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for E. coli bacteria is the geometric mean of daily discharge samples collected in a one month period. The monthly average for flow is the arithmetic mean of all flow measurements

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

37. New Discharger – means a person owning or operating any building, structure, facility or installation:

a. From which there is or may be a discharge of pollutants;

b. From which the discharge of pollutants did not commence prior to August 13, 1979, and which is not a new source; and

c. Which has never received a final effective NPDES permit for dischargers at that site.

38. New Source – means:

a. A new source as defined for coal mines by 40 CFR Part 434.11 (1994); and

b. Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(1) After promulgation of standards of performance under Section 306 of FWPCA which are applicable to such source; or

(2) After proposal of standards of performance in accordance with Section 306 of the FWPCA which are applicable to such source, but only if the standards are promulgated in accordance with Section 206 within 120 days of their proposal.

39. NH3-N – means the pollutant parameter ammonia, measured as nitrogen.

40. 1-year, 24-hour precipitation event – means the maximum 24-hour precipitation event with a probable recurrence interval of once in one year as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.

41. Permit application – means forms and additional information that are required by ADEM Admin. Code r. 335-6-6-.08 and applicable permit fees.

42. Point Source – means "any discernible, confined and discrete conveyance, including but not limited to any pipe, channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged." Section 502(14) of the FWPCA, 33 U.S.C. §1362(14).

43. Pollutant – includes for purposes of this Permit, but is not limited to, those pollutants specified in Code of Alabama 1975, §22-22-1(b)(3) and those effluent characteristics, excluding flow, specified in Part I.A. of this Permit.

44. Pollutant of Concern – means those pollutants for which a water body is listed as impaired or which contribute to the listed impairment.

45. Preparation, Dry – means a dry preparation facility within which the mineral/material is cleaned, separated, or otherwise processed without use of water or chemical additives before it is shipped to the customer or otherwise utilized. A dry preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Dry preparation also includes minor water spray(s) used solely for dust suppression on equipment and roads to minimize dust emissions.

46. Preparation, Wet – means a wet preparation facility within which the mineral/material is cleaned, separated, or otherwise processed using water or chemical additives before it is shipped to the customer or otherwise utilized. A wet preparation plant includes all ancillary operations and structures necessary to clean, separate, or otherwise process the mineral/material, such as storage areas and loading facilities. Wet preparation also includes mineral extraction/processing by dredging, slurry pumping, etc.

47. Privately Owned Treatment Works – means any devices or system which is used to treat wastes from any facility whose operator is not the operator of the treatment works, and which is not a "POTW".

48. Publicly Owned Treatment Works (POTW) – means a wastewater collection and treatment facility owned by the State, municipality, regional entity composed of two or more municipalities, or another entity created by the State or local authority for the purpose of collecting and treating municipal wastewater.

49. Receiving Stream – means the "waters" receiving a "discharge" from a "point source".

50. Severe property damage – means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

51. 10-year, 24-hour precipitation event – means that amount of precipitation which occurs during the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.

52. TKN – means the pollutant parameter Total Kjeldahl Nitrogen.

53. TON – means the pollutant parameter Total Organic Nitrogen.

54. TRC – means Total Residual Chlorine.

55. TSS – means the pollutant parameter Total Suspended Solids

56. Total Year-to-Date discharge limitation – means the sum of the discharge mass flow rates of a pollutant on all previous days within a calendar year. For days when data has not been collected, the mass flow rates shall be assumed to be equal to the most recent calculated daily mass flow rate.

57. Treatment facility and treatment system – means all structures which contain, convey, and as necessary, chemically or physically treat mine and/or associated preparation plant drainage, which remove pollutants limited by this Permit from such drainage or wastewater. This includes all pipes, channels, ponds, tanks, and all other equipment serving such structures.

58. 24HC – means 24-hour composite sample, including any of the following:

    a. The mixing of at least 12 equal volume samples collected at constant time intervals of not more than 2 hours over a period of 24 hours;

b. A sample collected over a consecutive 24-hour period using an automatic sampler composite to one sample. As a minimum, samples shall be collected hourly and each shall be no more than one twenty-fourth (1/24) of the total sample volume collected; or

c. A sample collected over a consecutive 24-hour period using an automatic composite sampler composited proportional to flow.

59. 24-hour precipitation event – means that amount of precipitation which occurs within any 24-hour period.

60. 2-year, 24-hour precipitation event – means the maximum 24-hour precipitation event with a probable recurrence interval of once in two years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.

61. Upset – means an exceptional incident in which there is an unintentional and temporary noncompliance with technology-based permit discharge limitations because of factors beyond the control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate facilities, lack of preventive maintenance, or careless or improper operation.

62. Waters – means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the State, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, §22-22-1(b)(2). "Waters" include all "navigable waters" as defined in §502(7) of the FWPCA, 33 U.S.C. §1362(7), which are within the State of Alabama.

63. Week – means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

64. Weekly (7-day and calendar week) Average – is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The calendar week is defined as beginning on Sunday and ending on Saturday. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for the calendar week shall be included in the data for the month that contains the Saturday.

E. SEVERABILITY

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

F. PROHIBITIONS AND ACTIVIES NOT AUTHORIZED

1. Discharges from disposal or landfill activities as described in ADEM Admin. Code div. 335-13 are not authorized by this Permit unless specifically approved by the Department.

2. Relocation, diversion, or other alteration of a water of the State is not authorized by this Permit unless specifically approved by the Department.

3. Lime or cement manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.

4. Concrete or asphalt manufacturing or production and discharge of process waters from such manufacturing or production is not authorized by this Permit unless specifically approved by the Department.

5. The discharge of wastewater, generated by any process, facility, or by any other means not under the operational control of the Permittee or not identified in the application for this Permit or not identified specifically in the description of an outfall in this Permit is not authorized by this Permit.

PART IV SPECIAL REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

A. DISCHARGES TO IMPAIRED WATERS

1. This Permit does not authorize new sources or new discharges of pollutants of concern to impaired waters unless consistent with an EPA-approved or EPA-established Total Maximum Daily Load (TMDL) and applicable State law or unless compliance with the limitations and requirements of the Permit ensure that the discharge will not contribute to further degradation of the receiving stream. Impaired waters are those that do not meet applicable water quality standards and are identified on the State of Alabama's §303(d) list or on an EPA-approved or EPA-established TMDL. Pollutants of concern are those pollutants for which the receiving water is listed as impaired or contribute to the listed impairment.

2. Facilities that discharge into a receiving stream which is listed on the State of Alabama's §303(d) list of impaired waters, and with discharges that contain the pollutant(s) for which the waters are impaired, must within six (6) months of the Final §303(d) list approval, document in its BMP plan how the BMPs will control the discharge of the pollutant(s) of concern, and must ensure that there will be no increase of the pollutants of concern. A monitoring plan to assess the effectiveness of the BMPs in achieving the allocations must also be included in the BMP plan.

3. If the facility discharges to impaired waters as described above, it must determine whether a TMDL has been developed and approved or established by EPA for the listed waters. If a TMDL is approved or established during this Permit cycle by EPA for any waters into which the facility discharges, the facility must review the applicable TMDL to see if it includes requirements for control of any water discharged by the Permittee. Within six (6) months of the date of TMDL approval or establishment, the facility must notify the Department on how it will modify its BMP plan to include best management practices specifically targeted to achieve the allocations prescribed by the TMDL, if necessary. Any revised BMP plans must be submitted to the Department for review. The facility must include in the BMP plan a monitoring component to assess the effectiveness of the BMPs in achieving the allocations.

B. PRECIPITATION EVENT DISCHARGE LIMITATIONS

1. Monitoring for Claims of Precipitation Event Discharge Limitation Exemption

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

2. Precipitation Event Discharge Limitation Exemption Submittal

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

a. Persuasive evidence that the discharge or increase in the volume of a discharge was caused by an applicable 24-hour precipitation event;

b. Persuasive evidence of the amount of precipitation occurring during the applicable 24-hour precipitation event;

c. Persuasive evidence demonstrating the origin of the drainage causing a discharge;

d. The day and time at which the 24-hour precipitation event commenced and ceased;

e. The volume or amount in inches of the applicable 24-hour precipitation event; and

f. The results of monitoring conducted pursuant to Part I.A. of this Permit, if required thereby.

3. Applicable 24-Hour Precipitation Events

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

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

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

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

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

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

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

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

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

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

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

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

C. pH EXEMPTION DISCHARGE LIMITATIONS

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

D. MANGANESE EXEMPTION DISCHARGE LIMITATIONS

Limitations and monitoring requirements for total manganese do not apply if the drainage, before any treatment, normally has a pH equal to or more than 6.0 s.u. Use of this exemption must be noted on the Discharge Monitoring Report (DMR) form when submitted for each eligible outfall. Documentation of such drainage before treatment must also be submitted at the time of or prior to the associated DMR submittal.

E. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR ACUTE TOXICITY

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

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

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

1. **Test Requirements**

   a. The tests shall be performed using undiluted effluent.

   b. Any test where survival in the effluent concentration is less than 90% and statistically lower than the control indicates acute toxicity and constitutes noncompliance with this Permit.

2. **General Test Requirements**

   a. A grab sample shall be obtained for use in above biomonitoring tests. The holding time for each sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-012 or most current edition or another control water selected by the Permittee and approved by the Department.

   b. Effluent toxicity tests in which the control survival is less than 90% or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period.

   c. In the event of an invalid test, upon subsequent completion of a valid test, the results of all tests, valid and invalid, are reported with an explanation of the tests performed and results.

   d. Should results from five consecutive testing periods indicate that the effluent does not exhibit acute toxicity, the Permittee may request, in writing, that the Toxicity monitoring and reporting requirements be suspended. It remains the responsibility of the Permittee to comply with the Toxicity monitoring and reporting requirements until written authorization to suspend the monitoring and reporting is received by the Permittee from the Director.

3. **Reporting Requirements**

   a. The Permittee shall notify the Department in writing within 48 hours after toxicity has been demonstrated by the scheduled test(s).

   b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 6. Of this part, an effluent toxicity report containing the information in Section 6. Shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month in which the tests were performed.

4. **Additional Testing Requirements**

   a. If acute toxicity is indicated (noncompliance with permit limit), the Permittee shall perform two additional valid acute toxicity tests in accordance with these procedures. The toxicity tests shall be performed on new samples collected during the first discharge event after becoming aware of the acute toxicity. The additional samples shall be collected a minimum of 12 hours apart, or sooner if the discharge is not expected to continue for 12 hours. In the event that the discharge ceases prior to collection of the second additional sample, the sample shall be collected during the beginning of the next discharge event. The results of these tests shall be submitted no later than 28 days following the month in which the tests were performed. Additional testing sample

collection and analysis timeframes may be extended, as necessary, to obtain the samples during discharges.

b. After evaluation of the results of the additional tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The Permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols/guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.).

5. Test Methods

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

6. Effluent Toxicity Testing Reports

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

a. Introduction

(1) Facility Name, location and county

(2) Permit number

(3) Toxicity testing requirements of permit

(4) Name of receiving water body

(5) Contract laboratory information (if tests are performed under contract)

(i) Name of firm

(ii) Telephone number

(iii) Address

(6) Objective of test

b. Plant Operations

(1) Discharge operating schedule (if other than continuous)

(2) Volume of discharge during sample collection to include Mean daily discharge on sample collection date (MGD, CFS, GPM)

c. Source of Effluent Water and Dilution Water

(1) Effluent samples

(i) Sample point

(ii) Sample collection dates and times

(iii) Sample collection method

(iv) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)

(v) Sample temperature when received at the laboratory

(vi) Lapsed time from sample collection to delivery

(vii) Lapsed time from sample collection to test initiation

(2) Dilution Water samples

(i) Source

(ii) Collection date(s) and time(s) (where applicable)

(iii) Pretreatment (if applicable)

(iv) Physical and chemical characteristics (pH, hardness, water temperature, alkalinity, specific conductivity, etc.)

d. Test Conditions

(1) Toxicity test method utilized

(2) End point(s) of test

(3) Deviations from referenced method, if any, and reason(s)

(4) Date and time test started

(5) Date and time test terminated

(6) Type and volume of test chambers

(7) Volume of solution per chamber

(8) Number of organisms per test chamber

(9) Number of replicate test chambers per treatment

(10) Test temperature, pH and dissolved oxygen as recommended by the method (to include ranges)

(11) Feeding frequency, and amount and type of food

(12) Light intensity (mean)

e. Test Organisms

(1) Scientific name

(2) Life stage and age

(3) Source

(4) Disease treatment (if applicable)

f. Quality Assurance

(1) Reference toxicant utilized and source

(2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)

(3) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.

(4) Physical and chemical methods utilized

g. Results

(1) Provide raw toxicity data in tabular form, including daily records of affected organisms in each concentration (including controls) and replicate

(2) Provide table of endpoints: LC50, NOAEC, Pass/Fail (as required in the applicable NPDES permit)

(3) Indicate statistical methods used to calculate endpoints

(4) Provide all physical and chemical data required by method

(5) Results of test(s) (LC50, NOAEC, Pass/Fail, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD)

h. Conclusions and Recommendations

(1) Relationship between test endpoints and permit limits

(2) Action to be taken

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

NPDES INDIVIDUAL PERMIT RATIONALE

Company Name:	**Drummond Company, Inc.**
Facility Name:	**Short Creek Preparation Plant**
County:	**Jefferson**
Permit Number:	**AL0043711**
Prepared by:	**Clint Dear**
Date:	**April 1, 2022**
Receiving Waters:	**Locust Fork, Unnamed Tributary to Locust Fork, Short Creek, Fishtrap Branch, and Unnamed Tributary to Fishtrap Branch**
Permit Coverage:	**Existing Source Coal Preparation Plant, Wet Preparation, Transportation and Storage, and Associated Areas**
SIC Code:	**1221**

The Department has made a tentative determination that the available information is adequate to support modification of this permit. The modification covers the addition of Outfalls 011-1, 013-1, 014-1, and 015-1. The modification also covers the addition of Total Recoverable Mercury for Outfall 002-1.

This proposed permit covers an existing source coal preparation plant, wet preparation, transportation and storage, and associated areas.

This proposed permit authorizes treated discharges into stream segments, other State waters, or local watersheds that currently have a water quality use classification of Fish & Wildlife (F&W) (ADEM Admin. Code ch. 335-6-11). If the requirements of the proposed permit are fully implemented, the facility will not discharge pollutants at levels that will cause or contribute to a violation of this classification.

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

The standard discharge limitations for the daily maximum and minimum of pH, and the monthly average and daily maximum of Total Suspended Solids (TSS), Total Iron as Fe, and Total Manganese as Mn are based on the New Source Performance Standards (NSPS) Effluent Limit Guidelines (ELGs) found in 40 CFR Part 434.25(a) for coal preparation plant drainage.

However, the Permittee may submit documentation that discharges from the site prior to treatment normally has a pH equal to or more than 6.0 s.u. Part IV.E. of the proposed permit provides that limitations and monitoring requirements for Total Manganese as Mn do not apply if the Permittee has provided the documentation of such drainage. In such a case, the discharge limitations for the daily maximum and minimum of pH and Total Iron as Fe are based on the NSPS ELGs found in 40 CFR Part 434.25(b).

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

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

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

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

The applicant has, in accordance with 40 CFR Part 122.21 and their NPDES permit application, submitted representative effluent and background stream data for metals, cyanide, and total phenols as part of the application. The Department has acknowledged that the other Part A, B, and C pollutants listed in EPA Form 2C and 2D are not believed to be present in the waste stream due to the processes involved in the regulated activity. Therefore, testing for the other Part A, B, and C pollutants listed in EPA Form 2C and 2D is not required. The Department has reviewed available data in ALAWADR, ADEM's water quality database, and found nothing to contradict the data submitted by the applicant.

The Department completed a reasonable potential analysis (RPA) of the discharges based on the laboratory data provided in the application. The RPA indicates whether or not pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream WQS. Based on the analytical data, it appears that reasonable potential may exist to cause an in-stream water quality criteria exceedance for Mercury. As a result, the Department is imposing the following Water Quality-Based Effluent Limitations (WQBELs): Total Recoverable Mercury (Outfall 002-1). The WQBELs were calculated as follows:

$$c_{dmax} = \frac{(Q_d + Q_s) \times c_r - Q_s \times c_s}{Q_d}$$

where c_{dmax} = limitation ($\mu g/L$)
Q_d = expected average daily discharge flow rate (cfs)
Q_s = calculated or statistical stream flow (cfs)
c_r = water quality criterion ($\mu g/L$)
c_s = concentration of pollutant upstream of discharge ($\mu g/L$)

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

In accordance with ADEM Admin. Code r. 335-6-3-.07 the design professional engineer (PE), as evidenced by their seal and/or signature on the application, has accepted full responsibility for the effectiveness of the waste treatment facility to treat the Permittee's effluent to meet NPDES permit limitations and requirements, and to fully comply with Alabama's WQS, when such treatment facilities are properly operated.

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

reduction of pollutants in the discharge to a level that reduces the potential of contributing to or causing a violation of applicable State WQS.

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

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

This proposed permit authorizes treated discharges into Locust Fork (AL03160111-0413-112), a stream segment which has an approved Total Maximum Daily Load (TMDL) for Nutrients. 40 CFR 122.4(i) prohibits issuance of an NPDES permit to a new source or a new discharge if that treated discharge will cause or contribute to a violation of applicable State water quality standards in the receiving water. The TMDL does not consider discharges from a regulated activity of this type to be a significant contributor of nutrients.

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

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

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

ANTIDEGRADATION RATIONALE

Company Name:	**Drummond Company, Inc.**
Facility Name:	**Short Creek Preparation Plant**
County:	**Jefferson**
Permit Number:	**AL0043711**
Prepared by:	**Clint Dear**
Date:	**January 12, 2022**
Receiving Waters:	**Locust Fork, Unnamed Tributary to Locust Fork, Short Creek, Fishtrap Branch, and Unnamed Tributary to Fishtrap Branch**
Stream Category:	**Tier II as defined by ADEM Admin. Code 335-6-10-.12**
Discharge Description:	**This proposed permit covers an existing source coal preparation plant, wet preparation, transportation and storage, and associated areas which discharge to surface waters.**

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

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

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

1. The Permittee states that the operation will have the potential to increase employment by approximately 350 employees.

2. The Permittee states an estimated $17,187,000 of taxes/fees will be generated for the mine operation.

3. The Permittee states that the operation will benefit the community by supplying labor and materials to meet the needs of the operations. This will increase the local tax revenue, theryby helping to fund governmental services. The consistent demands for labor will maintain employment levels.

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

Reviewed By: Eric Reedy

Date: 03/21/22

Facility Name: Drummond Company, Inc.

NPDES No.: AL0043771 Outfall: 002-1 [1, 2, 3, 4]

				Freshwater F&W classification.		Freshwater Acute (µg/l) Q_s =1Q10				Freshwater Chronic (µg/l) Q_s = 7Q10						Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant[4] (C_{dmax})	Water Quality Criteria (C_f)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant[4] (C_{davg})	Water Quality Criteria (C_f)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_f)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.73E+02	3.73E+02	7.47E+01	No
2	Arsenic		YES	0	0.93	340.000	47805.501	9561.100	No	0	0.93	150.000	150.000	30.000	No	3.03E-01	4.26E+01	8.52E+00	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	2.014	283.139	56.628	No	0	0	0.246	0.246	0.049	No	-	-	-	-
5	Chromium/ Chromium III			0	0	569.763	80111.260	16022.252	No	0	0	74.115	74.115	14.823	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	2249.671	449.934	No	0	0	11.000	11.000	2.200	No	-	-	-	-
7	Copper			0	0	13.439	1889.599	377.920	No	0	0	8.956	8.956	1.791	No	1.30E+03	1.30E+03	2.60E+02	No
8	Lead			0	0	64.581	9080.427	1816.085	No	0	0	2.517	2.517	0.503	No	-	-	-	-
9	Mercury	YES		0	0.014	2.400	337.451	67.490	No	0	0.014	0.012	0.012	0.002	Yes	4.24E-02	4.24E-02	8.48E-03	Yes
10	Nickel			0	0	468.236	65836.018	13167.204	No	0	0	52.007	52.007	10.401	No	9.93E+02	9.93E+02	1.99E+02	No
11	Selenium			0	0	20.000	2812.088	562.418	No	0	0	5.000	5.000	1.000	No	2.43E+03	2.43E+03	4.86E+02	No
12	Silver			0	0	3.217	452.290	90.458	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	2.74E-01	5.47E-02	No
14	Zinc			0	0	355.092	49927.543	9985.509	No	0	0	118.139	118.139	23.628	No	1.49E+04	1.49E+04	2.98E+03	No
15	Cyanide			0	0	22.000	3093.297	618.659	No	0	0	5.200	5.200	1.040	No	9.33E+03	9.33E+03	1.87E+03	No
16	Total Phenolic Compounds			0	24.9	-	-	-	-	0	24.9	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-

[1] Outfall 002-1 discharges to an UT to Locust Fork. The 7Q10 for the receiving steam is 0 cfs. The Mean Annual Flow for the receiving stream is 2.16 cfs. This is the receiving stream flow value used in the calculations.

[2] Outfall 002-1 has a discharge flow rate of 0.01 MGD. This is the discharge flow rate used in the calculations.

[3] A hardness of 100 mg/L was used in the calculations based on expected stream hardness in this portion of the state.

[4] Discharge data for all parameters are a result of samples obtained from Outfall 001-1 at Short Creek Preparation Plant on August 4, 2021.

Facility Name: **Drummond Company, Inc.**

NPDES No.: **AL0043771** Outfall: **001-1** [1, 2, 3, 4]

																Human Health Consumption Fish only (µg/l)			
Freshwater F&W classification.				Freshwater Acute (µg/l) Q_s =1Q10						Freshwater Chronic (µg/l) Q_s = 7Q10						Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant[4] (C_{dmax})	Water Quality Criteria (C_T)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})[4]	Water Quality Criteria (C_T)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_T)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony		YES	1.48	0	-	-	-	-	1.48	0	-	-	-	-	3.73E+02	1.88E+05	3.76E+04	No
2	Arsenic			1	0.93	340.000	128555.385	25711.077	No	0.767	0.93	150.000	75406.506	15081.301	No	3.03E-01	-1.09E+04	2.19E+03	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0.726	0	2.014	489.054	97.811	No	0.726	0	0.246	241.814	48.363	No	-	-	-	-
5	Chromium/ Chromium III			0.823	0	569.763	215752.425	43150.485	No	0.8005	0	74.115	37045.543	7409.109	No	-	-	-	-
6	Chromium/ Chromium VI			0.823	0	16.000	5756.191	1151.238	No	0.8005	0	11.000	5154.492	1030.898	No	-	-	-	-
7	Copper			1.56	0	13.439	4506.315	901.263	No	1.19	0	8.956	3925.136	785.027	No	1.30E+03	6.56E+05	1.31E+05	No
8	Lead			0.697	0	64.581	24226.707	4845.341	No	0.697	0	2.517	920.142	184.028	No	-	-	-	-
9	Mercury			0	0.014	2.400	910.120	182.024	No	0	0.014	0.012	6.063	1.213	No	4.24E-02	2.14E+01	4.29E+00	No
10	Nickel			1.96	0	468.236	176821.419	35364.284	No	1.865	0	52.007	25337.815	5067.563	No	9.93E+02	5.01E+05	1.00E+05	No
11	Selenium			1.9	0	20.000	6865.718	1373.144	No	1.9	0	5.000	1568.295	313.659	No	2.43E+03	1.23E+06	2.45E+05	No
12	Silver			1.35	0	3.217	709.255	141.851	No	1.35	0	-	-	-	-	-	-	-	-
13	Thallium			0.641	0	-	-	-	-	0.641	0	-	-	-	-	2.74E-01	-1.85E+02	3.70E+01	No
14	Zinc			2.35	0	355.092	133768.036	26753.607	No	2.35	0	118.139	58509.208	11701.842	No	1.49E+04	7.52E+06	1.50E+06	No
15	Cyanide			0	0	22.000	8342.762	1668.552	No	0	0	5.200	2627.501	525.500	No	9.33E+03	4.72E+06	9.43E+05	No
16	Total Phenolic Compounds			0	24.9	-	-	-	-	0	24.9	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-

[1] Outfall 001-1 discharges to Locust Fork. The 7Q10 for the receiving steam is 31.21 cfs. The Mean Annual Flow for the receiving stream is 1459.23 cfs. This is the receiving stream flow value used in the calculations.

[2] Outfall 001-1 has a discharge flow rate of 0.04 MGD. This is the discharge flow rate used in the calculations.

[3] A hardness of 100 mg/L was used in the calculations based on expected stream hardness in this portion of the state.

[4] Discharge data for all parameters are a result of samples obtained from Outfall 001-1 at Short Creek Preparation Plant on August 4, 2021.

Facility Name: Drummond Company, Inc.

NPDES No.: AL0043771 Outfall: 011-1 [1, 2, 3, 4]

				Freshwater F&W classification.		Freshwater Acute (µg/l) Q_s =1Q10				Freshwater Chronic (µg/l) Q_s = 7Q10						Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant[4] (C_{dmax})	Water Quality Criteria (C_t)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})[4]	Water Quality Criteria (C_t)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_t)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony			0	0	-	-	-	-	0	0	-	-	-	-	3.73E+02	3.73E+02	7.47E+01	No
2	Arsenic		YES	0	0	340.000	340.000	68.000	No	0	0	150.000	150.000	30.000	No	3.03E-01	2.63E+00	5.25E-01	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	2.014	2.014	0.403	No	0	0	0.246	0.246	0.049	No	-	-	-	-
5	Chromium/ Chromium III			0	0	569.763	569.763	113.953	No	0	0	74.115	74.115	14.823	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	16.000	3.200	No	0	0	11.000	11.000	2.200	No	-	-	-	-
7	Copper			0	0	13.439	13.439	2.688	No	0	0	8.956	8.956	1.791	No	1.30E+03	1.30E+03	2.60E+02	No
8	Lead			0	0	64.581	64.581	12.916	No	0	0	2.517	2.517	0.503	No	-	-	-	-
9	Mercury			0	0	2.400	2.400	0.480	No	0	0	0.012	0.012	0.002	No	4.24E-02	4.24E-02	8.48E-03	No
10	Nickel			0	0	468.236	468.236	93.647	No	0	0	52.007	52.007	10.401	No	9.93E+02	9.93E+02	1.99E+02	No
11	Selenium			0	0	20.000	20.000	4.000	No	0	0	5.000	5.000	1.000	No	2.43E+03	2.43E+03	4.86E+02	No
12	Silver			0	0	3.217	3.217	0.643	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	2.74E-01	5.47E-02	No
14	Zinc			0	0	355.092	355.092	71.018	No	0	0	118.139	118.139	23.628	No	1.49E+04	1.49E+04	2.98E+03	No
15	Cyanide			0	0	22.000	22.000	4.400	No	0	0	5.200	5.200	1.040	No	9.33E+03	9.33E+03	1.87E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-

[1] Outfall 011-1 discharges to Short Creek. The 7Q10 for the receiving steam is 0.227 cfs. The Mean Annual Flow for the receiving stream is 27.4 cfs. This is the receiving stream flow value used in the calculations.

[2] Outfall 011-1 has a discharge flow rate of 2.31 MGD. This is the discharge flow rate used in the calculations.

[3] A hardness of 100 mg/L was used in the calculations based on expected stream hardness in this portion of the state.

[4] Discharge data for all parameters are a result of samples obtained from Outfall 011-1 at Short Creek Preparation Plant on July 14, 2021.

Facility Name: Drummond Company, Inc.

NPDES No.: AL0043771 Outfall: 013-1 [1, 2, 3, 4]

				Freshwater F&W classification.		Freshwater Acute (µg/l) Q_s =1Q10				Freshwater Chronic (µg/l) Q_s = 7Q10						Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant[4] (C_{dmax})	Water Quality Criteria (C_i)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})[4]	Water Quality Criteria (C_i)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_i)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony			0	0	-	-	-	-	0	0	-	-	-	-	3.73E+02	3.73E+02	7.47E+01	No
2	Arsenic		YES	0	0	340.000	340.000	68.000	No	0	0	150.000	150.000	30.000	No	3.03E-01	2.12E+01	4.24E+00	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	2.014	2.014	0.403	No	0	0	0.246	0.246	0.049	No	-	-	-	-
5	Chromium/ Chromium III			0	0	569.763	569.763	113.953	No	0	0	74.115	74.115	14.823	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	16.000	3.200	No	0	0	11.000	11.000	2.200	No	-	-	-	-
7	Copper			0	0	13.439	13.439	2.688	No	0	0	8.956	8.956	1.791	No	1.30E+03	1.30E+03	2.60E+02	No
8	Lead			0	0	64.581	64.581	12.916	No	0	0	2.517	2.517	0.503	No	-	-	-	-
9	Mercury			0	0	2.400	2.400	0.480	No	0	0	0.012	0.012	0.002	No	4.24E-02	4.24E-02	8.48E-03	No
10	Nickel			0	0	468.236	468.236	93.647	No	0	0	52.007	52.007	10.401	No	9.93E+02	9.93E+02	1.99E+02	No
11	Selenium			0	0	20.000	20.000	4.000	No	0	0	5.000	5.000	1.000	No	2.43E+03	2.43E+03	4.86E+02	No
12	Silver			0	0	3.217	3.217	0.643	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	2.74E-01	5.47E-02	No
14	Zinc			0	0	355.092	355.092	71.018	No	0	0	118.139	118.139	23.628	No	1.49E+04	1.49E+04	2.98E+03	No
15	Cyanide			0	0	22.000	22.000	4.400	No	0	0	5.200	5.200	1.040	No	9.33E+03	9.33E+03	1.87E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-

[1] Outfall 013-1 discharges to Fishtrap Branch. The 7Q10 for the receiving steam is 0 cfs. The Mean Annual Flow for the receiving stream is 3.2 cfs. This is the receiving stream flow value used in the calculations.

[2] Outfall 013-1 has a discharge flow rate of 0.03 MGD. This is the discharge flow rate used in the calculations.

[3] A hardness of 100 mg/L was used in the calculations based on expected stream hardness in this portion of the state.

[4] Discharge data for all parameters are a result of samples obtained from Outfall 011-1 at Short Creek Preparation Plant on July 14, 2021.

Facility Name: **Drummond Company, Inc.**

NPDES No.: AL0043771 Outfall: 014-1 [1, 2, 3, 4]

				Freshwater F&W classification.			Freshwater Acute (µg/l) Q_s =1Q10					Freshwater Chronic (µg/l) Q_s = 7Q10						Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant[4] (C_{dmax})	Water Quality Criteria (C_f)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant[4] (C_{davg})	Water Quality Criteria (C_f)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_f)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.73E+02	3.73E+02	7.47E+01	No
2	Arsenic			0	0	340.000	340.000	68.000	No	0	0	150.000	150.000	30.000	No	3.03E-01	3.77E+00	7.54E-01	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	2.014	2.014	0.403	No	0	0	0.246	0.246	0.049	No	-	-	-	-
5	Chromium/ Chromium III			0	0	569.763	569.763	113.953	No	0	0	74.115	74.115	14.823	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	16.000	3.200	No	0	0	11.000	11.000	2.200	No	-	-	-	-
7	Copper			0	0	13.439	13.439	2.688	No	0	0	8.956	8.956	1.791	No	1.30E+03	1.30E+03	2.60E+02	No
8	Lead			0	0	64.581	64.581	12.916	No	0	0	2.517	2.517	0.503	No	-	-	-	-
9	Mercury			0	0	2.400	2.400	0.480	No	0	0	0.012	0.012	0.002	No	4.24E-02	4.24E-02	8.48E-03	No
10	Nickel			0	0	468.236	468.236	93.647	No	0	0	52.007	52.007	10.401	No	9.93E+02	9.93E+02	1.99E+02	No
11	Selenium			0	0	20.000	20.000	4.000	No	0	0	5.000	5.000	1.000	No	2.43E+03	2.43E+03	4.86E+02	No
12	Silver			0	0	3.217	3.217	0.643	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	2.74E-01	5.47E-02	No
14	Zinc			0	0	355.092	355.092	71.018	No	0	0	118.139	118.139	23.628	No	1.49E+04	1.49E+04	2.98E+03	No
15	Cyanide			0	0	22.000	22.000	4.400	No	0	0	5.200	5.200	1.040	No	9.33E+03	9.33E+03	1.87E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-

[1] Outfall 014-1 discharges to an UT to Fishtrap Branch. The 7Q10 for the receiving steam is 0 cfs. The Mean Annual Flow for the receiving stream is 0.531 cfs. This is the receiving stream flow value used in the calculations.

[2] Outfall 014-1 has a discharge flow rate of 0.03 MGD. This is the discharge flow rate used in the calculations.

[3] A hardness of 100 mg/L was used in the calculations based on expected stream hardness in this portion of the state.

[4] Discharge data for all parameters are a result of samples obtained from Outfall 011-1 at Short Creek Preparation Plant on July 14, 2021.

Facility Name: Drummond Company, Inc.

NPDES No.: AL0043771 Outfall: 015-1 [1, 2, 3, 4]

				Freshwater F&W classification.			Freshwater Acute (µg/l) Q_s =1Q10					Freshwater Chronic (µg/l) Q_s = 7Q10						Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant[4] (C_{dmax})	Water Quality Criteria (C_t)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})[4]	Water Quality Criteria (C_t)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_t)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.73E+02	3.73E+02	7.47E+01	No
2	Arsenic		YES	0	0	340.000	340.000	68.000	No	0	0	150.000	150.000	30.000	No	3.03E-01	3.61E+01	7.23E+00	No
3	Beryllium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	2.014	2.014	0.403	No	0	0	0.246	0.246	0.049	No	-	-	-	-
5	Chromium/ Chromium III			0	0	569.763	569.763	113.953	No	0	0	74.115	74.115	14.823	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	16.000	3.200	No	0	0	11.000	11.000	2.200	No	-	-	-	-
7	Copper			0	0	13.439	13.439	2.688	No	0	0	8.956	8.956	1.791	No	1.30E+03	1.30E+03	2.60E+02	No
8	Lead			0	0	64.581	64.581	12.916	No	0	0	2.517	2.517	0.503	No	-	-	-	-
9	Mercury			0	0	2.400	2.400	0.480	No	0	0	0.012	0.012	0.002	No	4.24E-02	4.24E-02	8.48E-03	No
10	Nickel			0	0	468.236	468.236	93.647	No	0	0	52.007	52.007	10.401	No	9.93E+02	9.93E+02	1.99E+02	No
11	Selenium			0	0	20.000	20.000	4.000	No	0	0	5.000	5.000	1.000	No	2.43E+03	2.43E+03	4.86E+02	No
12	Silver			0	0	3.217	3.217	0.643	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	2.74E-01	5.47E-02	No
14	Zinc			0	0	355.092	355.092	71.018	No	0	0	118.139	118.139	23.628	No	1.49E+04	1.49E+04	2.98E+03	No
15	Cyanide			0	0	22.000	22.000	4.400	No	0	0	5.200	5.200	1.040	No	9.33E+03	9.33E+03	1.87E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-

[1] Outfall 015-1 discharges to an UT to Locust Fork. The 7Q10 for the receiving steam is 0 cfs. The Mean Annual Flow for the receiving stream is 1.83 cfs. This is the receiving stream flow value used in the calculations.

[2] Outfall 015-1 has a discharge flow rate of 0.01 MGD. This is the discharge flow rate used in the calculations.

[3] A hardness of 100 mg/L was used in the calculations based on expected stream hardness in this portion of the state.

[4] Discharge data for all parameters are a result of samples obtained from Outfall 011-1 at Short Creek Preparation Plant on July 14, 2021.

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

Instructions: This form should be used to submit an application for an NPDES individual permit to authorize discharges from surface & underground mineral, ore, or mineral product mining, quarrying, excavation, borrowing, hydraulic mining, storage, processing, preparation, recovery, handling, loading, storing, or disposing activities, and associated areas including pre-mining site development, construction, excavation, clearing, disturbance, and reclamation. Please complete all questions. Respond with "N/A" as appropriate. Incomplete or incorrect answers or missing signatures will delay processing. Attach additional comments or information as needed. If space is insufficient, continue on an attached sheet(s) as necessary. Commencement of activities applied for as detailed in this application are not authorized until permit coverage has been issued by the Department. Please type or print legibly in blue or black ink.

R#21-538648
$7,875.00

Purpose of this Application

- ☐ Initial Permit Application for New Facility
- ☐ Initial Permit Application for Existing Facility (*e.g.*, facility previously permitted less than 5 acres)
- ☒ Modification of Existing Permit
- ☐ Reissuance of Existing Permit
- ☐ Reissuance & Modification Existing Permit
- ☐ Reissuance & Transfer of Existing Permit
- ☐ Revocation and Reissuance of Existing Permit
- ☐ Other _____

I. GENERAL INFORMATION

NPDES Permit Number (Not applicable if initial permit application):	County(s) in which Facility is Located:
AL 0043711	JEFFERSON

RECEIVED
SEP 24 2021
STORM WATER MANAGEMENT BRANCH

Company/Permittee and Facility Information

Company/Permittee Name			Facility Name		
DRUMMOND COMPANY, INC.			SHORT CREEK PREPARATION PLANT		
Mailing Address of Company/Permittee:			Physical Address of Operation (as near as possible to main entrance):		
P. O. BOX 1549			2250 SHORT CREEK ROAD		
City	State	Zip Code	City	State	Zip
JASPER	AL	35502	MULGA	AL	35118
Permittee Phone Number	Permittee Fax Number:		Latitude and Longitude of Main Entrance:		
205-387-0501	205-384-2155		33° 34' 36"	87° 04' 39"	

Responsible Official (RO) Information

RO Name (as described on Page 12 of this application):			RO Official Title:		
DAVID MUNCHER			VICE PRESIDENT - OPERATIONS SUPPORT		
Mailing Address:			Physical Address:		
P. O. BOX 1549			3000 HWY. 118 E.		
City	State	Zip Code	City	State	Zip Code
JASPER	AL	35502	JASPER	AL	35504
Phone Number:	Fax Number:		Email Address:		
205-387-0501	205-384-2155		dmuncher@drummondco.com		

Facility Contact Information

Facility Contact Name:			Facility Contact Title:	
KEITH MADISON			DIRECTOR-PERMITTING & ENVIRONMENTAL COMPLIANCE	
Physical Address:			Phone Number:	Fax Number:
3000 HWY. 118 E.			205-384-2470	205-384-2155
City	State	Zip Code	Email Address:	
JASPER	AL	35504	kmadison@drummondco.com	

II. MEMBER INFORMATION

A. Identify the name, title/position, and unless waived in writing by the Department, the resident address of every officer (a PO Box is not acceptable), general partner, LLP partner, LLC member, investor, director, or person performing a function similar to a director, of the applicant, and each person who is the record or beneficial owner of 10 percent or more of any class of voting stock of the applicant, or any other responsible official(s) of the applicant with legal or decision making responsibility or authority for the facility:

Name	Title/Position	Physical Address of Residence
SEE Page 2a of 12		

B. Other than the "Company/Permittee" listed in Part I, identify the name of each corporation, partnership, association, and single proprietorship for which any individual identified in Part II.A. is or was an officer, general partner, LLP partner, LLC member, investor, director, or individual performing a function similar to a director, or principal (10% or more) stockholder, that had an Alabama NPDES permit at any time during the five year (60 month) period immediately preceding the date on which this form is signed:

Name of Corporation, Partnership, Association, or Single Proprietorship	Name of Individual from Part II.A	Title/Position in Corporation, Partnership, Association, or Single Proprietorship
SEE Page 2b of 12		

III. LEGAL STRUCTURE OF APPLICANT

A. Indicate the legal structure of the "Company/Permittee" listed in Part I:

☒ Corporation ☐ Association ☐ Individual ☐ Single Proprietorship ☐ Partnership ☐ LLP ☐ LLC

☐ Government Agency _____ ☐ Other _____

B. If not an individual, single proprietorship, or government agency, is the "Company/Permittee" listed in Part I. properly registered and in good standing with the Alabama Secretary of State's office. **(If the answer is "No," attach a letter of explanation.)** ☒ Yes ☐ No

C. Parent Corporation and Subsidiary Corporations of Applicant, if any:

D. Landowner(s):

DRUMMOND COMPANY, INC.; COMMERCIAL LAND COMPANY, INC.

E. Sub-contractor(s)/Operator(s), if known:

N/A

IV. COMPLIANCE HISTORY

A. Has the applicant ever had any of the following:

Yes	No		
☐	☒	(1)	An Alabama NPDES, SID, or UIC permit suspended or terminated?
☐	☒	(2)	An Alabama or federal environmental permit suspended/terminated?
☐	☒	(3)	An Alabama State Oil & Gas Board permit or other approval suspended or terminated?
☐	☒	(4)	An Alabama or federal performance/environmental bond, or similar security deposited in lieu of a bond, or portion thereof, forfeited?

(If the response to any item of Part IV.A. is "Yes," attach a letter of explanation.)

B. Identify every Warning Letter, Notice of Violation (NOV), Administrative Action, or litigation issued to the applicant, parent corporation, subsidiary, general partner, LLP partner, or LLC Member and filed by ADEM or EPA during the three year (36 month) period preceding the date on which this form is signed. Indicate the date of issuance, briefly describe alleged violations, list actions (if any) to abate alleged violations, and indicate date of final resolution:

NONE

Drummond Company. Inc. Officers and Directors

*Chief Executive Officer,	Richard L. Mullen 120 N. Walston Bridge Rd., Jasper, AL 35504
*President-Mining	Ron Damron 120 N. Walston Bridge Rd., Jasper, AL 35504
*Executive Vice President, Director (Chairman)	John H. Drummond 120 N. Walston Bridge Rd., Jasper, AL 35504
*Executive Vice President, Chief Legal Officer, Secretary	Bruce C. Webster 120 N. Walston Bridge Rd., Jasper, AL 35504
*Chief Commercial Officer, Director	Nathaniel Drummond 120 N. Walston Bridge Rd., Jasper, AL 35504
Chief Adm. Officer, Sr. Vice President	Johnny L. Coffey 120 N. Walston Bridge Rd., Jasper, AL 35504
Vice President, General Counsel, Assistant Secretary	Blake Andrews 120 N. Walston Bridge Rd., Jasper, AL 35504
*President - ABC Coke Division	Richard R. Owens 120 N. Walston Bridge Rd., Jasper, AL 35504
*Vice President – ABC- Coke Division Operations	Dean Bishop 120 N. Walston Bridge Rd., Jasper, AL 35504
Treasurer	Scott Stanfield 120 N. Walston Bridge Rd., Jasper, AL 35504
Senior Vice President, Chief Accounting Officer	Kenneth P. Dortch 120 N. Walston Bridge Rd., Jasper, AL 35504
Chief Financial Officer, Exec. Vice President	Allan Lang 120 N. Walston Bridge Rd., Jasper, AL 35504
Vice President – Supply Chain Mgmt.	Ken Maddox 120 N. Walston Bridge Rd., Jasper, AL 35504
*Vice President – Operations Support	David Muncher 120 N. Walston Bridge Rd., Jasper, AL 35504
Sr. Vice President, Corp. Controller, Assistant Secretary	Matt Rohling 120 N. Walston Bridge Rd., Jasper, AL 35504
Senior Vice President – Risk Mgmt. & Corp. Soc. Responsibility	Carolina Riano 120 N. Walston Bridge Rd., Jasper, AL 35504

Drummond Company, Inc. Officers and Directors

Vice President – Corporate Social Responsibility	Paulo Gonzalez 120 N. Walston Bridge Rd., Jasper, AL 35504
Vice President – Land Dev.-Florida	Leonard Mass 120 N. Walston Bridge Rd., Jasper, AL 35504
Vice President – Human Resources	Terry Whitt 120 N. Walston Bridge Rd., Jasper, AL 35504
Assistant Secretary	Curtis W. Jones 120 N. Walston Bridge Rd., Jasper, AL 35504
Director (Vice Chairman)	John R. Davidson 120 N. Walston Bridge Rd., Jasper, AL 35504
Director	Patrick Drummond 120 N. Walston Bridge Rd., Jasper, AL 35504
Director	Heman Lin Drummond 120 N. Walston Bridge Rd., Jasper, AL 35504
Director	Beth Stukes 120 N. Walston Bridge Rd., Jasper, AL 35504
Director	Charles Bishop 120 N. Walston Bridge Rd., Jasper, AL 35504
Director	J. Michael Tracy 120 N. Walston Bridge Rd., Jasper, AL 35504
Director	Lewis Wayne Isaacs 120 N. Walston Bridge Rd., Jasper, AL 35504

Agent:

Bruce C. Webster *
1000 Urban Center Drive, Ste. 300
Birmingham, AL 35242

* Indicates authority to prevent and abate violations.

Name of corporation, partnership, association, or single proprietorship	Name of Individual (from Item I)	Title/position in corporation, partnership, association, or single proprietorship
Shannon, LLC.	Kenneth Dortch	Member of Mgt. Committee
Twin Pines II, LLC.	Kenneth Dortch	Member of Mgt. Committee
Yeshic, LLC.	Kenneth Dortch	Member of Mgt. Committee
Evergreen Mining, LLC	Kenneth Dortch	Sr. Vice President – Sr. Accounting Officer
Evergreen Mining, LLC	David Muncher	Vice President – Operations Support
Shannon, LLC.	David Muncher	Member of Mgt. Committee
Twin Pines II, LLC.	David Muncher	Member of Mgt. Committee
Yeshic, LLC.	David Muncher	Member of Mgt. Committee
Quinton Mining, LLC	David Muncher	President
Shepherd Bend, LLC	David Muncher	President

MINE NAME	ASMC NUMBER	MSHA NUMBER	ADEM NUMBER
DRUMMOND CO. INC.			
Arkadelphia 66	P-3178-25-86-S	01-01091	AL0027057
Natural Bridge 738	P-3179-67-99-S	01-00315	AL0002453
Lindbergh (Transferred)	P-3180-01-98-S	01-02354	AL0043958
Gilmore (Transferred)	P-3181-01-95-S	01-01987	AL0042811
Short Creek	P-3182-01-03-S	01-00742	AL0029289
Flat Top	P-3183-01-03-S	01-00627	AL0022845
Morris	P-3185-01-98-S	01-00760	AL0029238
Kellerman 1570 #1	P-3186-63-91-S	01-00560	AL0022870
Cedrum 2570 (Townley)	P-3187-64-98-S	01-01270	AL0024805
Kellerman Scissors Fault	P-3188-63-93-S	01-01086	AL0022870
Arkadelphia 5761	P-3189-25-08-S	01-00163	AL0022837
East Brookwood	P-3190-63-89-S	01-00558	AL0041688
Manchester (Transferred)	P-3191-64-98-S	01-01362	AL0025399
Mill Creek	P-3192-64-88-S	01-01986	AL0026964
Beltona #2	P-3193-01-03-S	01-00406	AL0022900
Cedrum 8750	P-3194-64-03-S	01-01985	AL0026981
Bagley Bend (North)	P-3197-01-92-S	01-01256	AL0023931
Sayre Prep. Plant	P-3198-01-23-P	01-01254	AL0030937
Kellerman Prep. Plant	P-3199-63-08-P	01-00563	AL0022861
Short Creek Prep. Plant	P-3200-01-23-P	01-00742	AL0043711
Arkadelphia Prep. Plant	P-3202-25-23-P	01-00163	AL0022837 (AL0022888
Chetopa	P-3248-01-03-U	01-00323	AL0003379
Segco #1	P-3249-64-88-U	01-00347	AL0003131 Transferred to APCO
Mary Lee #1	P-3250-64-03-U	01-00515	AL0003387
Knob #1	P-3251-01-18-S	01-01037	AL0024287

MINE NAME	ASMC NUMBER	MSHA NUMBER	ADEM NUMBER
Gorgas #7	P-3252-64-03-U	01-00340	AL0003794
Mary Lee #2	P-3253-64-98-U	01-00821	AL0026531
Maxine	P-3254-01-86-U	01-00322	AL0001724
Port Warrior Loading	P-3318-01-98-P	01-02901	AL0041351
Knob #2	P-3445-01-20-S	01-01037	AL0024287
Dorsey Creek	P-3452-25-96-S	No Permit	AL0050474
Cedrum 2570 (Holly Grove)	P-3462-64-90-S	01-01270	AL0024805
Short Creek (South)	P-3492-01-01-S	01-00742	AL0029289
Mill Creek (Spillway)	P-3511-64-16-S	01-01986	AL0026964
Short Creek (East)	P-3525-01-96-S	01-00742	AL0029289
Prospect Loading Facility	P-3530-64-97-P	01-02332	AL0048259
Bryan Loading Facility	P-3531-64-97-P	01-01256	AL0043940
Cordova Loading Facility	P-3532-64-97-P	01-00114	AL0048267
Kellerman 1570 #2 (Page)	P-3550-63-03-S	01-01086	AL0057461
Cedrum #3	P-3568-64-98-S	01-01270	AL0024805
Bagley Bend (Bibby)	P-3574-01-93-S/U	01-02776	AL0023931
Kellerman 1570-1	P-3577-63-98-S	01-00560	AL0022870
Mill Creek 1570 #2	P-3589-64-95-S	01-01986	AL0026972
Cedrum #4	P-3602-64-00-S	01-01270	AL0024805
Kellerman 1570 No. 1	P-3606-63-00-S	01-00560	AL0022870
Black Creek No. 2	P-3609-01-95-U	01-02829	AL0059145
Black Creek No. 3	No Permit	N/A	AL0061760
Beltona 1570	P-3611-01-00-S	01-00406	AL0022900
Mine #89 (Maxine Fines)	P-3629-01-25-S	01-02806	AL0060402
Short Creek North	P-3641-01-XX-S	01-00742	AL0029289

MINE NAME	ASMC NUMBER	MSHA NUMBER	ADEM NUMBER
Kellerman No. 2	P-3648-63-96-S	01-01086	AL0061832 AL0069833
Arkadelphia 5761 (NE)	P-3657-25-96-S	01-00163	AL0022837
Flat Top South	P-3665-01-11-S	01-00627	AL0022845 AL0070602
Shoal Creek	P-3666-01-16-U	01-02901	AL0062421
Kell. No. 2 (Peterson)	P-3728-63-99-S	01-03013	AL0067059 AL0072583
Surface Mine No. 1	P-3734-64-99-S	01-03019	AL0067547
Cedrum #5	P-3745-64-00-S	01-01270	AL0024805
Surface Mine No. 1	P-3770-64-02-S	01-03019	AL0067547
Surface Mine No. 1	P-3869-64-25-S	01-03019	AL0067547
Downey Branch	P-3890-64-18-S	01-01985	AL0026981
Short Creek (South)	P-3915-01-24-S	01-00742	AL0029289
Surface Mine No. 3	No Permit	-	AL0070815
Kellerman 650	No Permit	01-01267	AL0022870
America Highwall	X-0018	01-02697	AL0054721
Coke Plant	No Permit	N/A	AL0003417
Arkadelphia 4600	No Permit	01-00163	No Permit
Cluster Springs	No Permit	01-02371	No Permit
Hay Valley 732	No Permit	01-00114	AL0024813
Arkadelphia 70	No Permit	N/A	AL0029271
Arkadelphia 2400	No Permit	N/A	AL0029262
Bonner Hollow	No Permit	No Permit	AL0048241
Bakers Crk Abandoned Mine	No Permit	-	ALR160409
COMMERCIAL LAND CO.			
Mulga	P-3266-01-98-P	01-00330	AL0022187

MINE NAME	ASMC NUMBER	MSHA NUMBER	ADEM NUMBER
EVERGREEN MINING, LLC			
Mine No. 1	P-3773-25-02-S	01-03117	AL0070246
Mine No. 2	P-3789-25-18-S	01-03117	AL0071536
Littleton	P-3801-01-14-S	01-03150	AL0072524
Mine No. 3	P-3812-25-05-S	01-03117	AL0071536
Mine No. 4	P-3842-25-09-S	01-03117	AL0071536
Praco	P-3846-01-08-S	01-03271	AL0075809
Pumpkin Center	P-3856-64-19-S	01-03271	AL0075809
Red Star	P-3857-64-15-S	01-03292	AL0076473
Toby	P-3874-58-11-S	01-03334	AL0076236
Cold Springs West	P-3896-25-18-S	01-03361	AL0078662
Buttahatchee North	No Permit	No Permit	AL0078352
Buttahatchee South	No Permit	No Permit	AL0078522
Mill Creek	No Permit	No Permit	AL0080501
Segco Mine No. 2	No Permit	No Permit	AL0079197
Trey	No Permit	No Permit	AL0078247
SHANNON, LLC			
Shannon	P-3859-01-24-S	01-03303	AL0076597
Shannon No. 2	P-3925-01-24-S	01-03303	AL0076597
Shannon No. 3	P-3948-01-25-S	01-03303	AL0076597
Shannon No. 4	P-3959-01-22-S	01-03303	AL0076597
TWIN PINES II, LLC			
Segco Mine No. 1	P-3901-58-18-S	01-03334	AL0079189
YESHIC, LLC			
Yeshic	P-3914-58-14-S	01-03417	AL0079464
Yeshic No. 2	P-3940-58-20-S	01-03417	AL0079464
POWHATAN DOCK, LLC			
Barge Loading Facility	No Permit	No Permit	AL0078310
TRIPLE B MINERALS			
Kellerman Barge Loadout	No Permit	No Permit	AL0076759

MINE NAME	KYDSMRE NUMBER	KYDSMRE EXP. DATE	MSHA NUMBER	MSHA ISSUANCE	NPDES NUMBER	NPDES EXP. DATE
Triple A Minerals Stoker Tipple (Transfer Completed 08/26/98)	897-6038	12/19/01	15-05152	January 1987	General Permit KYG044057	01/31/97

MINE NAME	WV-DEP NUMBER	WV-DEP EXP. DATE	MSHA NUMBER	MSHA ISSUANCE	NPDES NUMBER	NPDES EXP. DATE
Drummond Company, Inc. Nellis (Transferred Effective 05/21/98)	S-5040-90	10/20/98	N/A	-	WV1010824	03/24/98
Maben	U-3031-86	03/07/91	46-06177	Jan. 1, 1980	WV1009095	10/03/01

MINE NAME	WY-DEP NUMBER	WY-DEP EXP. DATE	MSHA NUMBER	MSHA ISSUANCE	NPDES NUMBER	NPDES EXP. DATE
Drummond Company, Inc. Welch #1 (Transferred Effective 07/21/99)	497-T2	03/07/99				

MINE NAME	ADEM UIC #	EXP. DATE
Maxine	ALSI9937249	01/31/95
Chetopa	ALSI9937252	11/08/99
Short Creek Prep.	ALSI9937283	08/31/95
Gorgas #7	ALSI9964253	09/09/04
Mary Lee #1	ALSI9964254	11/08/99
Segco #1	ALSI9964262	04/30/95
Short Creek Prep. (Mulga Inj.)	ALSI9937294	08/01/96
Mary Lee #2	ALSI9964319	11/04/98
Mary Lee #1	ALSI9964496	12/03/00
Shoal Creek	ALSI9937717	04/18/23

MINE NAME	CORPS OF ENGINEERS #	EXP. DATE
Short Creek Wetlands	AL86-000777-A	03/17/91

ATTACHMENT I

PERMITS HELD BY DRUMMOND COMPANY, INC.
ISSUED BY THE
ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
FOR CLASS V INJECTION WELLS
1400 COLISEUM BOULEVARD
MONTGOMERY, AL 36110

PERMIT #	EXPIRATION DATE
ALSI9937283	08/31/95
ALSI9937252	11/08/99
ALSI9964253	09/09/04
ALSI9964254	11/08/99
ALSI9937249	01/31/95
ALSI9964262	04/30/95
ALSI9937294	08/01/96
ALSI9964319	11/04/98
ALSI9964496	12/03/00
ALSI9937717	04/18/23

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS HELD BY DRUMMOND COMPANY, INC. ISSUED BY THE STATE OF ALABAMA WATER IMPROVEMENT COMMISSION 1400 COLISEUM BOULEVARD MONTGOMERY, AL 36110

PERMIT #	EXPIRATION DATE
AL0022829	10/24/82
AL0022853	10/24/82
AL0022896	10/24/82
AL0029246	10/29/83
AL0029254	10/29/83

V. OTHER PERMITS/AUTHORIZATIONS

A. List any other NPDES, State Oil & Gas Board (OGB) Class II Injection well permits, or other environmental permits (including permit numbers), authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, Alabama Surface Mining Commission (ASMC), Alabama Department of Labor (ADOL), or other agency, to the applicant, parent corporation, subsidiary, or LLC member for this operation whether presently effective, expired, suspended, revoked or terminated:

ASMC: P-3200, P-3915; MSHA: 01-00742

B. List any other NPDES or other ADEM permits (including permit numbers), authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, OGB, ASMC, or ADOL to the applicant, parent corporation, subsidiary, or LLC member for other facilities whether presently effective, expired, suspended, revoked, or terminated:

SEE ATTACHMENT I

VI. PROPOSED SCHEDULE

Anticipated Activity Commencement Date: PRIOR TO 1977 Anticipated Activity Completion Date: DECEMBER 2026

VII. ACTIVITY DESCRIPTION & INFORMATION

A. Proposed Total Area of the Permitted Site: 1369 acres Proposed Total Disturbed Area of the Permitted Site: 634 acres

B. Township(s), Range(s), Section(s): T17S,R5W,Sec 4, 8, 9, 16, 17, 20

C. Detailed Directions to Site:

From Birmingham, proceed to and take I-22 west to exit 81 (West Jefferson); turn left onto Snowville-Brent Rd/Flat Top Rd and continue unto intersection of Porter Rd; turn left and proceed to Short Creek Rd (bear right) and proceed approximately 3.0 miles to the plant entrance on right

D. Is/will this operation:

Yes	No	
☒	☐	(1) an existing facility which currently results in discharges to State waters?
☐	☒	(2) a proposed facility which will result in a discharge to State waters?
☐	☒	(3) be located within any 100-year flood plain?
☐	☒	(4) discharge to Municipal Separate Storm Sewer?
☐	☒	(5) discharge to waters of or be located in the Coastal Zone?
☐	☒	(6) need/have ADEM UIC permit coverage?
☐	☒	(7) be located on Indian/historically significant lands?
☐	☒	(8) need/have ADEM SID permit coverage?
☒	☐	(9) need/have ASMC permit coverage?
☐	☒	(10) need/have ADOL permit coverage?
☐	☒	(11) generate, treat, store, or dispose of hazardous or toxic waste? (If "Yes," attach a detailed explanation.)
☐	☒	(12) be located in or discharge to a Public Water Supply (PWS) watershed or be located within ½ mile of any PWS well?

VIII. MATERIAL TO BE REMOVED, PROCESSED, OR TRANSLOADED

List relative percentages of the mineral(s) or mineral product(s) that are proposed to be and/or are currently mined, quarried, recovered, prepared, processed, handled, transloaded, or disposed at the facility. **If more than one mineral is to be mined, list the relative percentages of each mineral by tonnage for the life of the mine.**

	Dirt &/or Chert		Sand &/or Gravel		Coal product, coke		Talc		Crushed rock (other)
	Bentonite		Industrial Sand		Shale &/or Common Clay		Marble		Sandstone
100	Coal		Kaolin		Coal fines/refuse recovery		Chalk		Slag, Red Rock
	Fire clay		Iron ore		Dimension stone		Granite		Phosphate rock
	Bauxitic Clay		Bauxite Ore		Limestone, crushed limestone and dolomite				
	Gold, other trace minerals:				Other:				
	Other:				Other:				
	Other:				Other:				

IX. PROPOSED ACTIVITY TO BE CONDUCTED

A. Type(s) of activity presently conducted at applicant's existing facility or proposed to be conducted at facility (check all that apply):

☒ Surface mining	☒ Underground mining	☐ Quarrying	☐ Auger mining	☐ Hydraulic mining
☐ Within-bank mining	☐ Solution mining	☒ Mineral storing	☐ Lime production	☐ Cement production
☐ Synthetic fuel production	☐ Alternative fuels operation	☒ Mineral dry processing (crushing & screening)		☒ Mineral wet preparation
☐ Other beneficiation & manufacturing operations		☒ Mineral loading		☐ Chemical processing or leaching
☒ Grading, clearing, grubbing, *etc.*		☐ Pre-construction ponded water removal		☐ Excavation
☒ Pre-mining logging or land clearing		☐ Waterbody relocation or other alteration		☐ Creek/stream crossings
☐ Construction related temporary borrow pits/areas		☒ Mineral transportation: ☐ rail ☒ barge ☒ truck		
☐ Preparation plant waste recovery		☐ Hydraulic mining, dredging, instream or between stream-bank mining		
☐ Onsite construction debris or equipment storage/disposal		☐ Onsite mining debris or equipment storage/disposal		
☒ Reclamation of disturbed areas		☐ Chemicals used in process or wastewater treatment (coagulant, biocide, etc.)		
☐ Adjacent/associated asphalt/concrete plant(s)		☐ Low volume sewage treatment package plant		
☐ Other (Please describe):				

B. Primary SIC Code: 1221 NAICS Code: _____ Description: Bituminous Coal Mining

Secondary SIC Code: 1222 NAICS Code: _____ Description: Bituminous Coal Underground Mining

C. Narrative Description of the Activity:
to conduct wet process prep of bit. coal from underground mining; storing raw & clean coal; and coal shipping.

X. FUEL – CHEMICAL HANDLING, STORAGE & SPILL PREVENTION CONTROL & COUNTERMEASURES (SPCC) PLAN

A. Will fuels, chemicals, compounds, or liquid waste be used or stored onsite? ☒ Yes ☐ No

B. If "Yes," identify the fuel, chemicals, compounds, or liquid waste and indicate the volume of each:

Volume (*gallons*)	Contents	Volume (*gallons*)	Contents	Volume (*gallons*)	Contents
6,000	Sodium Hydroxide/Amm.	10,000	Diesel	6,000	Diesel
12,000	Sodium Hydroxide/Amm.	10,000	Gasoline		

C. If "Yes", a detailed SPCC Plan with acceptable format and content, including diagrams, must be attached to application in accordance with ADEM Admin. Code R. 335-6-6-.12(r). Unless waived in writing by the Department on a programmatic, categorical, or individual compound/chemical basis, Material Safety Data Sheets (MSDS) for chemicals/compounds used or proposed to be used at the facility must be included in the SPCC Plan submittal.

XI. POLLUTION ABATEMENT & PREVENTION (PAP) PLAN

A. For non-coal mining facilities, a PAP Plan in accordance with ADEM Admin. Code r. 335-6-9-.03 has been completed and is attached as part of this application. ☐ Yes ☐ No

B. For coal mining facilities, a detailed PAP Plan has been submitted to ASMC according to submittal procedures for ASMC regulated facilities. ☒ Yes ☐ No

(1) If "Yes" to Part XI.B., provide the date that the PAP Plan was submitted to ASMC: August 1982

(2) If "No" to Part XI.B., provide the anticipated date that the PAP Plan will be submitted to ASMC: _____

XII. ASMC REGULATED ENTITIES

A. Is this coal mining operation regulated by ASMC? ☒ Yes ☐ No

B. If "Yes," provide copies as part of this application of any pre-mining hydrologic sampling reports and Hydrologic Monitoring Reports which have been submitted to ASMC within the 36 months prior to submittal of this application.

XIII. TOPOGRAPHIC MAP SUBMITTAL

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

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

(b) An outline of the facility

(c) All existing and proposed disturbed areas

(d) Location of intake and discharge areas

(e) Proposed and existing discharge points

(f) Perennial, intermittent, and ephemeral streams

(g) Lakes, springs, water wells, wetlands

(h) All known facility dirt/improved access/haul roads

(i) All surrounding unimproved/improved roads

(j) High-tension power lines and railroad tracks

(l) Contour lines, township-range-section lines

(m) Drainage patterns, swales, washes

(n) All drainage conveyance/treatment structures (ditches, berms, etc.)

(o) Any other pertinent or significant feature

XIV. DETAILED FACILITY MAP SUBMITTAL

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

(a) Information listed in Item XIII (a) – (o) above

(b) If noncoal, detailed, planned mining progression

(c) If noncoal, location of topsoil storage areas

(d) Location of ASMC bonded increments (if applicable)

(e) Location of mining or pond cleanout waste storage/disposal areas

(f) Other information relevant to facility or operation

(g) Location of facility sign showing Permittee name, facility name, and NPDES Number

XV. RECEIVING WATERS

List the requested permit action for each outfall (issue, reissue, add, delete, move, *etc.*); outfall designation including denoting "E" for existing and "P" for proposed outfalls; name of receiving water(s); latitude and longitude (to seconds) of location(s) of each discharge point; distance of receiving water from the discharge point; number of disturbed acres; the number of drainage acres which will drain through each outfall; and if the outfall discharges to an ADEM listed CWA Section 303(d) waterbody segment or is included in a TMDL at the time of application submittal.

Action	Outfall E/P	Receiving Water	Latitude	Longitude	Distance to Rec. Water (ft)	Disturbed Area (acres)	Drainage Area (acres)	ADEM WUC	303(d) Segment (Y/N)	TMDL Segment* (Y/N)
R	001E	Locust Fork of Black Warrior	33° 34' 48"	87° 04' 44"	320	30	53	F/W	N	N
R	002E	UT of Locust Fork	33° 34' 36"	87° 04' 44"	250	5	5	F/W	N	N
A	011E	Short Creek	33° 33' 15"	87° 04' 47"	30	577	678	F/W	N	N
A	013P	Fishtrap Branch	33° 35' 03"	87° 03' 55"	300	106	106	F/W	N	N
A	014P	UT of Fishtrap Branch	33° 35' 04"	87° 03' 48"	0	109	209	F/W	N	N
A	015E	UT of Locust Fork	33° 34' 26"	87° 04' 30"	450	463	637	F/W	N	N
				-						
				-						

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

XVI. DISCHARGE CHARACTERIZATION

A. EPA Form 2C, EPA Form 2D, and/or ADEM Form 567 Submittal

☐ Yes, pursuant to 40 CFR 122.21, the applicant requests a waiver for completion of EPA Form 2C, EPA Form 2D, and ADEM Form 567 and certifies that the operating facility will discharge treated stormwater only; that chemical/compound additives are not used (unless waived in writing by the Department on a programmatic, categorical, or individual compound/chemical basis); that there are no process, manufacturing, or other industrial operations or wastewaters, including but not limited to lime or cement production and synfuel operations; and that coal and coal products are not mined nor stored onsite.

☒ No, the applicant does not request a waiver and a complete EPA Form 2C, EPA Form 2D, and/or ADEM Form 567 is attached.

B. The applicant is required to supply the following information separately for every proposed or existing outfall. (Attach extra sheets if necessary.) List expected average daily discharge flow rate in cfs and gpd; frequency of discharge in hours per day and days per month; average summer and winter temperature of discharge(s) in degrees centigrade; average pH in standard units; and average daily discharges in pounds per day of BOD_5, Total Suspended Solids, Total Iron, Total Manganese, and Total Aluminum (if bauxite or bauxitic clay or if otherwise believed present):

Outfall E/P	Information Source - # of Samples	Flow (cfs)	Flow (gpd)	Frequency (hours/day)	Frequency (days/month)	Sum/Win Temp, (°C)	pH (s.u.)	BOD_5 (lbs/day)	TSS (lbs/day)	Tot Fe (lbs/day)	Tot Mn (lbs/day)	Tot Al (lbs/day)
001E	24	0.06	0.04m	Precip	Precip	31/8	6.94	0.10	1.29	0.11	0.06	n/a
002E	24	0.01	0.01m	Precip	Precip	31/8	7.10	0.01	0.54	0.02	0.00	n/a
011E	27	3.57	2.31m	Precip	Precip	31/8	7.30	1.25	71.82	3.31	1.08	n/a
013P	BPE	0.05	0.03m	Precip	Precip	31/8	6.9	0.50	1.50	0.20	0.01	n/a
014P	BPE	0.05	0.03m	Precip	Precip	31/8	6.9	0.50	1.50	0.20	0.01	n/a
015E	24	0.01	0.01m	Precip	Precip	31/8	7.46	0.15	0.65	0.04	0.01	n/a

C. The applicant is required to supply the following information separately for every proposed or existing outfall. (Attach extra sheets if necessary.) Identify and list expected average daily discharge of any other pollutant(s) listed in EPA Form 2C Tables A, B, C, D, and E that are not referenced in Part XVI.B. or otherwise submitted elsewhere, that you know is present or have reason to believe could be present in the discharge(s) at levels of concern:

Outfall E/P	Reason Believed Present	Information Source - # of Samples								
			lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L
	SEE Page 6a(1-4) of 12									

NPDES Permit: AL0043711	Company: Drummond Company, Inc.				Facility: Short Creek Prep. Plant
OUTFALL # SAMPLED: 001E	DATE SAMPLED: 8/04/21	In-Pond No	Discharge Yes	SUBSTANTIALLY IDENTICAL OUTFALLS:002E	DESCRIPTION: Drainage from Preparation Plant

Please supply the following information separately for every P or E outfall evaluated/tested. If necessary, attach extra sheets. If you are a coal facility mark "X" in appropriate column for ALL listed metals, cyanides, and total phenols. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is proposed you must either submit at least one representative analysis for a substantially identical existing outfall at the facility, or if not available, at least one representative analysis for a substantially identical outfall at another similar facility.

POLLUTANT AND CAS NO. *(if available)* 1/	MARK 'X'			EFFLUENT													
	TESTING REQUIRED EXISTING OUTFALL	BELIEVED PRESENT PROPOSED OUTFALL	BELIEVED ABSENT PROPOSED OUTFALL	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVRG. VALUE (if available)		# Of Analyses	Frequency of Discharge Days/Mth Hours/Day	40 CFR Part 136 EPA Approved Method Analysis Used	Method Detection Limit (µg/L)	Receiving Water 7-Q10 Flow (CFS)	2/ Optional Instream hardness (mg/L CaCO3)	Optional Discharge Flow (CFS)	Optional Background Instream Concentration (µg/L)	Optional Instream Flow (CFS)
				CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (ug/L)	MASS (lbs)									
1m. Antimony, Dissolved (7440-36-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.92	52.48	167.8			
2M. Arsenic, Trivalent (7440-38-2)	X	X		0.93	0.0002					1	Precip. Based	EPA200.8	0.3	52.48	167.8			
3M. Beryllium, Dissolved (7440-41-7)	X		X	BML	BML					1	Precip. Based	EPA200.8	2.2	52.48	167.8			
4M. Cadmium, Dissolved (7440-43-9)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	52.48	167.8			
5M Chromium, Dissolved (7440-47-3)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.64	52.48	167.8			
6M Copper,Dissolved (7440-50-8)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.9	52.48	167.8			
7M lead, Dissolved (7439-92-1)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.31	52.48	167.8			
8M Mercury, Total (7439-97-6)	X	X		0.014	0.0000025					1	Precip. Based	EPA245.2	0.01	52.48	167.8			
9M Nickel, Dissolved (7440-02-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	6.86	52.48	167.8			
10M Selenium, Dissolved (7782-49-2)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.95	52.48	167.8			
11M Silver, Dissolved (7440-22-4)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.15	52.48	167.8			
12M Thallium, Dissolved (7440-28-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	52.48	167.8			
13M Zinc, Dissolved (7440-66-6)	X		X	BML	BML					1	Precip. Based	EPA200.8	16.45	52.48	167.8			
14M Cyanide, Total (57-12-5)	X		X	BML	BML					1	Precip. Based	4500CNE	3	52.48	167.8			
15M Phenols, Total	X	X		24.9	0.0044					1	Precip. Based	EPA420.1	6	52.48	167.8			

ND represents Not Detectable

By submission of this form, I/we (PE and applicant) certify that that I/we have read the instructions for completion of EPA Forms 2C & 2D. Attach Additional Information As Needed

1/ For the purpose of demonstration of compliance with these parameters, "Total" and "Total Recoverable" measurements shall be considered equivalent.

2/ Instream Hardness ($CaCO_3$) will be assumed to be 50 mg/L if instream Hardness data is not submitted.

Rev 6/20/07 Sampling results must be representative of the discharge and test methods used in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).

NPDES Permit: AL0043711	Company: Drummond Company, Inc.			Facility: Short Creek Prep. Plant	
OUTFALL # SAMPLED: 011E	DATE SAMPLED: 7/14/21	In-Pond No	Discharge Yes	SUBSTANTIALLY IDENTICAL OUTFALLS:013P, 014P and 015E	DESCRIPTION: Drainage from a Surface Mine

Please supply the following information separately for every P or E outfall evaluated/tested. If necessary, attach extra sheets. If you are a coal facility mark "X" in appropriate column for ALL listed metals, cyanides, and total phenols. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is proposed you must either submit at least one representative analysis for a substantially identical existing outfall at the facility, or if not available, at least one representative analysis for a substantially identical outfall at another similar facility.

POLLUTANT AND CAS NO. *(if available)* 1/	MARK 'X'			EFFLUENT													
	TESTING REQUIRED EXISTING OUTFALL	BELIEVED PRESENT PROPOSED OUTFALL	BELIEVED ABSENT PROPOSED OUTFALL	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVRG. VALUE (If available)		# Of Analyses	Frequency of Discharge Days/Mth Hours/Day	40 CFR Part 136 EPA Approved Method Analysis Used	Method Detection Limit (µg/L)	Receiving Water 7-Q10 Flow (CFS)	2/ Optional Instream hardness (mg/L CaCO3)	Optional Discharge Flow (CFS)	Optional Background Instream Concentration (µg/L)	Optional Instream Flow (CFS)
				CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (µg/L)	MASS (lbs)									
1m. Antimony, Dissolved (7440-36-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.92	0.54	1160			
2M. Arsenic, Trivalent (7440-38-2)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.3	0.54	1160			
3M. Beryllium, Dissolved (7440-41-7)	X		X	BML	BML					1	Precip. Based	EPA200.8	2.2	0.54	1160			
4M. Cadmium, Dissolved (7440-43-9)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	0.54	1160			
5M Chromium, Dissolved (7440-47-3)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.64	0.54	1160			
6M Copper,Dissolved (7440-50-8)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.9	0.54	1160			
7M lead, Dissolved (7439-92-1)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.31	0.54	1160			
8M Mercury, Total (7439-97-6)	X		X	BML	BML					1	Precip. Based	EPA245.2	0.01	0.54	1160			
9M Nickel, Dissolved (7440-02-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	6.86	0.54	1160			
10M Selenium, Dissolved (7782-49-2)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.95	0.54	1160			
11M Silver, Dissolved (7440-22-4)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.15	0.54	1160			
12M Thallium, Dissolved (7440-28-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	0.54	1160			
13M Zinc, Dissolved (7440-66-6)	X		X	BML	BML					1	Precip. Based	EPA200.8	16.45	0.54	1160			
14M Cyanide, Total (57-12-5)	X		X	BML	BML					1	Precip. Based	4500CNE	3	0.54	1160			
15M Phenols, Total	X		X	BML	BML					1	Precip. Based	EPA420.1	6	0.54	1160			

ND represents Not Detectable

By submission of this form, I/we (PE and applicant) certify that that I/we have read the instructions for completion of EPA Forms 2C & 2D. Attach Additional Information As Needed

1/ For the purpose of demonstration of compliance with these parameters, "Total" and "Total Recoverable" measurements shall be considered equivalent.

2/ Instream Hardness ($CaCO_3$) will be assumed to be 50 mg/L if instream Hardness data is not submitted.

Rev 6/20/07 Sampling results must be representative of the discharge and test methods used in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).

NPDES Permit: AL0043711	Company: Drummond Company, Inc.			Facility: Short Creek Prep. Plant	
OUTFALL # SAMPLED: Locust Fork Upstream	DATE SAMPLED: 7/14/21	In-Pond No	Discharge Yes	SUBSTANTIALLY IDENTICAL OUTFALLS: N/A	DESCRIPTION: Stream

Please supply the following information separately for every P or E outfall evaluated/tested. If necessary, attach extra sheets. If you are a coal facility mark "X" in appropriate column for ALL listed metals, cyanides, and total phenols. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is proposed you must either submit at least one representative analysis for a substantially identical existing outfall at the facility, or if not available, at least one representative analysis for a substantially identical outfall at another similar facility.

POLLUTANT AND CAS NO. *(if available)* 1/	MARK 'X'			EFFLUENT													
	TESTING REQUIRED EXISTING OUTFALL	BELIEVED PRESENT PROPOSED OUTFALL	BELIEVED ABSENT PROPOSED OUTFALL	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVRG. VALUE (if available)		# Of Analyses	Frequency of Discharge Days/Mth Hours/Day	40 CFR Part 136 EPA Approved Method Analysis Used	Method Detection Limit (µg/L)	Receiving Water 7-Q10 Flow (CFS)	2/ Optional Instream hardness (mg/L CaCO3)	Optional Discharge Flow (CFS)	Optional Background Instream Concentration (µg/L)	Optional Instream Flow (CFS)
				CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (µg/L)	MASS (lbs)									
1m. Antimony, Dissolved (7440-36-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.92	52.48	133.6			
2M. Arsenic, Trivalent, (7440-38-2)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.3	52.48	133.6			
3M. Beryllium, Dissolved (7440-41-7)	X		X	BML	BML					1	Precip. Based	EPA200.8	2.2	52.48	133.6			
4M. Cadmium, Dissolved (7440-43-9)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	52.48	133.6			
5M Chromium, Dissolved (7440-47-3)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.64	52.48	133.6			
6M Copper, Dissolved (7440-50-8)	X	X		1.74	0.49220					1	Precip. Based	EPA200.8	0.9	52.48	133.6			
7M lead, Dissolved (7439-92-1)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.31	52.48	133.6			
8M Mercury, Total (7439-97-6)	X		X	BML	BML					1	Precip. Based	EPA245.2	0.01	52.48	133.6			
9M Nickel, Dissolved (7440-02-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	6.86	52.48	133.6			
10M Selenium, Dissolved (7782-49-2)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.95	52.48	133.6			
11M Silver, Dissolved (7440-22-4)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.15	52.48	133.6			
12M Thallium, Dissolved (7440-28-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	52.48	133.6			
13M Zinc, Dissolved (7440-66-6)	X		X	BML	BML					1	Precip. Based	EPA200.8	16.45	52.48	133.6			
14M Cyanide, Total (57-12-5)	X		X	BML	BML					1	Precip. Based	4500CNE	3	52.48	133.6			
15M Phenols, Total	X		X	BML	BML					1	Precip. Based	EPA420.1	6	52.48	133.6			

ND represents Not Detectable

By submission of this form, I/we (PE and applicant) certify that that I/we have read the instructions for completion of EPA Forms 2C & 2D. Attach Additional Information As Needed

1/ For the purpose of demonstration of compliance with these parameters, "Total" and "Total Recoverable" measurements shall be considered equivalent.

2/ Instream Hardness ($CaCO_3$) will be assumed to be 50 mg/L if instream Hardness data is not submitted.

Rev 6/20/07 Sampling results must be representative of the discharge and test methods used in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).

NPDES Permit: AL0043711	Company: Drummond Company, Inc.				Facility: Short Creek Prep. Plant
OUTFALL # SAMPLED: Short Creek Upstream	DATE SAMPLED: 7/14/21	In-Pond No	Discharge Yes	SUBSTANTIALLY IDENTICAL OUTFALLS:002E	DESCRIPTION: Stream

Please supply the following information separately for every P or E outfall evaluated/tested. If necessary, attach extra sheets. If you are a coal facility mark "X" in appropriate column for ALL listed metals, cyanides, and total phenols. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is proposed you must either submit at least one representative analysis for a substantially identical existing outfall at the facility, or if not available, at least one representative analysis for a substantially identical outfall at another similar facility.

POLLUTANT AND CAS NO. *(if available)* 1/	MARK 'X'			EFFLUENT													
	TESTING REQUIRED EXISTING OUTFALL	BELIEVED PRESENT PROPOSED OUTFALL	BELIEVED ABSENT PROPOSED OUTFALL	MAXIMUM DAILY VALUE		MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVRG. VALUE (if available)		# Of Analyses	Frequency of Discharge Days/Mth Hours/Day	40 CFR Part 136 EPA Approved Method Analysis Used	Method Detection Limit (µg/L)	Receiving Water 7-Q10 Flow (CFS)	2/ Optional Instream hardness (mg/L CaCO3)	Optional Discharge Flow (CFS)	Optional Background Instream Concentration (µg/L)	Optional Instream Flow (CFS)
				CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (µg/L)	MASS (lbs)	CONCENT-RATION (µg/L)	MASS (lbs)									
1m. Antimony, Dissolved (7440-36-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.92	0.54	133.9			
2M. Arsenic, Trivalent (7440-38-2)	X	X		0.38	0.001108					1	Precip. Based	EPA200.8	0.3	0.54	133.9			
3M. Beryllium, Dissolved (7440-41-7)	X		X	BML	BML					1	Precip. Based	EPA200.8	2.2	0.54	133.9			
4M. Cadmium, Dissolved (7440-43-9)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	0.54	133.9			
5M Chromium, Dissolved (7440-47-3)	X		X	BML	BML					1	Precip. Based	EPA200.8	1.64	0.54	133.9			
6M Copper,Dissolved (7440-50-8)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.9	0.54	133.9			
7M lead, Dissolved (7439-92-1)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.31	0.54	133.9			
8M Mercury, Total (7439-97-6)	X		X	BML	BML					1	Precip. Based	EPA245.2	0.01	0.54	133.9			
9M Nickel, Dissolved (7440-02-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	6.86	0.54	133.9			
10M Selenium, Dissolved (7782-49-2)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.95	0.54	133.9			
11M Silver, Dissolved (7440-22-4)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.15	0.54	133.9			
12M Thallium, Dissolved (7440-28-0)	X		X	BML	BML					1	Precip. Based	EPA200.8	0.08	0.54	133.9			
13M Zinc, Dissolved (7440-66-6)	X		X	BML	BML					1	Precip. Based	EPA200.8	16.45	0.54	133.9			
14M Cyanide, Total (57-12-5)	X		X	BML	BML					1	Precip. Based	4500CNE	3	0.54	133.9			
15M Phenols, Total	X		X	BML	BML					1	Precip. Based	EPA420.1	6	0.54	133.9			

ND represents Not Detectable

By submission of this form, I/we (PE and applicant) certify that that I/we have read the instructions for completion of EPA Forms 2C & 2D. Attach Additional Information As Needed

1/ For the purpose of demonstration of compliance with these parameters, "Total" and "Total Recoverable" measurements shall be considered equivalent.

2/ Instream Hardness ($CaCO_3$) will be assumed to be 50 mg/L if instream Hardness data is not submitted.

Rev 6/20/07 Sampling results must be representative of the discharge and test methods used in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).

XVII. DISCHARGE STRUCTURE DESCRIPTION & POLLUTANT SOURCE

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

Outfall	Discharge structure Description	Description of Origin of pollutants	Surface Discharge	Groundwater Discharge	Wet Prep -Other Production Plant	Pumped or Controlled Discharge	Low Volume STP
001E	Pipe/Channel	5	X		X		
002E	Pipe/Channel	5	X		X		
011E	Channel	5, 9	X		X		
013P	Pipe &/or Channel	5, 9	X		X		
014P	Pipe &/or Channel	5, 9	X		X		
015E	Pipe/Channel	5, 9	X		X		

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

XVIII. COOLING WATER

A. Does your facility use cooling water? ☐ Yes ☒ No

B. If "Yes," identify the source of the cooling water:

XIX. VARIANCE REQUEST

A. Do you intend to request or renew one or more of the CWA technology variances authorized at 40 CFR 122.21(m)? ☐ Yes ☒ No

B. If "Yes," select all that apply:

☐ Fundamentally different factors (CWA Section 301(n))

☐ Water quality related effluent limitations (CWA Section 302(b)(2))

☐ Non-conventional pollutants (CWA Section 301(c) and (g))

☐ Thermal discharges (CWA Section 316(a))

XX. PROPOSED NEW OR INCREASED DISCHARGES

A. Pursuant to ADEM Admin. Code ch. 335-6-10-.12(9), responses to the following questions must be provided by the applicant requesting NPDES permit coverage for new or expanded discharges of pollutant(s) to Tier 2 waters (except discharges eligible for coverage under general permits). As part of the permit application review process, the Department is required to consider, based on the applicant's demonstration, whether the proposed new or increased discharge to Tier 2 waters is necessary for important economic or social development in the area in which the waters are located.

☒ Yes. New/increased discharges of pollutant(s) or discharge locations to Tier 2 waters are proposed.

☐ No. New/increased discharges of pollutants(s) or discharge locations to Tier 2 waters are not proposed.

B. If "Yes," complete Items 1 through 6 of this Part (XIII.B.), ADEM Form 311-Alternative Analysis, and either ADEM Form 312 or ADEM Form 313-Calculation of Total Annualized Project Costs (Public-Section or Private-Sector, whichever is applicable). ADEM Form 312 or ADEM Form 313, whichever is applicable, should be completed for each technically feasible alternative evaluated on ADEM Form 311. ADEM Forms can be found on the Department's website at www.adem.alabama.gov/DeptForms. **Attach additional sheets/documentation and supporting information as needed.**

(1) What environmental or public health problem will the discharge be correcting?

See Page 8a of 12 for responses to this Part B.

(2) How much will the discharger be increasing employment (at its existing facility or as a result of locating a new facility)?

(3) How much reduction in employment will the discharger be avoiding?

(4) How much additional state or local taxes will the discharger be paying?

(5) What public service to the community will the discharger be providing?

(6) What economic or social benefit will the discharger be providing to the community?

1.) **What environmental or public health problem will the discharge be correcting?**

These discharges will not correct any existing environmental or public health problem since there are not any known issues at this time.

2.) **How much will the discharger be increasing employment (at its existing facility or as a result of locating a new facility)?**

This modification has the potential to increase employment by approximately 350 employees.

3.) **How much reduction in employment will the discharger be avoiding?**

This site is currently idle under an Alabama Surface Mining Commission approved Temporary Cessation. Therefore, avoidance of employment reduction is not applicable as the monitoring, maintenance and security personnel are only present.

4.) **How much additional state or local taxes will the discharger be paying?**

The following is an estimate of the taxes/fees that will be generated for the mine operation from company and employees:

Federal Income	$ 2,500,000	Jefferson County	$ 350,000
Alabama Income	$ 500,000	Property	$ 200,000
FICA	$ 1,200,000	Alabama Severance	$ 1,035,000
FUTA	$ 380,000	AML Reclamation	$ 2,100,000
SUTA	$ 76,000	Black Lung Excise	$ 2,850,000
Workman Comp	$ 396,000	Fuel (Fed/State/Co)	$ 5,400,000

5.) **What public service to the community will the discharger be providing?**

The company may provide equipment and/or personnel to aid the community in times of localized disasters, to suppress wild fires or assistance for improvement of roads. Community service will depend on specific needs matching available company resources. The company also encourages its employees to participate in civic affairs such as Habitats for Humanity or organizing blood drives through the American Red Cross and Lifesouth. The company provides annual volunteers to assist The United Way in its yearly pledge drive. The company participates in leadership training through Leadership Alabama, Leadership Jefferson County and Leadership Walker County.

6.) **What economic or social benefit will the discharger be providing to the community?**

The community will benefit from the mine by supplying labor and materials to meet the needs of the operations. This will increase the local tax revenue, thereby helping to fund governmental services. The consistent demand for labor will maintain employment levels. These positive attributes will lift community pride. On a larger scale, the company is an excellent steward that provides substantial annual contributions to the following charities: The United Way, American Heart Association, American Cancer Association, Museum of Alabama History, Boy Scouts of America, Girl Scouts of America, Big Oak Ranch, King's Ranch, Kid Transport System, Boys & Girls Club of Central Alabama, 4H Club Foundation, Alabama Sheriffs Association for Boys & Girls, Alabama Institute for the Deaf and Blind, Alabama Independent Colleges, United Negro College Fund, University of Alabama, Auburn University, University of Alabama Birmingham, Birmingham Southern College and many others. The company is quite diverse in its contributions to the community by making donations to various organizations, providing scholarship programs, and seeks to enrich the state by encouraging industrial development, economic growth, appreciation of the Arts, and protection of Alabama's environment.

Attachment 1 to Supplementary Form
ADEM Form 311

Alternatives Analysis

Applicant/Project: AL0043711

All new or expanded discharges (except discharges eligible for coverage under general permits) covered by the NPDES permitting program are subject to the provisions of ADEM's antidegradation policy. Applicants for such discharges to Tier 2 waters are required to demonstrate " . . . that the proposed discharge is necessary for important economic or social development." As a part of this demonstration, the applicant must complete an evaluation of the discharge alternatives listed below, including a calculation of the total annualized project costs for each technically feasible alternative (using ADEM Form 312 for public-sector projects and ADEM Form 313 for private-sector projects). Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

Alternative	Viable	Non-Viable	Comment
1 Land Application		X	See Attachment I to Supplementary Form - Cont.
2 Pretreatment/Discharge to POTW		X	See Attachment I to Supplementary Form - Cont.
3 Relocation of Discharge		X	See Attachment I to Supplementary Form - Cont.
4 Reuse/Recycle		X	See Attachment I to Supplementary Form - Cont.
5 Process/Treatment Alternatives		X	See Attachment I to Supplementary Form - Cont.
6 On-site/Sub-surface Disposal		X	See Attachment I to Supplementary Form - Cont.
(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)			
7			
8			
9			

Pursuant to ADEM Administrative Code Rule 335-6-3-.04, I certify on behalf of the applicant that I have completed an evaluation of the discharge alternatives identified above, and reached the conclusions indicated.

Signature: _____ *(Professional Engineer)*

Date: 10/09/2021

(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)

This permitted facility will become an underground coal mining operation that includes the existing preparation plant. It is regulated by several state and federal agencies to prevent any adverse environmental impacts during mining. Also, according to the Alabama Surface Mining Commission's regulation, 880-X-10C-.30 (paraphrased), it is required that mining activities be conducted to extract and conserve all economically recoverable coal so that future mining activities will be minimized. Therefore, based on site specifics, the proposed new discharges are the minimum necessary to control disturbed drainage and make full coal recovery.

ASMC regulation, 880-X-10D-.13(1)(a) states "All surface drainage from the disturbed area shall be passed through a sedimentation pond, a series of sedimentation ponds or other treatment facility before (emphasis added) leaving the permit area." Because of this regulation and site specifics of the coal seam's geology, there are no technically feasible alternatives that would be allowed or economical to use in place of the proposed discharge outfalls at this mine site

Further description will engage all seven (7) items of ADEM's application form for Item XV as follows:

1) Land Application – This is not technically feasible since the ASMC requires all disturbed drainage to be passed through a treatment facility. Once the discharge has been treated to meet effluent limits, then there are no further responsibilities to be met. Since the source of the discharges is an underground mine and the water is treated prior to being discharged at the surface, then land application would not be necessary or applicable.

2) Pretreatment/Discharge To POTW By SID Permit – This is not technically feasible since the ASMC requires all disturbed drainage to be passed through a sediment control structure. Once disturbance has been treated by the sediment control structure to meet effluent guidelines, there is no longer a need to prevent site discharge. Secondly, there is not a POTW located within proximity to make this feasible even if it would be allowed by the ASMC.

3) Relocation Of Discharge – This is not technically feasible for the mine site because of the economics involved. It is most efficient to handle underground mine water where it is encountered by treating and discharging to the surface at that point. The alternative to have a central discharge point is not feasible since the mine would be progressing away from it. This would require additional pumps and pipelines that would increase capital and operational expenses. It would also increase the risk of mine closure if the system failed.

4) Reuse/Recycle – This is not technically feasible since the volume of water is greater than the use at this operation. The mine is already utilizing all of the water possible for its operations. Please note, again, that the ASMC requires all discharges to be passed through a sediment control structure.

5) Process/Treatment Alternatives – This is not technically feasible since there isn't a process/treatment system designed to meet regulatory compliance and the need for dewatering an underground coal mine other than the described point source discharges of this application

6) On-site/Sub-surface Disposal – This is not technically feasible for this permit because there isn't another zone available for injection.

In conclusion, there isn't a technically feasible alternative to the proposed discharges that will meet the site requirements and/or meet ASMC regulations. It is DCI's intent to mine coal at the lowest cost and meet all safety and environmental requirements. If an economical alternative existed, then DCI would use it as we have at other operations in the past.

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 4,8100,000 (1)
Interest rate for Financing (Expressed as a decimal)	0.10 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor $= \frac{i}{(1+i)^{10} - 1} + i$	0.16275 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 782,828 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 171,680 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 954,508 (5)

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

XXI. POLLUTION ABATEMENT & PREVENTION (PAP) PLAN SUMMARY (must be completed for all outfalls)

Yes	No	N/A	Outfall(s): 001E, 002E, 011E, 013P, 014P, 015E
☒	☐	☐	1. Runoff from all areas of disturbance is controlled
☒	☐	☐	2. Drainage from pit area, stockpiles, and spoil areas directed to a sedimentation pond
☐	☒	☐	3. Sedimentation basin at least 0.25 acre/feet for every acre of disturbed drainage
☐	☒	☐	4. Sedimentation basin cleaned out when sediment accumulation is 60% of design capacity
☒	☐	☐	5. Trees, boulders, and other obstructions removed from pond during initial construction
☒	☐	☐	6. Width of top of dam greater than 12'
☐	☒	☐	7. Side slopes of dam no steeper than 3:1
☒	☐	☐	8. Cutoff trench at least 8' wide
☒	☐	☐	9. Side slopes of cutoff trench no less than 1:1
☒	☐	☐	10. Cutoff trench located along the centerline of the dam
☒	☐	☐	11. Cutoff trench extends at least 2' into bedrock or impervious soil
☒	☐	☐	12. Cutoff trench filled with impervious material
☒	☐	☐	13. Embankments and cutoff trench 95% compaction standard proctor ASTM
☒	☐	☐	14. Embankment free of roots, tree debris, stones >6" diameter, etc.
☒	☐	☐	15. Embankment constructed in lifts no greater than 12"
☒	☐	☐	16. Spillpipe sized to carry peak flow from a one year storm event
☒	☐	☐	17. Spillpipe will not chemically react with effluent
☒	☐	☐	18. Subsurface withdrawal
☒	☐	☐	19. Anti-seep collars extend radially at least 2' from each joint in spillpipe
☒	☐	☐	20. Splashpad at the end of the spillpipe
☒	☐	☐	21. Emergency Spillway sized for peak flow from 25-yr 24-hr event if discharge not into PWS classified stream
☐	☐	☒	22. Emergency spillway sized for peak flow from 50-yr 24-hr event if discharge is into PWS classified stream
☒	☐	☐	23. Emergency overflow at least 20' long
☒	☐	☐	24. Side slopes of emergency spillway no steeper than 2:1
☐	☒	☐	25. Emergency spillway lined with riprap or concrete
☒	☐	☐	26. Minimum of 1.5' of freeboard between normal overflow and emergency overflow
☒	☐	☐	27. Minimum of 1.5' of freeboard between max. design flow of emergency spillway and top of dam
☒	☐	☐	28. All emergency overflows are sized to handle entire drainage area for ponds in series
☒	☐	☐	29. Dam stabilized with permanent vegetation
☒	☐	☐	30. Sustained grade of haul road <10%
☒	☐	☐	31. Maximum grade of haul road <15% for no more than 300'
☒	☐	☐	32. Outer slopes of haul road no steeper than 2:1
☒	☐	☐	33. Outer slopes of haul road vegetated or otherwise stabilized
☒	☐	☐	34. Detail drawings supplied for all stream crossings
☒	☐	☐	35. Short-Term Stabilization/Grading And Temporary Vegetative Cover Plans
☒	☐	☐	36. Long-Term Stabilization/Grading And Permanent Reclamation or Water Quality Remediation Plans

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

Sediment basins provide sediment storage volume of 0.10 acre-feet per acre disturbed in addition to sufficient calculated and designed detention volume to meet 0.50 ml/l settleable solids.
Sediment basins are cleaned out when the accumulated sediment reaches the specified sediment storage volume set forth on the detailed design plans.
Upstream and downstream slopes of the dam are no less than 2.5H to 1V and are designed to provide slope stability with a minimum static safety factor of 1.3. This design is determined using the actual tested strength characteristics of the foundation and embankment material.
The emergency spillway is designed based on the anticipated flows, flow velocities, and whether the spillway is expected to carry continuous, sustained flows. In the case of a primary spillway of pipe, the secondary or emergency spillway may be set at an elevation above the maximum anticipated peak flow elevation. In such a case, a vegetated emergency spillway is adequate.
There are no stream crossings at this facility and does not discharge to a public water supply.
**All of the above deviations from ADEM guidelines are accepted design practices in accordance with Alabama Surface Mining Commission (ASMC) Rules and Regulations.

XXII. POLLUTION ABATEMENT & PREVENTION (PAP) PLAN REVIEW CHECKLIST

Yes	No	N/A	
			General Information:
☒	☐	☐	PE Seal with License #
☒	☐	☐	Name and Address of Operator
☒	☐	☐	Legal Description of Facility
☒	☐	☐	Name of Company
☒	☐	☐	Number of Employees
☒	☐	☐	Products to be Mined
☒	☐	☐	Hours of Operation
☒	☐	☐	Water Supply and Disposition
			Maps:
☒	☐	☐	Topographic Map including Information from Part XIII (a) – (o) of this Application
☒	☐	☐	1" – 500' or Equivalent Facility Map including Information from Part XIV of this Application
			Detailed Design Diagrams:
☒	☐	☐	Plan Views
☒	☐	☐	Cross-section Views
☒	☐	☐	Method of Diverting Runoff to Treatment Basins
☒	☐	☐	Line Drawing of Water Flow through Facility with Water Balance or Pictorial Description of Water Flow
			Narrative of Operations:
☒	☐	☐	Raw Materials Defined
☒	☐	☐	Processes Defined
☒	☐	☐	Products Defined
			Schematic Diagram:
☒	☐	☐	Points of Waste Origin
☒	☐	☐	Collection System
☒	☐	☐	Disposal System
			Post Treatment Quantity and Quality of Effluent:
☒	☐	☐	Flow
☒	☐	☐	Suspended Solids
☒	☐	☐	Iron Concentration
☒	☐	☐	pH
			Description of Waste Treatment Facility:
☒	☐	☐	Pre-Treatment Measures
☒	☐	☐	Recovery System
☒	☐	☐	Expected Life of Treatment Basin
☒	☐	☐	Measures for Ensuring Access to All Treatment Structures and Related Appurtenances including Outfall Locations
☒	☐	☐	Schedule of Cleaning and/or Abandonment
			Other:
☒	☐	☐	Precipitation/Volume Calculations/Diagram Attached
☒	☐	☐	BMP Plan for Haul Roads
☒	☐	☐	Measures for Minimizing Impacts to Adjacent Stream (*e.g.*, Buffer Strips, Berms)
☒	☐	☐	Measures for Ensuring Appropriate Setbacks are Maintained at All Times
☒	☐	☐	Methods for Minimizing Nonpoint Source Discharges
☒	☐	☐	If Chemical Treatment Used, Methods for Ensuring Appropriate Dosage
☒	☐	☐	Facility Closure Plans
☐	☒	☐	PE Rationale(s) For Alternate Standards, Designs or Plans

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

**All of the above deviations from ADEM guidelines are to meet accepted design practices in accordance with Alabama Surface Mining Commission (ASMC) Rules and Regulations.

XXIII. INFORMATION

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

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

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

The applicant is advised to contact:

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

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

Water Division
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463
Phone: (334) 271-7823
Fax: (334) 279-3051
h2omail@adem.alabama.gov
adem.alabama.gov

XXIV. PROFESSIONAL ENGINEER (PE) CERTIFICATION

A detailed, comprehensive Pollution Abatement & Prevention (PAP) Plan must be prepared, signed, and certified by a professional engineer (PE), registered in the State of Alabama, and the PE must certify as follows:

"I certify on behalf of the applicant, that I have completed an evaluation of discharge alternatives (Item XVIII) for any proposed new or increased discharges of pollutant(s) to Tier 2 waters and reached the conclusions indicated. I certify under penalty of law that technical information and data contained in this application, and a comprehensive PAP Plan including any attached SPCC plan, maps, engineering designs, etc. acceptable to ADEM, for the prevention and minimization of all sources of pollution in stormwater and authorized related process wastewater runoff has been prepared under my supervision for this facility utilizing effective, good engineering and pollution control practices and in accordance with the provisions of ADEM Admin. Code Division 335-6 , including Chapter 335-6-9 and Appendices A & B. If the PAP Plan is properly implemented and maintained by the Permittee, discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable and according to permit discharge limitations and other permit requirements. The applicant has been advised that appropriate pollution abatement/prevention facilities and structural & nonstructural management practices or Department approved equivalent management practices as detailed in the PAP Plan must be fully implemented and regularly maintained as needed at the facility in accordance with good sediment, erosion, and other pollution control practices, permit requirements, and other ADEM requirements to ensure protection of groundwater and surface water quality."

Name (type or print):	L. Wade Keeton	PE Registration #	17019
Title:	Director of Special Assignments	Phone Number	205-384-2126
Address:	P. O. Box 1549, Jasper, AL 35502		
Signature:	L. Wade Keeton	Date Signed	09/21/2021

XXV. RESPONSIBLE OFFICIAL SIGNATURE*

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

"I certify under penalty of law that this document, including technical information and data, the PAP Plan, including any SPCC plan, maps, engineering designs, and all other attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the PE and other person or persons under my supervision who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment for knowing violations. _____ *(initial here)*

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

"I certify that this form has not been altered, and if copied or reproduced, is consistent in format and identical in content to the ADEM approved form. _____ *(initial here)*

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

"I acknowledge my understanding that if coal, coal fines, coal refuse, or other coal related materials are mined, transloaded, processed, etc., that I may be required to obtain a permit from the ASMC. _____ *(initial here)*

"I acknowledge my understanding that if non-coal, non-limestone materials are mined, transloaded, processed, etc., that I may be required to obtain a permit from the ADOL. _____ *(initial here)*

"I acknowledge my understanding that if the proposed activities will be conducted in or potentially impact waters of the state or waters of the US (including wetlands), that I may be required to obtain a permit from the USACE." _____ *(initial here)*

Name (type or print): William David Muncher Official Title: Vice President - Operations Support

Signature: William David Muncher Date Signed 9/15/21

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

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

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

(b) In the case of a partnership, by a general partner;

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

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

Spill Prevention Control and Countermeasure Plan
State Of Alabama Registered Professional Engineer (PE) Certification

Drummond Company, Inc.
Short Creek Preparation Plant
NPDES Permit AL0043711

This is to certify that I, L. Wade Keeton, a Registered Engineer in the State of Alabama, am familiar with Drummond Company, Inc., Short Creek Preparation Plant, located in Alabama in the County of Jefferson, and, to the best of my knowledge, all information herein is true and correct, and the Spill Prevention Control and Countermeasures Plan has been prepared in accordance with good engineering practices.

L. Wade Keeton
Alabama Registration No. 17019

Date: 09/21/2021

Spill Prevention Control and Countermeasures Plan
For
Drummond Company, Inc.
Short Creek Preparation Plant

Location: T17S, R5W, Sec. 4, 8, 9, 16, 17, 20, Jefferson County, Alabama

Company Phone Number: (205) 387-0501

Company Contact and Address: Keith Madison, Director
Permitting & Environmental Compliance
P.O. Box 1549
Jasper, AL 35502-1549

1. This facility has never experienced a significant spill from any fuel or other chemical storage tanks.
2. The containment structures will be located in an area that is not subject to periodic flooding.
3. This plan provides for the containment of the chemicals as described in Attachment V of the permit modification (Item X response). The chemical list includes, water, oils, fuels and hydraulic fluids. Containment will be by bermed-off areas having a storage capacity of 110% of the largest tank in the area or double-walled tanks will be utilized. Containment walls will typically be constructed of concrete, blocks or compacted clay. The tanks are or will be located in well-ventilated areas. Only compatible materials will be used as pertains to each stored chemical.
4. The nearest surface waters of the State are Locust Fork of the Black Warrior River; UT to Locust Fork of the Black Warrior River; Fishtrap Branch; UT to Fishtrap Branch; and, Short Creek.
5. Containment structures will be constructed of compacted material around the tank area or concrete walls. There will be a 2" minimum pipe with a manual gate valve, which allows rainwater discharge when it is needed. The valve will remain closed at all times until the diked area collects enough rainwater that requires drainage. After an inspection of the water to determine if any pollutants are present, the valve will be opened to allow proper drainage and then immediately closed again. The containment system will be located such that rainwater released through normal dewatering drains to a permitted treatment structure. If pollutants are present in the rainwater, the pollutants will be removed prior to drainage. Pollutants will be disposed in accordance with existing State and Federal regulations.
6. If a spill should occur, the usable portion within the containment area will be immediately pumped as practical into a receiving vessel(s) for transport to another storage tank. Absorbent material will be kept available to contain spills. Unusable chemical waste and contaminated soil in the area will be excavated and disposed in accordance with existing State and Federal regulations.

7. The Company will maintain a written record of any spill that occurs and actions taken to properly dispose all spilled material.

8. All unloading of transport vehicles to fill the tanks will meet minimum requirements and regulations established by the Department of Transportation. Tanks will be attended while filling to prevent overflow and to note visible leaks from seams, gaskets, valves, etc. The Operations Manager of the facility will make periodic inspections of the unloading area to detect signs of minor spills. If spills are evident, contaminated soil will be disposed in accordance with existing State and Federal regulations.

9. All personnel connected with unloading transport vehicles, use of fuel oil, maintenance of the facility, or responsible for storm water drainage and spill cleanup will be made familiar with this plan, and a copy of this plan will be readily available to all personnel at the facility. Potential sources of spills are:

   A. Tank or Tank Valve Rupture

      Prevention: Tanks, valves, and fittings will be properly maintained and kept in good condition. A visual inspection of all tanks, valves, and fittings will be conducted periodically for leaks, and tank foundations for cracks and unusual settling.

   B. Tank Overfill

      Prevention: Truck drivers should follow correct operating procedures when unloading chemicals and stay with the equipment at all times during unloading operations. Key personnel will be present when fuel and/or other chemicals are delivered to assure that the delivery personnel follow proper procedures. Any spillage will be immediately cleaned up or mitigated in accordance with this plan.

   C. Hose Rupture During Unloading and Spillage from Hoses After Disconnection

      Prevention: Periodic inspections will be conducted of all hoses and replacement hoses will be inventoried. In addition, personnel will use the proper hose drainage procedure.

10. Notification

    In the event of a reportable quantity spill, immediately call:

    The National Response Center
    1-800-424-8802

    The Alabama Emergency Management Agency
    1-800-843-0699

    The Alabama Department of Environmental Management,
    Mining & Nonpoint Source Section, Field Operations Division
    1-334-394-4311

Report the following information:

1. Name, address and telephone number of person reporting spill
2. Exact location of facility and spill
3. Company name, number and location
4. Material spilled
5. Estimated quantity
6. Source of spill
7. Cause of spill
8. Nearest down-stream body of water to receive spill
9. Request actions to take for containment and cleanup

11. The facility will be kept gated and locked to prevent vandalism or theft whenever Drummond personnel are not present.

All key personnel will be fully trained in all aspects of this plan, the proper use of personal protective gear and all reporting and record keeping procedures. All non-key personnel will be made familiar with the plan and will be instructed on personal safety.

X. FUEL – CHEMICAL HANDLING, STORAGE & SPILL PREVENTION CONTROL & COUNTERMEASURES (SPCC) PLAN

Containment Structures

Map No.	Receiving Outfall	Individual Tank Capacity (gallons)	Contents
1	001	6,000	Sodium Hydroxide
2	001	12,000	Sodium Hydroxide
3	001	6,000	Diesel
4	015	10,000	Gasoline
5	015	10,000	Diesel

MATERIAL SAFETY DATA SHEET

Gasoline, All Grades **MSDS No. 9950**

EMERGENCY OVERVIEW

DANGER!

EXTREMELY FLAMMABLE - EYE AND MUCOUS MEMBRANE IRRITANT - EFFECTS CENTRAL NERVOUS SYSTEM - HARMFUL OR FATAL IF SWALLOWED - ASPIRATION HAZARD

NFPA 704 (Section 16)

High fire hazard. Keep away from heat, spark, open flame, and other ignition sources.

If ingested, do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs). Contact may cause eye, skin and mucous membrane irritation. Harmful if absorbed through the skin. Avoid prolonged breathing of vapors or mists. Inhalation may cause irritation, anesthetic effects (dizziness, nausea, headache, intoxication), and respiratory system effects.

Long-term exposure may cause effects to specific organs, such as to the liver, kidneys, blood, nervous system, and skin. Contains benzene, which can cause blood disease, including anemia and leukemia.

1. CHEMICAL PRODUCT and COMPANY INFORMATION

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

EMERGENCY TELEPHONE NUMBER (24 hrs): **CHEMTREC (800)424-9300**
COMPANY CONTACT (business hours): Corporate Safety (732)750-6000
MSDS (Environment, Health, Safety) Internet Website www.hess.com

SYNONYMS: Hess Conventional (Oxygenated and Non-oxygenated) Gasoline; Reformulated Gasoline (RFG); Reformulated Gasoline Blendstock for Oxygenate Blending (RBOB); Unleaded Motor or Automotive Gasoline

See Section 16 for abbreviations and acronyms.

2. COMPOSITION and INFORMATION ON INGREDIENTS *

INGREDIENT NAME (CAS No.)	CONCENTRATION PERCENT BY WEIGHT
Gasoline (86290-81-5)	100
Benzene (71-43-2)	0.1 - 4.9 (0.1 - 1.3 reformulated gasoline)
n-Butane (106-97-8)	< 10
Ethyl Alcohol (Ethanol) (64-17-5)	0 - 10
Ethyl benzene (100-41-4)	< 3
n-Hexane (110-54-3)	0.5 to 4
Methyl-tertiary butyl ether (MTBE) (1634-04-4)	0 to 15.0
Tertiary-amyl methyl ether (TAME) (994-05-8)	0 to 17.2
Toluene (108-88-3)	1 - 25
1,2,4- Trimethylbenzene (95-63-6)	< 6
Xylene, mixed isomers (1330-20-7)	1 - 15

A complex blend of petroleum-derived normal and branched-chain alkane, cycloalkane, alkene, and aromatic hydrocarbons. May contain antioxidant and multifunctional additives. Non-oxygenated Conventional Gasoline and RBOB do not have oxygenates (Ethanol or MTBE and/or TAME).

Oxygenated Conventional and Reformulated Gasoline will have oxygenates for octane enhancement or as legally required.

3. HAZARDS IDENTIFICATION

EYES
Moderate irritant. Contact with liquid or vapor may cause irritation.

SKIN
Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed repeatedly.

INGESTION
The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

INHALATION
Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

CHRONIC EFFECTS and CARCINOGENICITY
Contains benzene, a regulated human carcinogen. Benzene has the potential to cause anemia and other blood diseases, including leukemia, after repeated and prolonged exposure. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with systemic toxicity. See also Section 11 - Toxicological Information.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash). Chronic respiratory disease, liver or kidney dysfunction, or pre-existing central nervous system disorders may be aggravated by exposure.

4. FIRST AID MEASURES

EYES
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

SKIN
Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops.

INGESTION

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

INHALATION
Remove person to fresh air. If person is not breathing, ensure an open airway and provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT:	-45 °F (-43°C)
AUTOIGNITION TEMPERATURE:	highly variable; > 530 °F (>280 °C)
OSHA/NFPA FLAMMABILITY CLASS:	1A (flammable liquid)
LOWER EXPLOSIVE LIMIT (%):	1.4%
UPPER EXPLOSIVE LIMIT (%):	7.6%

FIRE AND EXPLOSION HAZARDS
Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

EXTINGUISHING MEDIA
SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or Halon.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

During certain times of the year and/or in certain geographical locations, gasoline may contain MTBE and/or TAME. Firefighting foam suitable for polar solvents is recommended for fuel with greater than 10% oxygenate concentration - refer to NFPA 11 "Low Expansion Foam - 1994 Edition."

FIRE FIGHTING INSTRUCTIONS
Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment.

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

See Section 16 for the NFPA 704 Hazard Rating.

6. ACCIDENTAL RELEASE MEASURES

ACTIVATE FACILITY SPILL CONTINGENCY or EMERGENCY PLAN.

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal - caution, flammable vapors may accumulate in closed containers. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

7. HANDLING and STORAGE

HANDLING PRECAUTIONS

******USE ONLY AS A MOTOR FUEL******
******DO NOT SIPHON BY MOUTH******

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents.

STORAGE PRECAUTIONS

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

WORK/HYGIENIC PRACTICES

Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

8. EXPOSURE CONTROLS and PERSONAL PROTECTION

EXPOSURE LIMITS

Component (CAS No.)	Source	TWA (ppm)	STEL (ppm)	Exposure Limits Note
Gasoline (86290-81-5)	ACGIH	300	500	A3
Benzene (71-43-2)	OSHA	1	5	Carcinogen
	ACGIH	0.5	2.5	A1, skin
	USCG	1	5	
n-Butane (106-97-8)	ACGIH	1000	--	Aliphatic Hydrocarbon Gases Alkane (C1-C4)
Ethyl Alcohol (ethanol) (64-17-5)	OSHA	1000	--	
	ACGIH	1000	--	A4
Ethyl benzene (100-41-4)	OSHA	100	--	
	ACGIH	100	125	A3
n-Hexane (110-54-3)	OSHA	500	--	
	ACGIH	50	--	Skin
Methyl-tertiary butyl ether [MTBE] (1634-04-4)	ACGIH	50		A3
Tertiary-amyl methyl ether [TAME] (994-05-8)				None established
Toluene (108-88-3)	OSHA	200		Ceiling: 300 ppm; Peak: 500 ppm (10 min.)
	ACGIH	20	--	A4
1,2,4- Trimethylbenzene (95-63-6)	ACGIH	25	--	
Xylene, mixed isomers (1330-20-7)	OSHA	100	--	
	ACGIH	100	150	A4

ENGINEERING CONTROLS

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

EYE/FACE PROTECTION

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

SKIN PROTECTION

Gloves constructed of nitrile or neoprene are recommended. Chemical protective clothing such as that made of of E.I. DuPont Tychem ®, products or equivalent is recommended based on degree of exposure.

Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

RESPIRATORY PROTECTION

A NIOSH-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection and limitations.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE

A translucent, straw-colored or light yellow liquid

ODOR

A strong, characteristic aromatic hydrocarbon odor. Oxygenated gasoline with MTBE and/or TAME may have a sweet, ether-like odor and is detectable at a lower concentration than non-oxygenated gasoline.

ODOR THRESHOLD

	Odor Detection	Odor Recognition
Non-oxygenated gasoline:	0.5 - 0.6 ppm	0.8 - 1.1 ppm
Gasoline with 15% MTBE:	0.2 - 0.3 ppm	0.4 - 0.7 ppm
Gasoline with 15% TAME:	0.1 ppm	0.2 ppm

BASIC PHYSICAL PROPERTIES

BOILING RANGE:	85 to 437 °F (39 to 200 °C)
VAPOR PRESSURE:	6.4 - 15 RVP @ 100 °F (38 °C) (275-475 mm Hg @ 68 °F (20 °C)
VAPOR DENSITY (air = 1):	AP 3 to 4
SPECIFIC GRAVITY (H_2O = 1):	0.70 – 0.78
EVAPORATION RATE:	10-11 (n-butyl acetate = 1)
PERCENT VOLATILES:	100 %
SOLUBILITY (H_2O):	Non-oxygenated gasoline - negligible (< 0.1% @ 77 °F). Gasoline with 15% MTBE - slight (0.1 - 3% @ 77 °F); ethanol is readily soluble in water

10. STABILITY and REACTIVITY)

STABILITY: Stable. Hazardous polymerization will not occur.

CONDITIONS TO AVOID

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources

INCOMPATIBLE MATERIALS

Keep away from strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

11. TOXICOLOGICAL PROPERTIES

ACUTE TOXICITY

Acute Dermal LD50 (rabbits): > 5 ml/kg
Acute Oral LD50 (rat): 18.75 ml/kg
Primary dermal irritation (rabbits): slightly irritating
Draize eye irritation (rabbits): non-irritating
Guinea pig sensitization: negative

CHRONIC EFFECTS AND CARCINOGENICITY

Carcinogenicity: OSHA: NO IARC: YES - 2B NTP: NO ACGIH: YES (A3)

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

This product may contain methyl tertiary butyl ether (MTBE): animal and human health effects studies indicate that MTBE may cause eye, skin, and respiratory tract irritation, central nervous system depression and neurotoxicity. MTBE is classified as an animal carcinogen (A3) by the ACGIH.

12. ECOLOGICAL INFORMATION

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations. If released, oxygenates such as ethers and alcohols will be expected to exhibit fairly high mobility in soil, and therefore may leach into groundwater. The API (www.api.org) provides a number of useful references addressing petroleum and oxygenate contamination of groundwater.

13. DISPOSAL CONSIDERATIONS

Consult federal, state and local waste regulations to determine appropriate disposal options.

14. TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME:	Gasoline
DOT HAZARD CLASS and PACKING GROUP:	3, PG II
DOT IDENTIFICATION NUMBER:	UN 1203
DOT SHIPPING LABEL:	FLAMMABLE LIQUID

PLACARD:

15. REGULATORY INFORMATION

U.S. FEDERAL, STATE, and LOCAL REGULATORY INFORMATION

This product and its constituents listed herein are on the EPA TSCA Inventory. Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state, or local regulations; consult those regulations applicable to your facility/operation.

CLEAN WATER ACT (OIL SPILLS)

Any spill or release of this product to "navigable waters" (essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIRONMENT)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil, refined, and unrefined petroleum products and any indigenous components of such. However, other federal reporting requirements (e.g., SARA Section 304 as well as the Clean Water Act if the spill occurs on navigable waters) may still apply.

SARA SECTION 311/312 - HAZARD CLASSES

ACUTE HEALTH	CHRONIC HEALTH	FIRE	SUDDEN RELEASE OF PRESSURE	REACTIVE
X	X	X	--	--

SARA SECTION 313 - SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

INGREDIENT NAME (CAS NUMBER)	CONCENTRATION WT. PERCENT
Benzene (71-43-2)	0.1 to 4.9 (0.1 to 1.3 for reformulated gasoline)
Ethyl benzene (100-41-4)	< 3

n-Hexane (110-54-3)	0.5 to 4
Methyl-tertiary butyl ether (MTBE) (1634-04-4)	0 to 15.0
Toluene (108-88-3)	1 to 15
1,2,4- Trimethylbenzene (95-63-6)	< 6
Xylene, mixed isomers (1330-20-7)	1 to 15

US EPA guidance documents (www.epa.gov/tri) for reporting Persistent Bioaccumulating Toxics (PBTs) indicate this product may contain the following deminimis levels of toxic chemicals subject to Section 313 reporting:

INGREDIENT NAME (CAS NUMBER)	CONCENTRATION - Parts per million (ppm) by weight
Polycyclic aromatic compounds (PACs)	17
Benzo (g,h,i) perylene (191-24-2)	2.55
Lead (7439-92-1)	0.079

CALIFORNIA PROPOSITION 65 LIST OF CHEMICALS

This product contains the following chemicals that are included on the Proposition 65 "List of Chemicals" required by the California Safe Drinking Water and Toxic Enforcement Act of 1986:

INGREDIENT NAME (CAS NUMBER)	Date Listed
Benzene	2/27/1987
Ethyl benzene	6/11/2004
Toluene	1/1/1991

CANADIAN REGULATORY INFORMATION (WHMIS)

Class B, Division 2 (Flammable Liquid)
Class D, Division 2A (Very toxic by other means) and Class D, Division 2B (Toxic by other means)

16. OTHER INFORMATION

NFPA® HAZARD RATING	HEALTH:	1	Slight
	FIRE:	3	Serious
	REACTIVITY:	0	Minimal
HMIS® HAZARD RATING	HEALTH:	1 *	Slight
	FIRE:	3	Serious
	PHYSICAL:	0	Minimal
			* CHRONIC

SUPERSEDES MSDS DATED: 07/01/06

ABBREVIATIONS:

AP = Approximately	< = Less than	> = Greater than
N/A = Not Applicable	N/D = Not Determined	ppm = parts per million

ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	CERCLA	Comprehensive Emergency Response, Compensation, and Liability Act
AIHA	American Industrial Hygiene Association	DOT	U.S. Department of Transportation [General Info: (800)467-4922]
ANSI	American National Standards Institute (212)642-4900	EPA	U.S. Environmental Protection Agency
API	American Petroleum Institute (202)682-8000	HMIS	Hazardous Materials Information System

IARC	International Agency For Research On Cancer	REL	Recommended Exposure Limit (NIOSH)
MSHA	Mine Safety and Health Administration	SARA	Superfund Amendments and Reauthorization Act of 1986 Title III
NFPA	National Fire Protection Association (617)770-3000	SCBA	Self-Contained Breathing Apparatus
NIOSH	National Institute of Occupational Safety and Health	SPCC	Spill Prevention, Control, and Countermeasures
NOIC	Notice of Intended Change (proposed change to ACGIH TLV)	STEL	Short-Term Exposure Limit (generally 15 minutes)
NTP	National Toxicology Program	TLV	Threshold Limit Value (ACGIH)
OPA	Oil Pollution Act of 1990	TSCA	Toxic Substances Control Act
OSHA	U.S. Occupational Safety & Health Administration	TWA	Time Weighted Average (8 hr.)
PEL	Permissible Exposure Limit (OSHA)	WEEL	Workplace Environmental Exposure Level (AIHA)
RCRA	Resource Conservation and Recovery Act	WHMIS	Workplace Hazardous Materials Information System (Canada)

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

Common Name: SODIUM HYDROXIDE
Manufacturer: LABCHEM
SDS Revision Date: 2/21/2018
SDS Format: GHS-US

Item Number(s): 5CVU9, 9MRE0
Manufacturer Model Number(s):

SDS Table of Contents

Click the desired link below to jump directly to that section in the SDS.

LC
LABCHEM

PERFORMANCE THROUGH CHEMISTRY

SODIUM HYDROXIDE

SAFETY DATA SHEET

ACCORDING TO FEDERAL REGISTER / VOL. 77, NO. 58 / MONDAY, MARCH 26, 2012 / RULES AND REGULATIONS

DATE OF ISSUE: 07/06/1998

REVISION DATE: 02/21/2018

SUPERSEDES: 10/14/2013

VERSION: 1.1

SECTION 1: IDENTIFICATION

top

1.1. IDENTIFICATION:

PRODUCT FORM: SUBSTANCE

SUBSTANCE NAME: SODIUM HYDROXIDE

CAS-NO.: 1310-73-2

PRODUCT CODE: LC23900

FORMULA: NaOH

SYNONYMS:
ANHYDROUS CAUSTIC SODA / CAUSTIC ALKALI / CAUSTIC FLAKE / CAUSTIC SODA, SOLID / CAUSTIC WHITE / CAUSTIC, FLAKED / HYDRATE OF SODA / HYDROXIDE OF SODA / LEWIS RED DEVIL LYE / SODA LYE / SODIUM HYDRATE / SODIUM HYDROXIDE, PELLETS

1.2. RECOMMENDED USE AND RESTRICTIONS ON USE:
USE OF THE SUBSTANCE/MIXTURE: INDUSTRIAL USE
RECOMMENDED USE: LABORATORY CHEMICALS
RESTRICTIONS ON USE: NOT FOR FOOD, DRUG OR HOUSEHOLD USE

1.3. SUPPLIER:
LABCHEM INC
JACKSON'S POINTE COMMERCE PARK BUILDING 1000
1010 JACKSON'S POINTE COURT
ZELIENOPLE, PA 16063
USA

T: 412-826-5230

F: 724-473-0647

INFO@LABCHEM.COM

WWW.LABCHEM.COM

1.4. EMERGENCY TELEPHONE NUMBER:

EMERGENCY NUMBER:
CHEMTREC: 1-800-424-9300 OR 011-703-527-3887

SECTION 2: HAZARD(S) IDENTIFICATION

top

2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

GHS-US CLASSIFICATION:
SKIN CORROSION/IRRITATION, CATEGORY 1A:
H314: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

SERIOUS EYE DAMAGE/EYE IRRITATION, CATEGORY 1:
H318: CAUSES SERIOUS EYE DAMAGE.

HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD, CATEGORY 3:
H402: HARMFUL TO AQUATIC LIFE

FULL TEXT OF H STATEMENTS : SEE SECTION 16

2.2. GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS:

GHS-US LABELLING:

HAZARD PICTOGRAMS (GHS-US):
GHS05: CORROSION

SIGNAL WORD (GHS-US): DANGER

HAZARD STATEMENTS (GHS-US):
H314: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
H402: HARMFUL TO AQUATIC LIFE

PRECAUTIONARY STATEMENTS (GHS-US):
P260: DO NOT BREATHE DUST, VAPOURS.

P264: WASH EXPOSED SKIN THOROUGHLY AFTER HANDLING.

P273: AVOID RELEASE TO THE ENVIRONMENT.

P280:
WEAR EYE PROTECTION, FACE PROTECTION, PROTECTIVE CLOTHING, PROTECTIVE GLOVES.

P301+P330+P331:
IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING.

P303+P361+P353:
IF ON SKIN (OR HAIR):
TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER.

P304+P340:
IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING.

P305+P351+P338:
IF IN EYES:
RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.

P310: IMMEDIATELY CALL A POISON CENTER/DOCTOR

P363: WASH CONTAMINATED CLOTHING BEFORE REUSE.

P405: STORE LOCKED UP.

P501: DISPOSE OF CONTENTS/CONTAINER TO COMPLY WITH APPLICABLE REGULATIONS

2.3. OTHER HAZARDS WHICH DO NOT RESULT IN CLASSIFICATION:

OTHER HAZARDS NOT CONTRIBUTING TO THE CLASSIFICATION:
NONE UNDER NORMAL CONDITIONS.

2.4. UNKNOWN ACUTE TOXICITY (GHS US): NOT APPLICABLE

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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3.1. SUBSTANCES:
SUBSTANCE TYPE: MONO-CONSTITUENT

NAME	PRODUCT IDENTIFIER	%	GHS-US CLASSIFICATION
SODIUM HYDROXIDE (MAIN CONSTITUENT)	(CAS-NO.): 1310-73-2	100	SKIN CORR. 1A, H314 EYE DAM. 1, H318 AQUATIC ACUTE 3, H402

FULL TEXT OF HAZARD CLASSES AND H-STATEMENTS: SEE SECTION 16

3.2. MIXTURES: NOT APPLICABLE

SECTION 4: FIRST-AID MEASURES

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4.1. DESCRIPTION OF FIRST AID MEASURES:

FIRST-AID MEASURES GENERAL: CHECK THE VITAL FUNCTIONS.

UNCONSCIOUS: MAINTAIN ADEQUATE AIRWAY AND RESPIRATION.

RESPIRATORY ARREST: ARTIFICIAL RESPIRATION OR OXYGEN.

CARDIAC ARREST: PERFORM RESUSCITATION.

VICTIM CONSCIOUS WITH LABOURED BREATHING: HALF-SEATED.

VICTIM IN SHOCK: ON HIS BACK WITH LEGS SLIGHTLY RAISED.

VOMITING:
PREVENT ASPHYXIA/ASPIRATION PNEUMONIA. PREVENT COOLING BY COVERING THE VICTIM (NO WARMING UP). KEEP WATCHING THE VICTIM. GIVE PSYCHOLOGICAL AID. KEEP THE VICTIM CALM, AVOID PHYSICAL STRAIN.

DEPENDING ON THE VICTIM'S CONDITION: DOCTOR/HOSPITAL.

FIRST-AID MEASURES AFTER INHALATION: REMOVE THE VICTIM INTO FRESH AIR.

RESPIRATORY PROBLEMS: CONSULT A DOCTOR/MEDICAL SERVICE.

FIRST-AID MEASURES AFTER SKIN CONTACT:
WIPE OFF DRY PRODUCT FROM SKIN. REMOVE CLOTHING BEFORE WASHING. WASH IMMEDIATELY WITH LOTS OF WATER (15 MINUTES)/SHOWER. DO NOT APPLY (CHEMICAL) NEUTRALIZING AGENTS. DO NOT REMOVE CLOTHING IF IT STICKS TO THE SKIN. COVER WOUNDS WITH STERILE BANDAGE. CONSULT A DOCTOR/MEDICAL SERVICE.

IF BURNED SURFACE >10%: TAKE VICTIM TO HOSPITAL.

FIRST-AID MEASURES AFTER EYE CONTACT:
RINSE IMMEDIATELY WITH PLENTY OF WATER FOR 15 MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. DO NOT APPLY NEUTRALIZING AGENTS. TAKE VICTIM TO AN OPHTHALMOLOGIST.

FIRST-AID MEASURES AFTER INGESTION: RINSE MOUTH WITH WATER.

IMMEDIATELY AFTER INGESTION:
GIVE LOTS OF WATER TO DRINK. DO NOT INDUCE VOMITING. DO NOT GIVE ACTIVATED CHARCOAL. DO NOT GIVE CHEMICAL ANTIDOTE. IMMEDIATELY CONSULT A DOCTOR/MEDICAL SERVICE. CALL POISON INFORMATION CENTRE (WWW.BIG.BE/ANTIGIF.HTM).

INGESTION OF LARGE QUANTITIES:
IMMEDIATELY TO HOSPITAL. TAKE THE CONTAINER/VOMIT TO THE DOCTOR/HOSPITAL.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS (ACUTE AND DELAYED):

SYMPTOMS/EFFECTS AFTER INHALATION:

WHEN PROCESSED:
DRY/SORE THROAT. COUGHING. IRRITATION OF THE RESPIRATORY TRACT. IRRITATION OF THE NASAL MUCOUS MEMBRANES.

ON CONTINUOUS EXPOSURE/CONTACT: RESPIRATORY DIFFICULTIES.

FOLLOWING SYMPTOMS MAY APPEAR LATER:
POSSIBLE OEDEMA OF THE UPPER RESPIRATORY TRACT. POSSIBLE LARYNGEAL SPASM/OEDEMA. RISK OF LUNG OEDEMA.

SYMPTOMS/EFFECTS AFTER SKIN CONTACT:
BLISTERS. CAUSTIC BURNS/CORROSION OF THE SKIN. SLOW-HEALING WOUNDS.

SYMPTOMS/EFFECTS AFTER EYE CONTACT:
CORROSION OF THE EYE TISSUE. PERMANENT EYE DAMAGE.

SYMPTOMS/EFFECTS AFTER INGESTION:
DRY/SORE THROAT. NAUSEA. ABDOMINAL PAIN. BLOOD IN VOMIT. DIFFICULTY IN SWALLOWING. POSSIBLE ESOPHAGEAL PERFORATION. BURNS TO THE GASTRIC/INTESTINAL MUCOSA. BLEEDING OF THE GASTROINTESTINAL TRACT. SHOCK.

CHRONIC SYMPTOMS:
ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
DRY SKIN. SKIN RASH/INFLAMMATION. POSSIBLE INFLAMMATION OF THE RESPIRATORY TRACT. GASTROINTESTINAL COMPLAINTS.

4.3. IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NECESSARY:
OBTAIN MEDICAL ASSISTANCE.

SECTION 5: FIRE-FIGHTING MEASURES

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5.1. SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA:

SUITABLE EXTINGUISHING MEDIA:
ADAPT EXTINGUISHING MEDIA TO THE ENVIRONMENT FOR SURROUNDING FIRES.

5.2. SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

FIRE HAZARD:
DIRECT FIRE HAZARD: NON COMBUSTIBLE.
INDIRECT FIRE HAZARD:
REACTIONS INVOLVING A FIRE HAZARD: SEE "REACTIVITY HAZARD".

EXPLOSION HAZARD:
INDIRECT EXPLOSION HAZARD:
REACTIONS WITH EXPLOSION HAZARDS: SEE "REACTIVITY HAZARD".

REACTIVITY:
MAY BE CORROSIVE TO METALS. ABSORBS THE ATMOSPHERIC CO2. VIOLENT TO EXPLOSIVE REACTION WITH (SOME) ACIDS.

REACTS VIOLENTLY WITH MANY COMPOUNDS:
HEAT RELEASE RESULTING IN INCREASED FIRE OR EXPLOSION RISK.

VIOLENT EXOTHERMIC REACTION WITH WATER (MOISTURE):
RELEASE OF CORROSIVE MIST.

REACTS EXOTHERMICALLY ON EXPOSURE TO WATER (MOISTURE) WITH COMBUSTIBLE MATERIALS: RISK OF SPONTANEOUS IGNITION.

5.3. SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:

PRECAUTIONARY MEASURES FIRE:
EXPOSURE TO FIRE/HEAT: KEEP UPWIND.
EXPOSURE TO FIRE/HEAT: CONSIDER EVACUATION.
EXPOSURE TO FIRE/HEAT: HAVE NEIGHBOURHOOD CLOSE DOORS AND WINDOWS.

FIREFIGHTING INSTRUCTIONS:
COOL TANKS/DRUMS WITH WATER SPRAY/REMOVE THEM INTO SAFETY.

WHEN COOLING/EXTINGUISHING:
NO WATER IN THE SUBSTANCE. TAKE ACCOUNT OF TOXIC FIRE-FIGHTING WATER. USE WATER MODERATELY AND IF POSSIBLE COLLECT OR CONTAIN IT.

PROTECTION DURING FIREFIGHTING:
HEAT/FIRE EXPOSURE: COMPRESSED AIR/OXYGEN APPARATUS.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

GENERAL MEASURES:
ABSORB SPILLAGE TO PREVENT MATERIAL DAMAGE. DIKE AND CONTAIN SPILL.

6.1.1. FOR NON-EMERGENCY PERSONNEL:

PROTECTIVE EQUIPMENT: GLOVES. FACE-SHIELD. CORROSION-PROOF SUIT.
DUST CLOUD PRODUCTION: COMPRESSED AIR/OXYGEN APPARATUS.
CONTACT WITH MOISTURE/WATER: COMPRESSED AIR/OXYGEN APPARATUS.
CONTACT WITH MOISTURE/WATER: GAS-TIGHT SUIT.

EMERGENCY PROCEDURES:
MARK THE DANGER AREA. PREVENT DUST CLOUD FORMATION. CORROSION-PROOF APPLIANCES. KEEP CONTAINERS CLOSED. AVOID INGRESS OF WATER IN THE CONTAINERS. WASH CONTAMINATED CLOTHES.

ON CONTACT WITH MOISTURE/WATER: KEEP UPWIND.

ON CONTACT WITH MOISTURE/WATER: CONSIDER EVACUATION.

IN CASE OF HAZARDOUS REACTIONS: KEEP UPWIND.

IN CASE OF REACTIVITY HAZARD: CONSIDER EVACUATION.

MEASURES IN CASE OF DUST RELEASE:
IN CASE OF DUST PRODUCTION: KEEP UPWIND.
DUST PRODUCTION: HAVE NEIGHBOURHOOD CLOSE DOORS AND WINDOWS.

6.1.2. FOR EMERGENCY RESPONDERS:

PROTECTIVE EQUIPMENT:
EQUIP CLEANUP CREW WITH PROPER PROTECTION. DO NOT BREATHE DUST.

EMERGENCY PROCEDURES: STOP RELEASE.

6.2. ENVIRONMENTAL PRECAUTIONS:
PREVENT SOIL AND WATER POLLUTION. PREVENT SPREADING IN SEWERS.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

FOR CONTAINMENT:
CONTAIN RELEASED PRODUCT, PUMP INTO SUITABLE CONTAINERS. PLUG THE LEAK, CUT OFF THE SUPPLY. DAM UP THE SOLID SPILL.

HAZARDOUS REACTION: MEASURE EXPLOSIVE GAS-AIR MIXTURE.

REACTION: DILUTE COMBUSTIBLE GAS/VAPOUR WITH WATER CURTAIN.

METHODS FOR CLEANING UP: COLLECT THE SPILL ONLY IF IT IS IN A DRY STATE.

WETTED SUBSTANCE:
COVER WITH POWDERED LIMESTONE OR DRY SAND, EARTH, VERMICULITE. SCOOP SOLID SPILL INTO CLOSING CONTAINERS.

UNDER CONTROLLED CONDITIONS:
NEUTRALIZE LEFTOVERS WITH DILUTE ACID SOLUTION. POSSIBLE VIOLENT REACTION IF YOU NEUTRALIZE. CAREFULLY COLLECT THE SPILL/LEFTOVERS. CLEAN CONTAMINATED SURFACES WITH AN EXCESS OF WATER. TAKE COLLECTED SPILL TO MANUFACTURER/COMPETENT AUTHORITY. WASH CLOTHING AND EQUIPMENT AFTER HANDLING.

6.4. REFERENCE TO OTHER SECTIONS: NO ADDITIONAL INFORMATION AVAILABLE

SECTION 7: HANDLING AND STORAGE

top

7.1. PRECAUTIONS FOR SAFE HANDLING:

PRECAUTIONS FOR SAFE HANDLING:
AVOID RAISING DUST. AVOID CONTACT OF SUBSTANCE WITH WATER. MEASURE THE CONCENTRATION IN THE AIR REGULARLY. CARRY OPERATIONS IN THE OPEN/UNDER LOCAL EXHAUST/VENTILATION OR WITH RESPIRATORY PROTECTION. COMPLY WITH THE LEGAL REQUIREMENTS. REMOVE CONTAMINATED CLOTHING IMMEDIATELY. CLEAN CONTAMINATED CLOTHING. KEEP THE SUBSTANCE FREE FROM CONTAMINATION. USE CORROSION PROOF EQUIPMENT. THOROUGHLY CLEAN/DRY THE INSTALLATION BEFORE USE. DO NOT DISCHARGE THE WASTE INTO THE DRAIN.

HYGIENE MEASURES:
WASH HANDS AND OTHER EXPOSED AREAS WITH MILD SOAP AND WATER BEFORE EATING, DRINKING OR SMOKING AND WHEN LEAVING WORK. WASH CONTAMINATED CLOTHING BEFORE REUSE. SEPARATE WORKING CLOTHES FROM TOWN CLOTHES. LAUNDER SEPARATELY.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

INCOMPATIBLE PRODUCTS:
COMBUSTIBLE MATERIALS. METALS. STRONG ACIDS. STRONG OXIDIZERS. PROTECT FROM MOISTURE.

INCOMPATIBLE MATERIALS: INCOMPATIBLE MATERIALS. MOISTURE. HEAT SOURCES.

STORAGE TEMPERATURE: 20 DEG. C

HEAT AND IGNITION SOURCES:
KEEP SUBSTANCE AWAY FROM: HEAT SOURCES.

PROHIBITIONS ON MIXED STORAGE:

KEEP SUBSTANCE AWAY FROM:
COMBUSTIBLE MATERIALS. OXIDIZING AGENTS. (STRONG) ACIDS. METALS. ORGANIC MATERIALS. WATER/MOISTURE.

STORAGE AREA:
STORE IN A DRY AREA. KEEP CONTAINER IN A WELL-VENTILATED PLACE. KEEP LOCKED UP. UNAUTHORIZED PERSONS ARE NOT ADMITTED. STORE AT AMBIENT TEMPERATURE. KEEP ONLY IN THE ORIGINAL CONTAINER. MEET THE LEGAL REQUIREMENTS.

SPECIAL RULES ON PACKAGING:

SPECIAL REQUIREMENTS:
HERMETICAL. WATERTIGHT. CORROSION-PROOF. DRY. CLEAN. CORRECTLY LABELLED. MEET THE LEGAL REQUIREMENTS. SECURE FRAGILE PACKAGINGS IN SOLID CONTAINERS.

PACKAGING MATERIALS:
SUITABLE MATERIAL: STAINLESS STEEL. NICKEL. POLYETHYLENE. PAPER.
MATERIAL TO AVOID: LEAD. ALUMINIUM. COPPER. TIN. ZINC. BRONZE. TEXTILE.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

top

8.1. CONTROL PARAMETERS:

SODIUM HYDROXIDE (1310-73-2):

ACGIH:
ACGIH CEILING (MG/M3): 2 MG/M3

OSHA:
OSHA PEL (TWA) (MG/M3): 2 MG/M3

IDLH:
US IDLH (MG/M3): 10 MG/M3

NIOSH:
NIOSH REL (CEILING) (MG/M3): 2 MG/M3

8.2. APPROPRIATE ENGINEERING CONTROLS:

APPROPRIATE ENGINEERING CONTROLS:
EMERGENCY EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE IN THE IMMEDIATE VICINITY OF ANY POTENTIAL EXPOSURE. PROVIDE ADEQUATE GENERAL AND LOCAL EXHAUST VENTILATION.

8.3. INDIVIDUAL PROTECTION MEASURES/PERSONAL PROTECTIVE EQUIPMENT:

PERSONAL PROTECTIVE EQUIPMENT:
SAFETY GLASSES. PROTECTIVE CLOTHING. GLOVES. DUST/AEROSOL MASK WITH FILTER TYPE P3.

MATERIALS FOR PROTECTIVE CLOTHING:
GIVE GOOD RESISTANCE: NATURAL RUBBER. NEOPRENE. NITRILE RUBBER.
GIVE LESS RESISTANCE: BUTYL RUBBER. POLYETHYLENE. PVA.
GIVE POOR RESISTANCE: NATURAL FIBRES

HAND PROTECTION: GLOVES

EYE PROTECTION: FACE SHIELD.
IN CASE OF DUST PRODUCTION: PROTECTIVE GOGGLES

SKIN AND BODY PROTECTION: CORROSION-PROOF CLOTHING.
IN CASE OF DUST PRODUCTION: HEAD/NECK PROTECTION

RESPIRATORY PROTECTION:
DUST PRODUCTION: DUST MASK WITH FILTER TYPE P3.
HIGH DUST PRODUCTION: SELF-CONTAINED BREATHING APPARATUS

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE: SOLID

APPEARANCE:
CRYSTALLINE SOLID. CRYSTALLINE POWDER. LITTLE SPHERES. LUMPS. NEEDLES. SCALES. FLAKES.

COLOUR: WHITE

ODOUR: ODOURLESS

ODOUR THRESHOLD: NO DATA AVAILABLE

PH: 14 (5%)

MELTING POINT: 323 DEG. C

FREEZING POINT: NO DATA AVAILABLE

BOILING POINT: 1388 DEG. C (1013.25 HPA)

FLASH POINT: NOT APPLICABLE

RELATIVE EVAPORATION RATE (BUTYLACETATE=1): NO DATA AVAILABLE

FLAMMABILITY (SOLID, GAS): NO DATA AVAILABLE

VAPOUR PRESSURE: <0.1 HPA (20 DEG. C)

RELATIVE VAPOUR DENSITY AT 20 DEG. C: NO DATA AVAILABLE

RELATIVE DENSITY: 2.13 (20 DEG. C)

DENSITY: 2130 KG/M3

MOLECULAR MASS: 40 G/MOL

SOLUBILITY:
EXOTHERMICALLY SOLUBLE IN WATER. SOLUBLE IN ETHANOL. SOLUBLE IN METHANOL. SOLUBLE IN GLYCEROL.

WATER: 100 G/100ML (25 DEG. C)
ETHANOL: SOLUBLE

LOG POW: NO DATA AVAILABLE

AUTO-IGNITION TEMPERATURE: NOT APPLICABLE

DECOMPOSITION TEMPERATURE: NO DATA AVAILABLE

VISCOSITY, KINEMATIC: 0.53 MM2/S (25 DEG. C, 1 MOL/L)

VISCOSITY, DYNAMIC: 0.997 MPA.S (25 DEG. C, TEST DATA)

EXPLOSIVE LIMITS: NO DATA AVAILABLE

EXPLOSIVE PROPERTIES: NOT APPLICABLE.

OXIDISING PROPERTIES: NONE.

9.2. OTHER INFORMATION:

MINIMUM IGNITION ENERGY: NOT APPLICABLE

SATURATION CONCENTRATION: 671 G/M3

VOC CONTENT: NOT APPLICABLE (INORGANIC)

OTHER PROPERTIES: TRANSLUCENT. HYGROSCOPIC. SUBSTANCE HAS BASIC REACTION.

SECTION 10: STABILITY AND REACTIVITY

top

10.1. REACTIVITY:
MAY BE CORROSIVE TO METALS. ABSORBS THE ATMOSPHERIC CO2. VIOLENT TO EXPLOSIVE REACTION WITH (SOME) ACIDS.

REACTS VIOLENTLY WITH MANY COMPOUNDS:
HEAT RELEASE RESULTING IN INCREASED FIRE OR EXPLOSION RISK.

VIOLENT EXOTHERMIC REACTION WITH WATER (MOISTURE):
RELEASE OF CORROSIVE MIST.

REACTS EXOTHERMICALLY ON EXPOSURE TO WATER (MOISTURE) WITH COMBUSTIBLE MATERIALS: RISK OF SPONTANEOUS IGNITION.

10.2. CHEMICAL STABILITY: HYGROSCOPIC. UNSTABLE ON EXPOSURE TO AIR.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS:
REACTS VIOLENTLY WITH ACIDS. REACTS VIOLENTLY WITH WATER.

10.4. CONDITIONS TO AVOID: MOISTURE. INCOMPATIBLE MATERIALS.

10.5. INCOMPATIBLE MATERIALS:
WATER. STRONG OXIDIZERS. STRONG ACIDS. METALS. COMBUSTIBLE MATERIALS.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS: SODIUM OXIDE.

SECTION 11: TOXICOLOGICAL INFORMATION

top

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS:

LIKELY ROUTES OF EXPOSURE: SKIN AND EYES CONTACT

ACUTE TOXICITY: NOT CLASSIFIED

SKIN CORROSION/IRRITATION: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

PH: 14 (5%)

SERIOUS EYE DAMAGE/IRRITATION: CAUSES SERIOUS EYE DAMAGE.

PH: 14 (5%)

RESPIRATORY OR SKIN SENSITISATION: NOT CLASSIFIED

GERM CELL MUTAGENICITY: NOT CLASSIFIED

CARCINOGENICITY:
NOT CLASSIFIED
(BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET)

REPRODUCTIVE TOXICITY: NOT CLASSIFIED

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): NOT CLASSIFIED

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): NOT CLASSIFIED

ASPIRATION HAZARD: NOT CLASSIFIED

POTENTIAL ADVERSE HUMAN HEALTH EFFECTS AND SYMPTOMS:
CAUSES SEVERE SKIN BURNS. CAUSES SERIOUS EYE DAMAGE.

SYMPTOMS/EFFECTS AFTER INHALATION:
WHEN PROCESSED:
DRY/SORE THROAT. COUGHING. IRRITATION OF THE RESPIRATORY TRACT. IRRITATION OF THE NASAL MUCOUS MEMBRANES.

ON CONTINUOUS EXPOSURE/CONTACT: RESPIRATORY DIFFICULTIES.

FOLLOWING SYMPTOMS MAY APPEAR LATER:
POSSIBLE OEDEMA OF THE UPPER RESPIRATORY TRACT. POSSIBLE LARYNGEAL SPASM/OEDEMA. RISK OF LUNG OEDEMA.

SYMPTOMS/EFFECTS AFTER SKIN CONTACT:
BLISTERS. CAUSTIC BURNS/CORROSION OF THE SKIN. SLOW-HEALING WOUNDS.

SYMPTOMS/EFFECTS AFTER EYE CONTACT:
CORROSION OF THE EYE TISSUE. PERMANENT EYE DAMAGE.

SYMPTOMS/EFFECTS AFTER INGESTION:
DRY/SORE THROAT. NAUSEA. ABDOMINAL PAIN. BLOOD IN VOMIT. DIFFICULTY IN SWALLOWING. POSSIBLE ESOPHAGEAL PERFORATION. BURNS TO THE GASTRIC/INTESTINAL MUCOSA. BLEEDING OF THE GASTROINTESTINAL TRACT. SHOCK.

CHRONIC SYMPTOMS:

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
DRY SKIN. SKIN RASH/INFLAMMATION. POSSIBLE INFLAMMATION OF THE RESPIRATORY TRACT. GASTROINTESTINAL COMPLAINTS.

SECTION 12: ECOLOGICAL INFORMATION

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12.1. TOXICITY:

ECOLOGY - GENERAL:
NOT CLASSIFIED AS DANGEROUS FOR THE ENVIRONMENT ACCORDING TO THE CRITERIA OF REGULATION (EC) NO 1272/2008.

ECOLOGY - AIR:
NOT INCLUDED IN THE LIST OF FLUORINATED GREENHOUSE GASES (REGULATION (EU) NO 517/2014). NOT CLASSIFIED AS DANGEROUS FOR THE OZONE LAYER (REGULATION (EC) NO 1005/2009).

ECOLOGY - WATER:
HARMFUL TO CRUSTACEA. HARMFUL TO FISHES. GROUNDWATER POLLUTANT. PH SHIFT.

SODIUM HYDROXIDE (1310-73-2):
LC50 FISH 1:
45.4 MG/L (OTHER, 96 H, SALMO GAIRDNERI, STATIC SYSTEM, FRESH WATER, EXPERIMENTAL VALUE)

EC50 DAPHNIA 1:
40.4 MG/L (OTHER, 48 H, CERIODAPHNIA SP., EXPERIMENTAL VALUE)

12.2. PERSISTENCE AND DEGRADABILITY:

SODIUM HYDROXIDE (1310-73-2):
PERSISTENCE AND DEGRADABILITY:
BIODEGRADABILITY: NOT APPLICABLE.

BIOCHEMICAL OXYGEN DEMAND (BOD): NOT APPLICABLE (INORGANIC)

CHEMICAL OXYGEN DEMAND (COD): NOT APPLICABLE (INORGANIC)

THOD: NOT APPLICABLE (INORGANIC)

12.3. BIOACCUMULATIVE POTENTIAL:

SODIUM HYDROXIDE (1310-73-2):
BIOACCUMULATIVE POTENTIAL: NOT BIOACCUMULATIVE.

12.4. MOBILITY IN SOIL:

SODIUM HYDROXIDE (1310-73-2):
ECOLOGY - SOIL: NO (TEST)DATA ON MOBILITY OF THE SUBSTANCE AVAILABLE.

12.5. OTHER ADVERSE EFFECTS: NO ADDITIONAL INFORMATION AVAILABLE

SECTION 13: DISPOSAL CONSIDERATIONS

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13.1. DISPOSAL METHODS:

WASTE DISPOSAL RECOMMENDATIONS:
DO NOT DISCHARGE INTO DRAINS OR THE ENVIRONMENT. REMOVE WASTE IN ACCORDANCE WITH LOCAL AND/OR NATIONAL REGULATIONS. HAZARDOUS WASTE SHALL NOT BE MIXED TOGETHER WITH OTHER WASTE. DIFFERENT TYPES OF HAZARDOUS WASTE SHALL NOT BE MIXED TOGETHER IF THIS MAY ENTAIL A RISK OF POLLUTION OR CREATE PROBLEMS FOR THE FURTHER MANAGEMENT OF THE WASTE. HAZARDOUS WASTE SHALL BE MANAGED RESPONSIBLY. ALL ENTITIES THAT STORE, TRANSPORT OR HANDLE HAZARDOUS WASTE

SHALL TAKE THE NECESSARY MEASURES TO PREVENT RISKS OF POLLUTION OR DAMAGE TO PEOPLE OR ANIMALS. SHOULD NOT BE LANDFILLED WITH HOUSEHOLD WASTE. RECYCLE/REUSE. DILUTE. NEUTRALIZE.

ADDITIONAL INFORMATION:
HAZARDOUS WASTE ACCORDING TO DIRECTIVE 2008/98/EC, AS AMENDED BY REGULATION (EU) NO 1357/2014 AND REGULATION (EU) NO 2017/997.

SECTION 14: TRANSPORT INFORMATION

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DEPARTMENT OF TRANSPORTATION (DOT):

IN ACCORDANCE WITH DOT:

TRANSPORT DOCUMENT DESCRIPTION: UN1823 SODIUM HYDROXIDE, SOLID, 8, II

UN-NO.(DOT): UN1823

PROPER SHIPPING NAME (DOT): SODIUM HYDROXIDE, SOLID

TRANSPORT HAZARD CLASS(ES) (DOT):
8 - CLASS 8 - CORROSIVE MATERIAL 49 CFR 173.136

PACKING GROUP (DOT): II - MEDIUM DANGER

HAZARD LABELS (DOT): 8 - CORROSIVE

DOT PACKAGING NON BULK (49 CFR 173.XXX): 212

DOT PACKAGING BULK (49 CFR 173.XXX): 240

DOT SPECIAL PROVISIONS (49 CFR 172.102):
IB8 - AUTHORIZED IBCS:
METAL (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B AND 31N); RIGID PLASTICS (11H1, 11H2, 21H1, 21H2, 31H1 AND 31H2); COMPOSITE (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 AND 31HZ2); FIBERBOARD (11G); WOODEN (11C, 11D AND 11F); FLEXIBLE (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 OR 13M2).

IP2 - WHEN IBCS OTHER THAN METAL OR RIGID PLASTICS IBCS ARE USED, THEY MUST BE OFFERED FOR TRANSPORTATION IN A CLOSED FREIGHT CONTAINER OR A CLOSED TRANSPORT VEHICLE.

IP4 - FLEXIBLE, FIBERBOARD OR WOODEN IBCS MUST BE SIFT-PROOF AND WATER-RESISTANT OR BE FITTED WITH A SIFT-PROOF AND WATER-RESISTANT LINER.

T3 - 2.65 178.274(D)(2) NORMAL..... 178.275(D)(2)

TP33 - THE PORTABLE TANK INSTRUCTION ASSIGNED FOR THIS SUBSTANCE APPLIES FOR GRANULAR AND POWDERED SOLIDS AND FOR SOLIDS WHICH ARE FILLED AND DISCHARGED AT TEMPERATURES ABOVE THEIR MELTING POINT WHICH ARE COOLED AND TRANSPORTED AS A SOLID MASS. SOLID SUBSTANCES TRANSPORTED OR OFFERED FOR TRANSPORT ABOVE THEIR MELTING POINT ARE AUTHORIZED FOR TRANSPORTATION IN PORTABLE TANKS CONFORMING TO THE PROVISIONS OF PORTABLE TANK INSTRUCTION T4 FOR SOLID SUBSTANCES OF PACKING GROUP III OR T7 FOR SOLID SUBSTANCES OF PACKING GROUP II, UNLESS A TANK WITH MORE STRINGENT REQUIREMENTS FOR MINIMUM SHELL THICKNESS, MAXIMUM ALLOWABLE WORKING PRESSURE, PRESSURE-RELIEF DEVICES OR BOTTOM OUTLETS ARE ASSIGNED IN WHICH CASE THE MORE STRINGENT TANK INSTRUCTION AND SPECIAL PROVISIONS SHALL APPLY. FILLING LIMITS MUST BE IN ACCORDANCE WITH PORTABLE TANK SPECIAL PROVISION TP3. SOLIDS MEETING THE DEFINITION OF AN ELEVATED TEMPERATURE MATERIAL MUST BE TRANSPORTED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THIS SUBCHAPTER.

DOT PACKAGING EXCEPTIONS (49 CFR 173.XXX): 154

DOT QUANTITY LIMITATIONS PASSENGER AIRCRAFT/RAIL (49 CFR 173.27): 15 KG

DOT QUANTITY LIMITATIONS CARGO AIRCRAFT ONLY (49 CFR 175.75): 50 KG

DOT VESSEL STOWAGE LOCATION:
A - THE MATERIAL MAY BE STOWED "ON DECK" OR "UNDER DECK" ON A CARGO VESSEL AND ON A PASSENGER VESSEL.

DOT VESSEL STOWAGE OTHER: 52 - STOW "SEPARATED FROM" ACIDS

OTHER INFORMATION: NO SUPPLEMENTARY INFORMATION AVAILABLE.

SECTION 15: REGULATORY INFORMATION

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15.1. US FEDERAL REGULATIONS:

SODIUM HYDROXIDE (1310-73-2):
LISTED ON THE UNITED STATES TSCA (TOXIC SUBSTANCES CONTROL ACT) INVENTORY
NOT SUBJECT TO REPORTING REQUIREMENTS OF THE UNITED STATES SARA SECTION 313

RQ (REPORTABLE QUANTITY, SECTION 304 OF EPA'S LIST OF LISTS): 1000 LB

SARA SECTION 311/312 HAZARD CLASSES: IMMEDIATE (ACUTE) HEALTH HAZARD

ALL COMPONENTS OF THIS PRODUCT ARE LISTED, OR EXCLUDED FROM LISTING, ON THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY TOXIC SUBSTANCES CONTROL ACT (TSCA) INVENTORY

15.2. INTERNATIONAL REGULATIONS:

CANADA:

SODIUM HYDROXIDE (1310-73-2):
LISTED ON THE CANADIAN DSL (DOMESTIC SUBSTANCES LIST)

EU-REGULATIONS: NO ADDITIONAL INFORMATION AVAILABLE

NATIONAL REGULATIONS: NO ADDITIONAL INFORMATION AVAILABLE

15.3. US STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:
THIS PRODUCT DOES NOT CONTAIN ANY SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, DEVELOPMENTAL AND/OR REPRODUCTIVE HARM

SECTION 16: OTHER INFORMATION

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REVISION DATE: 02/21/2018

FULL TEXT OF H-STATEMENTS: SEE SECTION 16

H314: CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

H318: CAUSES SERIOUS EYE DAMAGE.

H402: HARMFUL TO AQUATIC LIFE

NFPA HEALTH HAZARD 3 - MATERIALS THAT, UNDER EMERGENCY CONDITIONS, CAN CAUSE SERIOUS OR PERMANENT INJURY.
NFPA FIRE HAZARD 0 - MATERIALS THAT WILL NOT BURN UNDER TYPICAL DIRE CONDITIONS, INCLUDING INTRINSICALLY NONCOMBUSTIBLE MATERIALS SUCH AS CONCRETE, STONE, AND SAND.

NFPA REACTIVITY 1 - MATERIALS THAT IN THEMSELVES ARE NORMALLY STABLE BUT CAN BECOME UNSTABLE AT ELEVATED TEMPERATURES AND PRESSURES.

HAZARD RATING:

HEALTH	3	SERIOUS HAZARD - MAJOR INJURY LIKELY UNLESS PROMPT ACTION IS TAKEN AND MEDICAL TREATMENT IS GIVEN
FLAMMABILITY	0	MINIMAL HAZARD - MATERIALS THAT WILL NOT BURN
PHYSICAL	1	SLIGHT HAZARD - MATERIALS THAT ARE NORMALLY STABLE BUT CAN BECOME UNSTABLE (SELF-REACT) AT HIGH TEMPERATURES AND PRESSURES. MATERIALS MAY REACT NON-VIOLENTLY WITH WATER OR UNDERGO HAZARDOUS POLYMERIZATION IN THE ABSENCE OF INHIBITORS.

PERSONAL PROTECTION F

F - SAFETY GLASSES, GLOVES, SYNTHETIC APRON, DUST RESPIRATOR

SDS US LABCHEM

EN (ENGLISH)

Common Name: NO. 2 DIESEL FUEL
Manufacturer: RELADYNE
SDS Revision Date: 4/6/2015
SDS Format: GHS-US

Item Number(s): 54YF17, 54YF18
Manufacturer Model Number(s):

SDS Table of Contents

Click the desired link below to jump directly to that section in the SDS.

SAFETY DATA SHEET

ACCORDING TO OSHA HCS 2012 (29 CFR 1910.1200)

SECTION 1: IDENTIFICATION

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PRODUCT IDENTIFIER: NO. 2 DIESEL FUEL

OTHER MEANS OF IDENTIFICATION:
#2DSL ULS (ALL GRADES); #2DSL HS (ALL GRADES); #2DSL LS (ALL GRADES); CARB DSL (ALL GRADES); DIST CARB-DIESEL (ALL GRADES); DISTILLATE, DIESEL (ALL GRADES); GAS OIL (ALL GRADES); HYDRODEWAXER DIESEL (ALL GRADES); DIESEL FUEL (ALL GRADES); EPA DIESEL FUEL (ALL GRADES); NO. 2 DIESEL (ALL GRADES); NO. 2 DIESEL FUEL OIL (ALL GRADES); NO. 2 DISTILLATE; NO. 2 DIESEL WITH RENEWABLE DIESEL (ALL GRADES); SUPER DIESEL FUEL (ALL GRADES); DISTILLATE BLEND STOCK; FUELS, DIESEL; VIRGIN DIESEL FUEL; PCR - HOD -HEATING OIL DISTILLATE

SDS NUMBER: 311

MARPOL ANNEX I CATEGORY: GAS OILS, INCLUDING SHIP'S BUNKERS

RELEVANT IDENTIFIED USES: FUEL

USES ADVISED AGAINST: ALL OTHERS

24 HOUR EMERGENCY PHONE NUMBER:
INFOTRAC: 800-535-5053

SUPPLIED FOR:
RELADYNE, LLC
8280 MONTGOMERY ROAD
SUITE 101
CINCINNATI, OH 45236

SDS INFORMATION:
PHONE: 888-830-3156

EMAIL: SALES@RELADYNE.COM

URL: WWW.RELADYNE.COM

SECTION 2: HAZARD IDENTIFICATION

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CLASSIFIED HAZARDS:
H226: FLAMMABLE LIQUIDS - CATEGORY 3
H315: SKIN CORROSION/IRRITATION - CATEGORY 2
H304: ASPIRATION HAZARD - CATEGORY 1
H332: ACUTE TOXICITY, INHALATION - CATEGORY 4
H373: SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - CATEGORY 2
H351: CARCINOGENICITY - CATEGORY 2
H411: HAZARDOUS TO THE AQUATIC ENVIRONMENT, CHRONIC TOXICITY - CATEGORY 2

OTHER HAZARDS:
ELECTROSTATIC CHARGE MAY BE GENERATED DURING PUMPING AND OTHER OPERATIONS

LABEL ELEMENTS:

DANGER:
FLAME
EXCLAMATION MARK
HEALTH HAZARD
ENVIRONMENT

FLAMMABLE LIQUID AND VAPOR

CAUSES SKIN IRRITATION

MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS

HARMFUL IF INHALED

MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE

SUSPECTED OF CAUSING CANCER

TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS

OBTAIN SPECIAL INSTRUCTIONS BEFORE USE; DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD; KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. - NO SMOKING; GROUND/BOND CONTAINER AND RECEIVING EQUIPMENT; USE ONLY NON-SPARKING TOOLS; TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE; DO NOT BREATHE DUST/FUME/GAS/MIST/VAPOURS/SPRAY; WASH SKIN THOROUGHLY AFTER HANDLING; USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA; AVOID RELEASE TO THE ENVIRONMENT; WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING AND EYE/FACE PROTECTION

IF SWALLOWED:

IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN; DO NOT INDUCE VOMITING

IF ON SKIN (OR HAIR):
REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER

IF INHALED:
REMOVE VICTIM TO FRESH AIR AND KEEP AT REST IN A POSITION COMFORTABLE FOR BREATHING; CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL; TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE

IN CASE OF FIRE:
USE CO2, DRY CHEMICAL, OR FOAM FOR EXTINCTION; STORE IN A WELL-VENTILATED PLACE. KEEP COOL; DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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CHEMICAL NAME	CASRN	CONCENTRATION(1)
FUELS, DIESEL, NO. 2	68476-34-6	95-100
NAPHTHALENE	91-20-3	<1

(1) ALL CONCENTRATIONS ARE PERCENT BY WEIGHT UNLESS INGREDIENT IS A GAS. GAS CONCENTRATIONS ARE IN PERCENT BY VOLUME.

SECTION 4: FIRST AID MEASURES

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EYE CONTACT:
IF IRRITATION OR REDNESS DEVELOPS FROM EXPOSURE, FLUSH EYES WITH CLEAN WATER. IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION.

SKIN CONTACT:
REMOVE CONTAMINATED SHOES AND CLOTHING, AND FLUSH AFFECTED AREA(S) WITH LARGE AMOUNTS OF WATER. IF SKIN SURFACE IS DAMAGED, APPLY A CLEAN DRESSING AND SEEK MEDICAL ATTENTION. IF SKIN SURFACE IS NOT DAMAGED, CLEANSE AFFECTED AREA(S) THOROUGHLY BY WASHING WITH MILD SOAP AND WATER OR A WATERLESS HAND CLEANER. IF IRRITATION OR REDNESS DEVELOPS, SEEK MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSE. IF PRODUCT IS INJECTED INTO OR UNDER THE SKIN, OR INTO ANY PART OF THE BODY, REGARDLESS OF THE APPEARANCE OF THE WOUND OR ITS SIZE, THE INDIVIDUAL SHOULD BE EVALUATED IMMEDIATELY BY A PHYSICIAN. (SEE NOTE TO PHYSICIAN)

INHALATION (BREATHING):
IF RESPIRATORY SYMPTOMS OR OTHER SYMPTOMS OF EXPOSURE DEVELOP, MOVE VICTIM AWAY FROM SOURCE OF EXPOSURE AND INTO FRESH AIR IN A POSITION COMFORTABLE FOR BREATHING. IF SYMPTOMS PERSIST, SEEK IMMEDIATE MEDICAL ATTENTION. IFVICTIM IS NOT BREATHING, CLEAR AIRWAY AND IMMEDIATELY BEGIN ARTIFICIAL RESPIRATION. IF BREATHING DIFFICULTIES DEVELOP, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. SEEK IMMEDIATE MEDICAL ATTENTION.

INGESTION (SWALLOWING):
ASPIRATION HAZARD:
DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH BECAUSE THIS MATERIAL CAN ENTER THE LUNGS AND CAUSE SEVERE LUNG DAMAGE. IF VICTIM IS DROWSY OR UNCONSCIOUS AND VOMITING, PLACE ON THE LEFT SIDE WITH THE HEAD DOWN. IF POSSIBLE, DO NOT LEAVE VICTIM UNATTENDED AND OBSERVE CLOSELY FOR ADEQUACY OF BREATHING. SEEK MEDICAL ATTENTION.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:
WHILE SIGNIFICANT VAPOR CONCENTRATIONS ARE NOT LIKELY, HIGH CONCENTRATIONS

CAN CAUSE MINOR RESPIRATORY IRRITATION, HEADACHE, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, DISORIENTATION AND FATIGUE. INGESTION CAN CAUSE IRRITATION OF THE DIGESTIVE TRACT, NAUSEA, DIARRHEA, AND VOMITING. DRY SKIN AND POSSIBLE IRRITATION WITH REPEATED OR PROLONGED EXPOSURE.

NOTES TO PHYSICIAN:
WHEN USING HIGH-PRESSURE EQUIPMENT, INJECTION OF PRODUCT UNDER THE SKIN CAN OCCUR. IN THIS CASE, THE CASUALTY SHOULD BE SENT IMMEDIATELY TO THE HOSPITAL. DO NOT WAIT FOR SYMPTOMS TO DEVELOP. HIGH-PRESSURE HYDROCARBON INJECTION INJURIES MAY PRODUCE SUBSTANTIAL NECROSIS OF UNDERLYING TISSUE DESPITE AN INNOCUOUS APPEARING EXTERNAL WOUND. THESE INJURIES OFTEN REQUIRE EXTENSIVE EMERGENCY SURGICAL DEBRIDEMENT AND ALL INJURIES SHOULD BE EVALUATED BY A SPECIALIST IN ORDER TO ASSESS THE EXTENT OF INJURY. EARLY SURGICAL TREATMENT WITHIN THE FIRST FEW HOURS MAY SIGNIFICANTLY REDUCE THE ULTIMATE EXTENT OF INJURY.

SECTION 5: FIREFIGHTING MEASURES

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NFPA 704 HAZARD CLASS:
HEALTH 1
FLAMMABILITY 2
INSTABILITY 0

0 (MINIMAL)
1 (SLIGHT)
2 (MODERATE)
3 (SERIOUS)
4 (SEVERE)

EXTINGUISHING MEDIA:
DRY CHEMICAL, CARBON DIOXIDE, OR FOAM IS RECOMMENDED. WATER SPRAY IS RECOMMENDED TO COOL OR PROTECT EXPOSED MATERIALS OR STRUCTURES. CARBON DIOXIDE CAN DISPLACE OXYGEN. USE CAUTION WHEN APPLYING CARBON DIOXIDE IN CONFINED SPACES. SIMULTANEOUS USE OF FOAM AND WATER ON THE SAME SURFACE IS TO BE AVOIDED AS WATER DESTROYS THE FOAM. WATER MAY BE INEFFECTIVE FOR EXTINGUISHMENT, UNLESS USED UNDER FAVORABLE CONDITIONS BY EXPERIENCED FIRE FIGHTERS.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:

UNUSUAL FIRE & EXPLOSION HAZARDS:
FLAMMABLE. THIS MATERIAL CAN BE IGNITED BY HEAT, SPARKS, FLAMES, OR OTHER SOURCES OF IGNITION (E.G., STATIC ELECTRICITY, PILOT LIGHTS, MECHANICAL/ELECTRICAL EQUIPMENT, AND ELECTRONIC DEVICES SUCH AS CELL PHONES, COMPUTERS, CALCULATORS, AND PAGERS WHICH HAVE NOT BEEN CERTIFIED AS INTRINSICALLY SAFE). VAPORS MAY TRAVEL CONSIDERABLE DISTANCES TO A SOURCE OF IGNITION WHERE THEY CAN IGNITE, FLASH BACK, OR EXPLODE. MAY CREATE VAPOR/AIR EXPLOSION HAZARD INDOORS, IN CONFINED SPACES, OUTDOORS, OR IN SEWERS. THIS PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE WATER. VAPORS ARE HEAVIER THAN AIR AND CAN ACCUMULATE IN LOW AREAS. IF CONTAINER IS NOT PROPERLY COOLED, IT CAN RUPTURE IN THE HEAT OF A FIRE.

HAZARDOUS COMBUSTION PRODUCTS:
COMBUSTION MAY YIELD SMOKE, CARBON MONOXIDE, AND OTHER PRODUCTS OF INCOMPLETE COMBUSTION. OXIDES OF NITROGEN AND SULFUR MAY ALSO BE FORMED.

SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS:
FOR FIRES BEYOND THE INITIAL STAGE, EMERGENCY RESPONDERS IN THE IMMEDIATE HAZARD AREA SHOULD WEAR PROTECTIVE CLOTHING. WHEN THE POTENTIAL CHEMICAL HAZARD IS UNKNOWN, IN ENCLOSED OR CONFINED SPACES, A SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN. IN ADDITION, WEAR OTHER APPROPRIATE PROTECTIVE EQUIPMENT AS CONDITIONS WARRANT (SEE SECTION 8).

ISOLATE IMMEDIATE HAZARD AREA AND KEEP UNAUTHORIZED PERSONNEL OUT. STOP SPILL/RELEASE IF IT CAN BE DONE SAFELY. MOVE UNDAMAGED CONTAINERS FROM

IMMEDIATE HAZARD AREA IF IT CAN BE DONE SAFELY. WATER SPRAY MAY BE USEFUL IN MINIMIZING OR DISPERSING VAPORS AND TO PROTECT PERSONNEL. COOL EQUIPMENT EXPOSED TO FIRE WITH WATER, IF IT CAN BE DONE SAFELY. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

SEE SECTION 9 FOR FLAMMABLE PROPERTIES INCLUDING FLASH POINT AND FLAMMABLE (EXPLOSIVE) LIMITS:

SECTION 6: ACCIDENTAL RELEASE MEASURES

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PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:
FLAMMABLE. SPILLAGES OF LIQUID PRODUCT WILL CREATE A FIRE HAZARD AND MAY FORM AN EXPLOSIVE ATMOSPHERE. KEEP ALL SOURCES OF IGNITION AND HOT METAL SURFACES AWAY FROM SPILL/RELEASE IF SAFE TO DO SO. THE USE OF EXPLOSION-PROOF ELECTRICAL EQUIPMENT IS RECOMMENDED. STAY UPWIND AND AWAY FROM SPILL/RELEASE. AVOID DIRECT CONTACT WITH MATERIAL. FOR LARGE SPILLAGES, NOTIFY PERSONS DOWN WIND OF THE SPILL/RELEASE, ISOLATE IMMEDIATE HAZARD AREA AND KEEP UNAUTHORIZED PERSONNEL OUT. WEAR APPROPRIATE PROTECTIVE EQUIPMENT, INCLUDING RESPIRATORY PROTECTION, AS CONDITIONS WARRANT (SEE SECTION 8). SEE SECTIONS 2 AND 7 FOR ADDITIONAL INFORMATION ON HAZARDS AND PRECAUTIONARY MEASURES.

ENVIRONMENTAL PRECAUTIONS:
STOP AND CONTAIN SPILL/RELEASE IF IT CAN BE DONE SAFELY. PREVENT SPILLED MATERIAL FROM ENTERING SEWERS, STORM DRAINS, OTHER UNAUTHORIZED DRAINAGE SYSTEMS, AND NATURAL WATERWAYS. USE FOAM ON SPILLS TO MINIMIZE VAPORS USE WATER SPARINGLY TO MINIMIZE ENVIRONMENTAL CONTAMINATION AND REDUCE DISPOSAL REQUIREMENTS. IF SPILL OCCURS ON WATER NOTIFY APPROPRIATE AUTHORITIES AND ADVISE SHIPPING OF ANY HAZARD. SPILLS INTO OR UPON NAVIGABLE WATERS, THE CONTIGUOUS ZONE, OR ADJOINING SHORELINES THAT CAUSE A SHEEN OR DISCOLORATION ON THE SURFACE OF THE WATER, MAY REQUIRE NOTIFICATION OF THE NATIONAL RESPONSE CENTER (PHONE NUMBER 800-424-8802).

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:
NOTIFY RELEVANT AUTHORITIES IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. IMMEDIATE CLEANUP OF ANY SPILL IS RECOMMENDED. DIKE FAR AHEAD OF SPILL FOR LATER RECOVERY OR DISPOSAL. ABSORB SPILL WITH INERT MATERIAL SUCH AS SAND OR VERMICULITE, AND PLACE IN SUITABLE CONTAINER FOR DISPOSAL. IF SPILLED ON WATER REMOVE WITH APPROPRIATE METHODS (E.G. SKIMMING, BOOMS OR ABSORBENTS). IN CASE OF SOIL CONTAMINATION, REMOVE CONTAMINATED SOIL FOR REMEDIATION OR DISPOSAL, IN ACCORDANCE WITH LOCAL REGULATIONS.

RECOMMENDED MEASURES ARE BASED ON THE MOST LIKELY SPILLAGE SCENARIOS FOR THIS MATERIAL; HOWEVER LOCAL CONDITIONS AND REGULATIONS MAY INFLUENCE OR LIMIT THE CHOICE OF APPROPRIATE ACTIONS TO BE TAKEN.

SECTION 7: HANDLING AND STORAGE

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PRECAUTIONS FOR SAFE HANDLING:
KEEP AWAY FROM IGNITION SOURCES SUCH AS HEAT/SPARKS/OPEN FLAME - NO SMOKING. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGE. NONSPARKING TOOLS SHOULD BE USED. OBTAIN SPECIAL INSTRUCTIONS BEFORE USE. DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD. DO NOT BREATHE VAPORS OR MISTS. USE ONLY OUTDOORS OR IN WELL-VENTILATED AREA. WEAR PROTECTIVE GLOVES/CLOTHING AND EYE/FACE PROTECTION. WASH THOROUGHLY AFTER HANDLING. USE GOOD PERSONAL HYGIENE PRACTICES AND WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). FLAMMABLE: MAY VAPORIZE EASILY AT AMBIENT TEMPERATURES. THE VAPOR IS HEAVIER THAN AIR AND MAY CREATE AN EXPLOSIVE MIXTURE OF VAPOR AND AIR. BEWARE OF ACCUMULATION IN CONFINED SPACES AND LOW LYING AREAS. OPEN CONTAINER SLOWLY TO RELIEVE ANY PRESSURE. THE USE OF EXPLOSION-PROOF ELECTRICAL EQUIPMENT IS RECOMMENDED AND MAY BE REQUIRED (SEE APPROPRIATE FIRE CODES). REFER TO NFPA-70 AND/OR API RP 2003 FOR SPECIFIC BONDING/GROUNDING REQUIREMENTS. DO NOT ENTER CONFINED SPACES

SUCH AS TANKS OR PITS WITHOUT FOLLOWING PROPER ENTRY PROCEDURES SUCH AS ASTM D-4276 AND 29 CFR 1910.146. DO NOT WEAR CONTAMINATED CLOTHING OR SHOES. KEEP CONTAMINATED CLOTHING AWAY FROM SOURCES OF IGNITION SUCH AS SPARKS OR OPEN FLAMES.

HIGH PRESSURE INJECTION OF HYDROCARBON FUELS, HYDRAULIC OILS OR GREASES UNDER THE SKIN MAY HAVE SERIOUS CONSEQUENCES EVEN THOUGH NO SYMPTOMS OR INJURY MAY BE APPARENT. THIS CAN HAPPEN ACCIDENTALLY WHEN USING HIGH PRESSURE EQUIPMENT SUCH AS HIGH PRESSURE GREASE GUNS, FUEL INJECTION APPARATUS OR FROM PINHOLE LEAKS IN TUBING OF HIGH PRESSURE HYDRAULIC OIL EQUIPMENT.

FOR USE AS A MOTOR FUEL ONLY. DO NOT USE AS A SOLVENT DUE TO ITS FLAMMABLE AND POTENTIALLY TOXIC PROPERTIES. SIPHONING BY MOUTH CAN RESULT IN LUNG ASPIRATION WHICH CAN BE HARMFUL OR FATAL.

THE USE OF HYDROCARBON FUEL IN AN AREA WITHOUT ADEQUATE VENTILATION MAY RESULT IN HAZARDOUS LEVELS OF INCOMPLETE COMBUSTION PRODUCTS (E.G. CARBON MONOXIDE, OXIDES OF SULFUR AND NITROGEN, BENZENE AND OTHER HYDROCARBONS) AND/OR DANGEROUSLY LOW OXYGEN LEVELS.

DIESEL ENGINE EXHAUST CONTAINS HAZARDOUS COMBUSTION PRODUCTS AND HAS BEEN IDENTIFIED AS A CANCER HAZARD. EXPOSURE SHOULD BE MINIMIZED TO REDUCE POTENTIAL RISK.

STATIC ACCUMULATION HAZARD:
ELECTROSTATIC CHARGE MAY ACCUMULATE AND CREATE A HAZARDOUS CONDITION WHEN HANDLING THIS MATERIAL. TO MINIMIZE THIS HAZARD, BONDING AND GROUNDING OF TANKS, TRANSFER PIPING, AND STORAGE TANK LEVEL FLOATS ARE NECESSARY BUT MAY NOT, BY THEMSELVES, BE SUFFICIENT. REVIEW ALL OPERATIONS WHICH HAVE THE POTENTIAL OF GENERATING AND ACCUMULATING AN ELECTROSTATIC CHARGE AND/OR A FLAMMABLE ATMOSPHERE (INCLUDING TANK AND CONTAINER FILLING, SPLASH FILLING, TANK CLEANING, SAMPLING, GAUGING, SWITCH LOADING, FILTERING, MIXING, AGITATION, AND VACUUM TRUCK OPERATIONS) AND USE APPROPRIATE MITIGATING PROCEDURES. SPECIAL CARE SHOULD BE GIVEN TO ENSURE THAT SPECIAL SLOW LOAD PROCEDURES FOR "SWITCH LOADING" ARE FOLLOWED TO AVOID THE STATIC IGNITION HAZARD THAT CAN EXIST WHEN HIGHER FLASH POINT MATERIAL (SUCH AS FUEL OIL OR DIESEL) IS LOADED INTO TANKS PREVIOUSLY CONTAINING LOW FLASH POINT PRODUCTS (SUCH AS GASOLINE OR NAPHTHA). FOR MORE INFORMATION, REFER TO OSHA STANDARD 29 CFR 1910.106, 'FLAMMABLE AND COMBUSTIBLE LIQUIDS', NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 77, 'RECOMMENDED PRACTICE ON STATIC ELECTRICITY', AND/OR THE AMERICAN PETROLEUM INSTITUTE (API) RECOMMENDED PRACTICE 2003, 'PROTECTION AGAINST IGNITIONS ARISING OUT OF STATIC, LIGHTNING, AND STRAY CURRENTS'.

CONDITIONS FOR SAFE STORAGE:
KEEP CONTAINER(S) TIGHTLY CLOSED AND PROPERLY LABELED. USE AND STORE THIS MATERIAL IN COOL, DRY, WELL-VENTILATED AREAS AWAY FROM HEAT, DIRECT SUNLIGHT, HOT METAL SURFACES, AND ALL SOURCES OF IGNITION. STORE ONLY IN APPROVED CONTAINERS. POST AREA "NO SMOKING OR OPEN FLAME." KEEP AWAY FROM ANY INCOMPATIBLE MATERIAL (SEE SECTION 10). PROTECT CONTAINER(S) AGAINST PHYSICAL DAMAGE. OUTDOOR OR DETACHED STORAGE IS PREFERRED. INDOOR STORAGE SHOULD MEET OSHA STANDARDS AND APPROPRIATE FIRE CODES.

"EMPTY" CONTAINERS RETAIN RESIDUE AND MAY BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. "EMPTY" DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED, AND PROMPTLY SHIPPED TO THE SUPPLIER OR A DRUM RECONDITIONER. ALL CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS. BEFORE WORKING ON OR IN TANKS WHICH CONTAIN OR HAVE CONTAINED THIS MATERIAL, REFER TO OSHA REGULATIONS, ANSI Z49.1, AND OTHER REFERENCES PERTAINING TO CLEANING, REPAIRING, WELDING, OR OTHER CONTEMPLATED OPERATIONS.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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CHEMICAL NAME	ACGIH	OSHA	OTHER
FUELS, DIESEL, NO. 2	TWA: 100 MG/M3 SKIN		100 MG/M3 TWA 8HR 50 MG/M3 TWA 12HR 13 PPM TWA 8HR 6.5 PPM TWA 12HR (PHILLIPS 66 GUIDELINES)
NAPHTHALENE	STEL: 15 PPM TWA: 10 PPM 10 PPM TWA; SKIN; A3 - CONFIRMED ANIMAL CARCINOGEN WITH UNKNOWN RELEVANCE TO HUMANS; TLV BASIS: UPPER RESPIRATORY TRACT IRRITATION SKIN	TWA: 10 PPM: 50 MG/M3	

NOTE:
STATE, LOCAL OR OTHER AGENCIES OR ADVISORY GROUPS MAY HAVE ESTABLISHED MORE STRINGENT LIMITS. CONSULT AN INDUSTRIAL HYGIENIST OR SIMILAR PROFESSIONAL, OR YOUR LOCAL AGENCIES, FOR FURTHER INFORMATION.

ENGINEERING CONTROLS:
IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE ESTABLISHED EXPOSURE LIMITS, ADDITIONAL ENGINEERING CONTROLS MAY BE REQUIRED.

EYE/FACE PROTECTION:
THE USE OF EYE PROTECTION THAT MEETS OR EXCEEDS ANSI Z.87.1 IS RECOMMENDED TO PROTECT AGAINST POTENTIAL EYE CONTACT, IRRITATION, OR INJURY. DEPENDING ON CONDITIONS OF USE, A FACE SHIELD MAY BE NECESSARY.

SKIN/HAND PROTECTION:
THE USE OF GLOVES IMPERVIOUS TO THE SPECIFIC MATERIAL HANDLED IS ADVISED TO PREVENT SKIN CONTACT. USERS SHOULD CHECK WITH MANUFACTURERS TO CONFIRM THE BREAKTHROUGH PERFORMANCE OF THEIR PRODUCTS. DEPENDING ON EXPOSURE AND USE CONDITIONS, ADDITIONAL PROTECTION MAY BE NECESSARY TO PREVENT SKIN CONTACT INCLUDING USE OF ITEMS SUCH AS CHEMICAL RESISTANT BOOTS, APRONS, ARM COVERS, HOODS, COVERALLS, OR ENCAPSULATED SUITS.

SUGGESTED PROTECTIVE MATERIALS: NITRILE

RESPIRATORY PROTECTION:
WHERE THERE IS POTENTIAL FOR AIRBORNE EXPOSURE ABOVE THE EXPOSURE LIMIT A NIOSH CERTIFIED AIR PURIFYING RESPIRATOR EQUIPPED WITH ORGANIC VAPOR CARTRIDGES/CANISTERS MAY BE USED.

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OR IS EQUIVALENT TO OSHA 29 CFR 1910.134 AND ANSI Z88.2 SHOULD BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. AIR PURIFYING RESPIRATORS PROVIDE LIMITED PROTECTION AND CANNOT BE USED IN ATMOSPHERES THAT EXCEED THE MAXIMUM USE CONCENTRATION (AS DIRECTED BY REGULATION OR THE MANUFACTURER'S INSTRUCTIONS), IN OXYGEN DEFICIENT (LESS THAN 19.5 PERCENT OXYGEN) SITUATIONS, OR UNDER CONDITIONS THAT ARE IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).

OTHER PROTECTIVE EQUIPMENT:
EYE WASH AND QUICK-DRENCH SHOWER FACILITIES SHOULD BE AVAILABLE IN THE WORK AREA. THOROUGHLY CLEAN SHOES AND WASH CONTAMINATED CLOTHING BEFORE REUSE.

SUGGESTIONS PROVIDED IN THIS SECTION FOR EXPOSURE CONTROL AND SPECIFIC TYPES OF PROTECTIVE EQUIPMENT ARE BASED ON READILY AVAILABLE INFORMATION. USERS SHOULD CONSULT WITH THE SPECIFIC MANUFACTURER TO CONFIRM THE PERFORMANCE OF THEIR PROTECTIVE EQUIPMENT. SPECIFIC SITUATIONS MAY REQUIRE CONSULTATION WITH INDUSTRIAL HYGIENE, SAFETY, OR ENGINEERING PROFESSIONALS.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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NOTE:
UNLESS OTHERWISE STATED, VALUES ARE DETERMINED AT 20 DEG. C (68 DEG. F) AND 760 MMHg (1 ATM). DATA REPRESENT TYPICAL VALUES AND ARE NOT INTENDED TO BE SPECIFICATIONS.

APPEARANCE: STRAW COLORED TO DYED RED

PHYSICAL FORM: LIQUID

ODOR: DIESEL FUEL

ODOR THRESHOLD: NO DATA

PH: NOT APPLICABLE

VAPOR DENSITY (AIR=1): >3

UPPER EXPLOSIVE LIMITS (VOL % IN AIR): 10.0
LOWER EXPLOSIVE LIMITS (VOL % IN AIR): 0.3

EVAPORATION RATE (NBUAC=1): <1

PARTICLE SIZE: NOT APPLICABLE

PERCENT VOLATILE: NEGLIGIBLE @ AMBIENT CONDITIONS

FLAMMABILITY (SOLID, GAS): NOT APPLICABLE

FLASH POINT: 125 - 180 DEG. F / 52 - 82 DEG. C
TEST METHOD: PENSKY-MARTENS CLOSED CUP (PMCC), ASTM D93, EPA 1010

INITIAL BOILING POINT/RANGE: 300 - 690 DEG. F / 149 - 366 DEG. C

VAPOR PRESSURE: 0.40 MMHg

PARTITION COEFFICIENT (N-OCTANOL/WATER) (KOW): NO DATA

MELTING/FREEZING POINT: NO DATA

AUTO-IGNITION TEMPERATURE: 500 DEG. F / 260 DEG. C

DECOMPOSITION TEMPERATURE: NO DATA

SPECIFIC GRAVITY (WATER=1): 0.81-0.88 @ 60 DEG. F (15.6 DEG. C)

BULK DENSITY: 7.08 LBS/GAL

VISCOSITY: N/D

SOLUBILITY IN WATER: NEGLIGIBLE

SECTION 10: STABILITY AND REACTIVITY

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REACTIVITY: NOT CHEMICALLY REACTIVE.

CHEMICAL STABILITY:
STABLE UNDER NORMAL AMBIENT AND ANTICIPATED CONDITIONS OF USE.

POSSIBILITY OF HAZARDOUS REACTIONS: HAZARDOUS REACTIONS NOT ANTICIPATED.

CONDITIONS TO AVOID:
AVOID HIGH TEMPERATURES AND ALL SOURCES OF IGNITION. PREVENT VAPOR ACCUMULATION.

INCOMPATIBLE MATERIALS:
AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND STRONG REDUCING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS:
NOT ANTICIPATED UNDER NORMAL CONDITIONS OF USE.

SECTION 11: TOXICOLOGICAL INFORMATION

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INFORMATION ON TOXICOLOGICAL EFFECTS:

SUBSTANCE / MIXTURE:

ACUTE TOXICITY	HAZARD	ADDITIONAL INFORMATION	LC50/LD50 DATA
INHALATION	HARMFUL IF INHALED		4.65 MG/L (MIST)
DERMAL	UNLIKELY TO BE HARMFUL		>2 G/KG
ORAL	UNLIKELY TO BE HARMFUL		>5 G/KG

ASPIRATION HAZARD: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.

SKIN CORROSION/IRRITATION:
CAUSES SKIN IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.

SERIOUS EYE DAMAGE/IRRITATION: CAUSES MILD EYE IRRITATION.

SKIN SENSITIZATION: NOT EXPECTED TO BE A SKIN SENSITIZER.

RESPIRATORY SENSITIZATION: NOT EXPECTED TO BE A RESPIRATORY SENSITIZER.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE):
NOT EXPECTED TO CAUSE ORGAN EFFECTS FROM SINGLE EXPOSURE.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE):
MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE. REPEATED DERMAL APPLICATION OF PETROLEUM GAS OILS FOR 90 DAYS RESULTED IN DECREASED LIVER, THYMUS, AND SPLEEN WEIGHTS, AND ALTERED BONE MARROW FUNCTION. MICROSCOPIC ALTERATIONS INCLUDED LIVER HYPERTROPHY AND NECROSIS, DECREASED HEMATOPOESIS AND LYMPHOCYTE DEPLETION.

CARCINOGENICITY:
SUSPECTED OF CAUSING CANCER. PETROLEUM MIDDLE DISTILLATES HAVE BEEN SHOWN TO CAUSE SKIN TUMORS IN MICE FOLLOWING REPEATED AND PROLONGED SKIN CONTACT. FOLLOW-UP STUDIES HAVE SHOWN THAT THESE TUMORS ARE PRODUCED THROUGH A NON-GENOTOXIC MECHANISM ASSOCIATED WITH FREQUENT CELL DAMAGE AND REPAIR, AND THAT THEY ARE NOT LIKELY TO CAUSE TUMORS IN THE ABSENCE OF PROLONGED SKIN IRRITATION.

GERM CELL MUTAGENICITY: NOT EXPECTED TO CAUSE HERITABLE GENETIC EFFECTS.

REPRODUCTIVE TOXICITY: NOT EXPECTED TO CAUSE REPRODUCTIVE TOXICITY.

OTHER COMMENTS:
DIESEL ENGINE EXHAUST HAS BEEN CLASSIFIED BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) AND NATIONAL TOXICOLOGY PROGRAM (NTP) AS A CARCINOGEN.

INFORMATION ON TOXICOLOGICAL EFFECTS OF COMPONENTS:

NAPHTHALENE:

CARCINOGENICITY:
NAPHTHALENE HAS BEEN EVALUATED IN TWO YEAR INHALATION STUDIES IN BOTH RATS AND MICE. THE US NATIONAL TOXICOLOGY PROGRAM (NTP) CONCLUDED THAT THERE IS CLEAR EVIDENCE OF CARCINOGENICITY IN MALE AND FEMALE RATS BASED ON INCREASED INCIDENCES OF RESPIRATORY EPITHELIAL ADENOMAS AND OLFACTORY EPITHELIAL NEUROBLASTOMAS OF THE NOSE. NTP FOUND SOME EVIDENCE OF CARCINOGENICITY IN FEMALE MICE (ALVEOLAR ADENOMAS) AND NO EVIDENCE OF CARCINOGENICITY IN MALE MICE. NAPHTHALENE HAS BEEN IDENTIFIED AS A CARCINOGEN BY IARC AND NTP.

SECTION 12: ECOLOGICAL INFORMATION

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GHS CLASSIFICATION:
H411: HAZARDOUS TO THE AQUATIC ENVIRONMENT, CHRONIC TOXICITY - CATEGORY 2
TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

ENVIRONMENT

TOXICITY:
EXPERIMENTAL STUDIES OF GAS OILS SHOW THAT ACUTE AQUATIC TOXICITY VALUES ARE TYPICALLY IN THE RANGE 2-20 MG/L. THESE VALUES ARE CONSISTENT WITH THE PREDICTED AQUATIC TOXICITY OF THESE SUBSTANCES BASED ON THEIR HYDROCARBON COMPOSITIONS. THEY SHOULD BE REGARDED AS TOXIC TO AQUATIC ORGANISMS, WITH THE POTENTIAL TO CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

PERSISTENCE AND DEGRADABILITY:
GAS OILS ARE COMPLEX COMBINATIONS OF INDIVIDUAL HYDROCARBON SPECIES. BASED ON THE KNOWN OR EXPECTED PROPERTIES OF INDIVIDUAL CONSTITUENTS, CATEGORY MEMBERS ARE NOT PREDICTED TO BE READILY BIODEGRADABLE. SOME HYDROCARBON CONSTITUENTS OF GAS OILS ARE PREDICTED TO MEET THE CRITERIA FOR PERSISTENCE; ON THE OTHER HAND, SOME COMPONENTS CAN BE EASILY DEGRADED BY MICROORGANISMS UNDER AEROBIC CONDITIONS.

PERSISTENCE PER IOPC FUND DEFINITION: NON-PERSISTENT

BIOACCUMULATIVE POTENTIAL:
GAS OIL COMPONENTS HAVE MEASURED OR CALCULATED LOG KOW VALUES IN THE RANGE OF 3.9 TO 6 WHICH INDICATES A HIGH POTENTIAL TO BIOACCUMULATE. LOWER MOLECULAR WEIGHT COMPOUNDS ARE READILY METABOLIZED AND THE ACTUAL BIOACCUMULATION POTENTIAL OF HIGHER MOLECULAR WEIGHT COMPOUNDS IS LIMITED BY THE LOW WATER SOLUBILITY AND LARGE MOLECULAR SIZE.

MOBILITY IN SOIL:
RELEASES TO WATER WILL RESULT IN A HYDROCARBON FILM FLOATING AND SPREADING ON THE SURFACE. FOR THE LIGHTER COMPONENTS, VOLATILIZATION IS AN IMPORTANT LOSS PROCESS AND REDUCES THE HAZARD TO AQUATIC ORGANISMS. IN AIR, THE HYDROCARBON VAPORS REACT READILY WITH HYDROXYL RADICALS WITH HALF-LIVES OF LESS THAN ONE DAY. PHOTOXIDATION ON THE WATER SURFACE IS ALSO A SIGNIFICANT LOSS PROCESS PARTICULARLY FOR POLYCYCLIC AROMATIC COMPOUNDS. IN WATER, THE MAJORITY OF COMPONENTS WILL BE ADSORBED ON SEDIMENT. ADSORPTION IS THE MOST PREDOMINANT PHYSICAL PROCESS ON RELEASE TO SOIL. ADSORBED HYDROCARBONS WILL SLOWLY DEGRADE IN BOTH WATER AND SOIL.

OTHER ADVERSE EFFECTS: NONE ANTICIPATED.

SECTION 13: DISPOSAL CONSIDERATIONS

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THE GENERATOR OF A WASTE IS ALWAYS RESPONSIBLE FOR MAKING PROPER HAZARDOUS WASTE DETERMINATIONS AND NEEDS TO CONSIDER STATE AND LOCAL REQUIREMENTS IN ADDITION TO FEDERAL REGULATIONS. THIS MATERIAL, IF DISCARDED AS PRODUCED, WOULD NOT BE A FEDERALLY REGULATED RCRA "LISTED" HAZARDOUS WASTE. HOWEVER, IT WOULD LIKELY BE IDENTIFIED AS A FEDERALLY REGULATED RCRA HAZARDOUS WASTE FOR THE FOLLOWING CHARACTERISTIC(S) SHOWN BELOW. SEE SECTIONS 7 AND 8 FOR INFORMATION ON HANDLING, STORAGE AND PERSONAL PROTECTION AND SECTION 9 FOR PHYSICAL/CHEMICAL PROPERTIES. IT IS POSSIBLE THAT THE MATERIAL AS PRODUCED CONTAINS CONSTITUENTS WHICH ARE NOT REQUIRED TO BE LISTED IN THE SDS BUT COULD AFFECT THE HAZARDOUS WASTE DETERMINATION. ADDITIONALLY, USE WHICH RESULTS IN CHEMICAL OR PHYSICAL CHANGE OF THIS MATERIAL COULD SUBJECT IT TO REGULATION AS A HAZARDOUS WASTE. CONTAINER CONTENTS SHOULD BE COMPLETELY USED AND CONTAINERS SHOULD BE EMPTIED PRIOR TO DISCARD. CONTAINER RESIDUES AND RINSEATES COULD BE CONSIDERED TO BE HAZARDOUS WASTES.

EPA WASTE NUMBER(S):
D001: IGNITABILITY CHARACTERISTIC

SECTION 14: TRANSPORT INFORMATION

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UN NUMBER: UN1202

UN PROPER SHIPPING NAME: DIESEL FUEL

TRANSPORT HAZARD CLASS(ES): 3 OR COMBUSTIBLE LIQUID

PACKING GROUP: III

ENVIRONMENTAL HAZARDS: MARINE POLLUTANT - ENVIRONMENTALLY HAZARDOUS

SPECIAL PRECAUTIONS FOR USER: COMBUSTIBLE LIQUID CLASSIFICATION IS DEPENDENT ON A FLASH POINT OF >60 DEG. C (140 DEG. F) AND <93 DEG. C (200 DEG. F).

**NA1993 MAY BE USED INSTEAD OF UN1202 FOR DOMESTIC LAND TRANSPORTATION.

IF TRANSPORTED IN BULK BY MARINE VESSEL IN INTERNATIONAL WATERS, PRODUCT IS BEING CARRIED UNDER THE SCOPE OF MARPOL ANNEX I.

CONTAINER(S) GREATER THAN 5 LITERS (LIQUIDS) OR 5 KILOGRAMS (SOLIDS), SHIPPED BY WATER MODE AND ALL BULK SHIPMENTS MAY REQUIRE THE SHIPPING DESCRIPTION TO CONTAIN THE "MARINE POLLUTANT" NOTATION [49 CFR 172.203(L)] AND THE CONTAINER(S) TO DISPLAY THE [MARINE POLLUTANT MARK] [49 CFR 172.322].

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE:
NOT APPLICABLE

SECTION 15: REGULATORY INFORMATION

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CERCLA/SARA - SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES AND TPQS (IN POUNDS):
THIS MATERIAL DOES NOT CONTAIN ANY CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA 302 AND 40 CFR 372.

CERCLA/SARA - SECTION 311/312 (TITLE III HAZARD CATEGORIES):
ACUTE HEALTH HAZARD: YES
CHRONIC HEALTH HAZARD: YES

FIRE HAZARD: YES
PRESSURE HAZARD: NO
REACTIVE HAZARD: NO

CERCLA/SARA - SECTION 313 AND 40 CFR 372:
THIS MATERIAL CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III AND 40 CFR 372:

CHEMICAL NAME	CONCENTRATION(1)	DE MINIMIS
NAPHTHALENE	<1	0.1%

EPA (CERCLA) REPORTABLE QUANTITY (IN POUNDS):
EPA'S PETROLEUM EXCLUSION APPLIES TO THIS MATERIAL - (CERCLA 101(14)).

CALIFORNIA PROPOSITION 65:

WARNING:
THIS MATERIAL MAY CONTAIN DETECTABLE QUANTITIES OF THE FOLLOWING CHEMICALS, KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM, AND WHICH MAY BE SUBJECT TO THE WARNING REQUIREMENTS OF CALIFORNIA PROPOSITION 65 (CA HEALTH & SAFETY CODE SECTION 25249.5):

CHEMICAL NAME	TYPE OF TOXICITY
NAPHTHALENE	CANCER

DIESEL ENGINE EXHAUST IS ON THE PROPOSITION 65 LIST OF CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

INTERNATIONAL HAZARD CLASSIFICATION:

CANADA:
THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE SDS CONTAINS ALL THE INFORMATION REQUIRED BY THE REGULATIONS.

WHMIS HAZARD CLASS:
B3 - COMBUSTIBLE LIQUID
D1B - TOXIC MATERIALS
D2A - VERY TOXIC MATERIALS
D2B - TOXIC MATERIALS

INTERNATIONAL INVENTORIES:
ALL COMPONENTS ARE EITHER LISTED ON THE US TSCA INVENTORY, OR ARE NOT REGULATED UNDER TSCA.

ALL COMPONENTS ARE EITHER ON THE DSL, OR ARE EXEMPT FROM DSL LISTING REQUIREMENTS.

U.S. EXPORT CONTROL CLASSIFICATION NUMBER: EAR99

SECTION 16: OTHER INFORMATION

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DATE OF ISSUE: 06-APR-2015

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SDS NUMBER: 001847

STATUS: FINAL

REVISED SECTIONS OR BASIS FOR REVISION:
TECHNICAL INFORMATION (SECTION 1); IDENTIFIED HAZARDS (SECTION 2); ENVIRONMENTAL HAZARDS (SECTION 12); SHIPPING INFORMATION (SECTION 14)

GUIDE TO ABBREVIATIONS:
ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS

CASRN: CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER

CEILING: CEILING LIMIT (15 MINUTES)

CERCLA:
THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT

EPA: ENVIRONMENTAL PROTECTION AGENCY

GHS: GLOBALLY HARMONIZED SYSTEM

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

INSHT: NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK

IOPC: INTERNATIONAL OIL POLLUTION COMPENSATION

LEL: LOWER EXPLOSIVE LIMIT

NE: NOT ESTABLISHED

NFPA: NATIONAL FIRE PROTECTION ASSOCIATION

NTP: NATIONAL TOXICOLOGY PROGRAM

OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)

SARA: SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT

STEL: SHORT TERM EXPOSURE LIMIT (15 MINUTES)

TLV: THRESHOLD LIMIT VALUE (ACGIH)

TWA: TIME WEIGHTED AVERAGE (8 HOURS)

UEL: UPPER EXPLOSIVE LIMIT

WHMIS: WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM (CANADA)

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:
THE INFORMATION PRESENTED IN THIS SAFETY DATA SHEET IS BASED ON DATA BELIEVED TO BE ACCURATE AS OF THE DATE THIS SAFETY DATA SHEET WAS PREPARED. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. NO RESPONSIBILITY IS ASSUMED FOR ANY DAMAGE OR INJURY RESULTING FROM ABNORMAL USE OR FROM ANY FAILURE TO ADHERE TO RECOMMENDED PRACTICES. THE INFORMATION PROVIDED ABOVE, AND THE PRODUCT, ARE FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING THEM SHALL MAKE THEIR OWN DETERMINATION AS TO THE SUITABILITY OF THE PRODUCT FOR THEIR PARTICULAR PURPOSE AND ON THE CONDITION THAT THEY ASSUME THE RISK OF THEIR USE. IN ADDITION, NO AUTHORIZATION IS GIVEN NOR IMPLIED TO PRACTICE ANY PATENTED INVENTION WITHOUT A LICENSE.

SDS#: 311

Date Printed: 10/11/2021
Company: Drummond Co., Inc
P.O. Box 1549
Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min				6.0				
	Average						35.0	3.0	2.0
	Max				10.5	0.5	70.0	6.0	4.0
	Freq	2/mth	1/Qtr	1/Qtr	See Permit Requirements	See Permit Requirements	2/mth	2/mth	2/mth
Collect Date	Outfall	Flow	Depth	Cond	pH	Settleable Solids	TSS	Fe	Mn
		MGD	Feet	µS/cm	S.U.	mL/L	mg/l	mg/l	mg/l
Basins									
4/3/2018	001	0.01			6.9		3	0.20	0.04
4/17/2018	001	0.84			6.5		2	0.56	0.05
5/1/2018	001	0.01			6.8		1	0.29	0.04
5/14/2018	001	ND							
6/5/2018	001	ND							
6/19/2018	001	0.01			7.1		2	0.16	0.12
4/3/2018	002	ND							
4/17/2018	002	0.01			6.7		6	0.78	0.04
5/1/2018	002	ND							
5/14/2018	002	ND							
6/5/2018	002	ND							
6/19/2018	002	ND							
4/3/2018	011	6.22			7.5		4	0.19	0.09
4/17/2018	011	8.78			7.2		4	0.31	0.08
5/1/2018	011	5.57			7.3		3	0.24	0.09
5/14/2018	011	3.93			7.2		2	0.17	0.10
6/5/2018	011	4.49			7.2		2	0.18	0.06
6/19/2018	011	5.58			7.0		4	0.14	0.12
4/3/2018	015	ND							
4/17/2018	015	0.01			7.3		6	0.69	0.08
5/1/2018	015	0.01			7.5		1	0.29	0.05

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

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5/14/2018	015	ND						
6/5/2018	015	ND						
6/19/2018	015	ND						
4/3/2018	021	0.01		7.1		3	0.17	0.02
4/17/2018	021	1.47		6.8		3	0.39	0.03
5/1/2018	021	0.56		6.7		2	0.28	0.03
5/14/2018	021	0.01		7.1		2	0.15	0.02
6/5/2018	021	0.02		7.3		1	0.17	0.02
6/19/2018	021	0.01		7.4		4	0.39	0.05
Streams								
6/7/2018	477-001	3.94		652	7.9	5	0.17	0.06
6/7/2018	477-002	3.90		781	7.5	3	0.27	0.10
6/15/2018	477-004	0.01		1060	7.5	5	0.19	0.12
6/7/2018	477-021	229.83		363	8.9	9	0.21	0.03
6/15/2018	477-022	310.88		377	8.5	10	0.27	0.22

ND = No Discharge
Permit Limit Exceeded
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ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min				6.0				
	Average						35.0	3.0	2.0
	Max				10.5	0.5	70.0	6.0	4.0
	Freq	2/mth	1/Qtr	1/Qtr	See Permit Requirements	See Permit Requirements	2/mth	2/mth	2/mth
Collect Date	Outfall	Flow	Depth	Cond	pH	Settleable Solids	TSS	Fe	Mn
		MGD	Feet	µS/cm	S.U.	mL/L	mg/l	mg/l	mg/l

Basins

7/3/2018	001	ND							
7/17/2018	001	0.11			6.7		42	3.50	0.11
7/20/2018	001						4	0.48	0.21
8/7/2018	001	ND							
8/21/2018	001	ND							
9/4/2018	001	0.01			7.6		1	0.21	0.08
9/18/2018	001	ND							
7/3/2018	002	ND							
7/17/2018	002	ND							
8/7/2018	002	ND							
8/21/2018	002	ND							
9/4/2018	002	ND							
9/18/2018	002	ND							
7/3/2018	011	2.13			7.9		4	0.14	0.10
7/17/2018	011	5.62			7.2		6	0.51	0.15
8/7/2018	011	2.42			7.3		4	0.16	0.13
8/21/2018	011	2.00			7.2		5	0.20	0.12
9/4/2018	011	2.07			7.5		4	0.31	0.13
9/18/2018	011	1.94			7.3		4	0.14	0.11
7/3/2018	015	0.01			8.4		3	0.43	0.10
7/17/2018	015	0.01			7.3		48	3.60	0.11

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8/7/2018	015	ND						
8/21/2018	015	ND						
9/4/2018	015	ND						
9/18/2018	015	ND						
7/3/2018	021	ND						
7/17/2018	021	0.07			7.3		8	0.60	0.07
8/7/2018	021	ND						
8/21/2018	021	ND						
9/4/2018	021	ND						
9/18/2018	021	ND						
Streams								
8/6/2018	477-001	4.83		674	7.8		4	0.27	0.07
8/6/2018	477-002	3.27		1042	7.3		3	0.45	0.37
8/6/2018	477-004			931	7.2		4	0.37	0.47
8/6/2018	477-021	158.78		431	9.0		10	0.28	0.04
8/6/2018	477-022	159.15		435	8.9		11	0.32	0.06

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	Min				6.0					
	Average						35.0	3.0	2.0	
	Max				10.5	0.5	70.0	6.0	4.0	
	Freq	2/mth	1/Qtr	1/Qtr	See Permit Requirements	See Permit Requirements	2/mth	2/mth	2/mth	
Collect Date	Outfall	Flow	Depth	Cond	pH	Settleable Solids	TSS	Fe	Mn	
		MGD	Feet	µS/cm	S.U.	mL/L	mg/l	mg/l	mg/l	
Basins										
10/2/2018	001	ND								
10/19/2018	001	ND								
11/1/2018	001	ND								
11/15/2018	001	0.01			8.2		6	0.40	0.14	
12/4/2018	001	0.03			6.4		3	0.30	0.11	
12/18/2018	001	0.01			8.5		4	0.28	0.14	
10/2/2018	002	ND								
10/19/2018	002	ND								
11/1/2018	002	ND								
11/15/2018	002	ND								
12/4/2018	002	ND								
12/18/2018	002	ND								
10/2/2018	011	1.25			7.6		4	0.14	0.12	
10/19/2018	011	1.40			7.6		6	0.12	0.09	
11/1/2018	011	2.81			7.9		8	0.15	0.09	
11/15/2018	011	0.71			8.0		6	0.13	0.06	
12/4/2018	011	2.49			7.3		5	0.17	0.04	
12/18/2018	011	0.12			7.9		5	0.10	0.05	
10/2/2018	015	ND								
10/19/2018	015	ND								
11/1/2018	015	ND								

ND = No Discharge
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11/15/2018	015	0.01		8.5	9	0.56	0.08	
12/4/2018	015	0.01		7.0	8	0.65	0.06	
12/18/2018	015	0.01		8.7	9	0.45	0.07	
10/2/2018	021	ND						
10/19/2018	021	ND						
11/1/2018	021	ND						
11/15/2018	021	0.01		7.9	5	0.20	0.30	
12/4/2018	021	0.34		7.1	4	0.19	0.05	
12/18/2018	021	0.02		8.6	6	0.22	0.04	
Streams								
11/29/2018	477-001	8.34	496	6.5	3	0.62	0.66	
11/29/2018	477-002	3.17	656	7.3	3	0.57	0.21	
12/6/2018	477-004	0.01	833	6.7	5	0.29	0.20	
12/6/2018	477-021	1061.25	226	6.5	8	0.50	0.05	
12/6/2018	477-022	1063.84	234	6.5	11	0.74	0.12	

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	Min				6.0					
	Average						35.0	3.0	2.0	
	Max				10.5	0.5	70.0	6.0	4.0	
	Freq	2/mth	1/Qtr	1/Qtr	See Permit Requirements	See Permit Requirements	2/mth	2/mth	2/mth	
Collect Date	Outfall	Flow	Depth	Cond	pH	Settleable Solids	TSS	Fe	Mn	
		MGD	Feet	µS/cm	S.U.	mL/L	mg/l	mg/l	mg/l	
Basins										
1/9/2019	001	0.08			6.3		4	0.30	0.14	
1/22/2019	001	0.04			8.2		6	0.46	0.15	
2/5/2019	001	0.02			6.6		3	0.66	0.10	
2/19/2019	001	0.54			6.6		3	0.36	0.14	
3/5/2019	001	0.01			6.4		6	0.59	0.14	
3/18/2019	001	0.03			6.8		1	0.51	0.12	
1/8/2019	002	ND								
1/22/2019	002	0.01			8.1		7	0.36	0.04	
2/5/2019	002	ND								
2/19/2019	002	0.23			7.0		4	0.34	0.05	
3/5/2019	002	0.01			6.5		8	0.61	0.13	
3/18/2019	002	ND								
1/9/2019	011	8.23			6.9		4	0.08	0.14	
1/22/2019	011	2.42			7.9		5	0.15	0.08	
2/5/2019	011	6.59			7.2		5	0.13	0.07	
2/19/2019	011	4.57			7.7		2	0.17	0.07	
3/5/2019	011	12.69			7.0		5	0.18	0.11	
3/18/2019	011	6.43			7.3		3	0.15	0.09	
1/9/2019	015	0.03			6.8		10	0.65	0.17	
1/22/2019	015	0.01			8.4		13	0.95	0.30	
2/5/2019	015	0.02			7.0		7	0.78	0.26	

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2/19/2019	015	0.37		7.3	7	0.49	0.14	
3/5/2019	015	0.03		6.9	12	1.01	0.37	
3/18/2019	015	0.02		7.4	3	0.92	0.31	
1/9/2019	021	0.96		6.3	8	0.21	0.02	
1/22/2019	021	0.45		8.6	5	0.21	0.07	
2/5/2019	021	0.21		6.9	2	0.19	0.05	
2/19/2019	021	1.30		6.8	4	0.34	0.03	
3/5/2019	021	0.66		6.9	5	0.41	0.04	
3/19/2019	021	0.11		6.9	4	0.23	0.07	
Streams								
3/8/2019	477-001	45.36	848	6.9	5	0.23	0.26	
3/8/2019	477-002	20.03	373	6.2	31	0.41	0.27	
3/7/2019	477-004		900	6.7	6	2.06	0.92	
3/7/2019	477-021	3250.97	221	6.8	66	1.53	0.15	
3/7/2019	477-022	3258.08	241	6.6	44	1.30	0.22	

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ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

Min				6.0								
Average			Report		Report	Report	35.0	3.0	2.0		
Max			Report	10.5	Report	Report	70.0	6.0	4.0		
Freq	2/mth	1/Qtr	2/mth	See Permit Requireme	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail

Basins

4/1/2019	001	0.02		401	6.8	298	290.0	4	0.35	0.05		
4/15/2019	001	0.11		427	6.8		270.0	1	0.68	0.08		
4/16/2019	001	0.11		434	7.3		360.0	2	0.67	0.05		
5/1/2019	001	0.08		406	6.7		320.0	8	1.45	0.13		
5/15/2019	001	0.01		409	6.6		320.0	2	0.33	0.05		
6/3/2019	001	ND										
6/17/2019	001	ND										
4/1/2019	002	ND										
4/15/2019	002	ND										
5/1/2019	002	ND										
5/15/2019	002	ND										
6/3/2019	002	ND										
6/17/2019	002	ND										
4/1/2019	011	4.71			7.6			3	0.24	0.08		
4/15/2019	011	3.51			7.3			3	0.87	0.10		
5/1/2019	011	2.37			7.6			6	0.20	0.08		
5/15/2019	011	2.73			7.3			6	0.43	0.11		
6/3/2019	011	2.04			7.5			3	0.18	0.11		
6/17/2019	011	0.98			7.7			6	0.14	0.10		
4/1/2019	015	0.01			7.5			4	0.39	0.18		
4/15/2019	015	0.01			7.4			4	0.86	0.07		
5/1/2019	015	ND										
5/15/2019	015	0.01			7.4			4	0.54	0.12		

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ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

6/3/2019	015	ND										
6/17/2019	015	ND										
4/1/2019	021	0.01			6.7			2	0.20	0.05		
4/15/2019	021	0.27			7.3			2	0.68	0.05		
5/1/2019	021	ND										
5/15/2019	021	ND										
6/3/2019	021	ND										
6/17/2019	021	ND										

Streams

5/22/2019	477-001	7.50		468	6.9			4	0.27	0.27		
5/22/2019	477-002	3.54		737	7.6			3	0.34	0.14		
5/22/2019	477-004	0.01		1386	6.7			7	0.91	1.45		
5/22/2019	477-021	433.74		318	8.9			11	0.41	0.18		
5/22/2019	477-022	434.71		312	8.4			8	0.41	0.12		

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ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min				6.0								
	Average			Report		Report	Report	35.0	3.0	2.0			
	Max			Report	10.5	Report	Report	70.0	6.0	4.0			
	Freq	2/mth	1/Qtr	2/mth	See Permit Requireme	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr	
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute	
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail	
Basins													
7/1/2019	001	ND											
7/15/2019	001	ND											
8/5/2019	001	ND											
8/19/2019	001	ND											
8/20/2019	001										Pass	Pass	
9/3/2019	001	ND											
9/16/2019	001	ND											
7/1/2019	002	ND											
7/15/2019	002	ND											
8/5/2019	002	ND											
8/19/2019	002	ND											
8/20/2019	002										Pass	Pass	
9/3/2019	002	ND											
9/16/2019	002	ND											
7/1/2019	011	0.65			7.5			5	0.12	0.08			
7/15/2019	011	1.04			7.7			4	0.14	0.07			
8/5/2019	011	1.01			7.9			4	0.12	0.07			
8/19/2019	011	2.22			7.8			4	0.10	0.06			
9/3/2019	011	1.02			7.7			3	0.12	0.05			
9/16/2019	011	1.54			7.7			4	0.12	0.06			
7/1/2019	015	ND											
7/15/2019	015	ND											
8/5/2019	015	ND											

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8/19/2019	015	ND						
9/3/2019	015	ND						
9/16/2019	015	ND						
7/1/2019	021	ND						
7/15/2019	021	ND						
8/5/2019	021	ND						
8/19/2019	021	ND						
9/3/2019	021	ND						
9/16/2019	021	ND						
Streams								
9/5/2019	477-001	1.65	607	8.0		5	0.10	0.02
9/5/2019	477-002	0.56	1526	7.7		4	0.36	0.24
9/5/2019	477-004		1209	7.0		4	0.47	0.73
9/5/2019	477-021	90.48	359	8.9		7	0.14	0.03
9/5/2019	477-022	90.48	359	8.9		7	0.12	0.03

ND = No Discharge
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ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

		Min				6.0								
		Average			Report		Report	Report	35.0	3.0	2.0			
		Maxi			Report	10.5	Report	Report	70.0	6.0	4.0			
		Freq.	2/mth	1/Qtr	2/mth	See Permit Requireme	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr	
Collect Date	Outfall		Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute	
			MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail	
Basins														
10/1/2019	001		ND											
10/14/2019	001		ND											
11/4/2019	001		0.01		348	6.7	222	120.0	3	0.32	0.08			
11/13/2019	001											Pass	Pass	
11/18/2019	001		0.01		417	6.3		145.0	3	0.17	0.05			
12/2/2019	001		0.01		401	6.4		140.0	2	0.19	0.07			
12/17/2019	001		0.01		435	6.6		150.0	1	0.15	0.06			
10/1/2019	002		ND											
10/14/2019	002		ND											
11/4/2019	002		ND											
11/13/2019	002											Pass	Pass	
11/18/2019	002		ND											
12/2/2019	002		ND											
12/17/2019	002		ND											
10/1/2019	011		0.65			6.8			3	0.14	0.37			
10/14/2019	011		0.88			6.4			4	0.11	0.04			
11/4/2019	011		1.90			7.7			3	0.20	0.03			
11/18/2019	011		7.83			7.4			5	0.12	0.05			
12/2/2019	011		1.39			7.4			4	0.14	0.04			
12/17/2019	011		2.23			7.3			2	0.10	0.03			
10/1/2019	015		ND											
10/14/2019	015		ND											
11/4/2019	015		0.01			7.4			8	0.40	0.14			

ND = No Discharge

Permit Limit Exceeded

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11/18/2019	015	ND										
12/2/2019	015	0.01			7.0			6	0.44	0.04		
12/17/2019	015	0.01			6.3			4	0.20	0.11		
10/1/2019	021	ND										
10/14/2019	021	ND										
11/4/2019	021	0.54			7.4			4	0.23	0.30		
11/18/2019	021	0.28			6.7			4	0.13	0.16		
12/2/2019	021	0.15			7.0			2	0.31	0.03		
12/17/2019	021	0.54			6.3			2	0.11	0.04		

Streams

12/9/2019	477-001	8.64		408	6.7			2	0.43	0.27		
12/9/2019	477-002	5.44		664	7.5			2	0.47	0.20		
11/13/2019	477-004			962	6.3			2	0.40	0.65		
11/13/2019	477-021			391	6.7			8	0.47	0.11		
11/13/2019	477-022			398	6.8			5	0.43	0.12		

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

Date Printed: 10/11/2021
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Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min.				6.0								
	Average			Report		Report	Report	35.0	3.0	2.0		
	Max.			Report	10.5	Report	Report	70.0	6.0	4.0		
	Freq	2/mth	1/Qtr	2/mth	See Permit Requireme	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	S04	TSS	Fe	Mn	Cerio Acute	Pimep Acute
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail
Basins												
1/6/2020	001	0.03		384	6.5	263	125.0	4	0.32	0.10		
1/23/2020	001	0.01		403	8.1		150.0	3	0.17	0.08		
2/3/2020	001	ND										
2/17/2020	001	0.03		316	8.9		100.0	2	0.31	0.09		
3/2/2020	001	0.23		480	7.3		160.0	3	0.25	0.07		
3/11/2020	001	0.02		320	6.8		100.0	2	0.26	0.07		
3/16/2020	001	0.11		378	6.7		140.0	3	0.19	0.07		
1/6/2020	002	0.01		343	7.1	206	80.0	6	0.67	0.09		
1/23/2020	002	ND										
2/3/2020	002	ND										
2/17/2020	002	ND										
3/2/2020	002	ND										
3/16/2020	002	ND										
1/6/2020	011	8.01			7.4			5	0.36	0.07		
1/23/2020	011	3.77			8.0			4	0.09	0.08		
2/3/2020	011	2.28		2587	6.6		1300.0	6	0.14	0.09		
2/17/2020	011	4.27		2236	7.7		1050.0	4	0.25	0.05		
3/2/2020	011	11.35		2063	7.3		920.0	4	0.15	0.07		
3/17/2020	011	10.37		2107	7.0		940.0	2	0.17	0.05		
1/6/2020	015	0.03			7.1			12	1.10	0.23		
1/23/2020	015	0.01			8.1			8	0.81	0.27		
2/3/2020	015	0.03		441	6.1		150.0	5	0.65	0.24		
2/17/2020	015	0.02		414	8.6		110.0	9	0.98	0.22		

ND = No Discharge

Permit Limit Exceeded

Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

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3/2/2020	015	0.19	540	7.3	180.0	9	0.80	0.39		
3/16/2020	015	0.05	585	7.1	190.0	5	0.49	0.29		
1/6/2020	021	0.51		6.7		5	0.37	0.03		
1/23/2020	021	0.03		8.1		4	0.10	0.06		
2/3/2020	021	0.08	567	6.0	200.0	3	0.12	0.05		
2/17/2020	021	0.05	369	7.2	120.0	4	0.26	0.02		
3/2/2020	021	3.77	453	7.2	150.0	6	0.17	0.04		
3/16/2020	021	0.65	310	6.5	100.0	4	0.18	0.02		

Streams

2/27/2020	477-001	41.96	850	6.8		4	0.18	0.20		
2/27/2020	477-002	28.02	323	5.7		23	0.40	0.24		
2/26/2020	477-004		782	5.5		9	1.49	1.05		
2/26/2020	477-021	5958.40	191	5.3		38	1.14	0.07		
2/26/2020	477-022	5971.97	228	5.4		34	1.04	0.16		

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

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Company: Drummond Co., Inc
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Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min				6.0								
	Average			Report		Report	Report	35.0	3.0	2.0		
	Max			Report	9.0	Report	Report	70.0	6.0	4.0		
	Freq	2/mth	1/Qtr	2/mth	2/mth	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail
Basins												
4/6/2020	001	ND										
4/21/2020	001	0.03		307	7.3	191	96.0	6	0.43	0.08		
5/4/2020	001	ND										
5/18/2020	001	ND										
5/20/2020	001	0.01		354	6.9		125.0	2	0.11	0.05		
6/1/2020	001	ND										
6/15/2020	001	ND										
4/6/2020	002	ND										
4/21/2020	002	ND										
5/4/2020	002	ND										
5/18/2020	002	ND										
6/1/2020	002	ND										
6/15/2020	002	ND										
4/6/2020	011	6.15		2399	7.1	2172	1100.0	3	0.21	0.06		
4/21/2020	011	4.72		2275	7.0		1100.0	4	0.14	0.07		
5/4/2020	011	6.68		2555	6.9		1370.0	4	0.08	0.07		
5/18/2020	011	5.69		2202	7.3		1000.0	4	0.14	0.06		
5/20/2020	011	4.51		2452	7.1		1300.0	4	0.10	0.06		
6/1/2020	011	3.25		2163	7.3		1000.0	2	0.12	0.07		
6/15/2020	011	2.08		2275	7.3		1100.0	4	0.14	0.07		
4/6/2020	015	0.08		687	7.4	488	240.0	8	0.32	0.26		
4/21/2020	015	0.01		409	7.2		120.0	16	0.89	0.26		
5/4/2020	015	0.23		588	7.0		200.0	5	0.29	0.25		

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

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5/18/2020	015	0.01		672	7.3		250.0	6	0.27	0.24	
6/1/2020	015	0.01		726	7.1		280.0	7	0.38	0.19	
6/15/2020	015	ND									
4/7/2020	021	0.79		455	6.8	289	140.0	1	0.24	0.05	
4/21/2020	021	1.81		259	7.3		84.0	6	0.31	0.04	
5/4/2020	021	0.19		376	6.7		125.0	6	0.21	0.04	
5/18/2020	021	0.05		508	6.9		185.0	2	0.19	0.07	
6/1/2020	021	ND									
6/15/2020	021	ND									
Streams											
6/17/2020	477-001	3.57		1111	7.5			3	0.10	0.05	
6/17/2020	477-002	1.44		1169	7.3				0.28	0.19	
6/11/2020	477-004			1504	6.4			14	2.81	2.84	
6/11/2020	477-021	516.47		452	7.5			11	0.38	0.09	
6/11/2020	477-022	517.64		456	8.2			10	0.43	0.09	

ND = No Discharge
Permit Limit Exceeded
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Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min				6.0								
	Average			Report		Report	Report	35.0	3.0	2.0			
	Max			Report	9.0	Report	Report	70.0	6.0	4.0			
	Freq	2/mth	1/Qtr	2/mth	2/mth	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr	
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute	
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail	
Basins													
7/6/2020	001	ND											
7/20/2020	001	ND											
8/3/2020	001	ND											
8/17/2020	001	ND											
9/1/2020	001	ND											
9/14/2020	001	ND											
7/6/2020	002	ND											
7/20/2020	002	ND											
8/3/2020	002	ND											
8/17/2020	002	ND											
9/1/2020	002	ND											
9/14/2020	002	ND											
7/6/2020	011	1.74		2170	7.3	1782	960.0	4	0.12	0.07			
7/20/2020	011	0.79		2343	7.4		1000.0	5	0.27	0.08			
8/4/2020	011	1.95		2197	7.6		1700.0	4	0.12	0.07			
8/17/2020	011	0.98		2202	7.6		1150.0	4	0.14	0.07			
9/1/2020	011	1.15		2116	7.8		920.0	5	0.14	0.04			
9/14/2020	011	0.79		2100	7.7		960.0	4	0.13	0.04			
7/6/2020	015	ND											
7/20/2020	015	ND											
8/3/2020	015	ND											
8/17/2020	015	ND											
9/1/2020	015	ND											

ND = No Discharge
Permit Limit Exceeded
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ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

9/14/2020	015	ND							
7/6/2020	021	ND							
7/20/2020	021	ND							
8/3/2020	021	ND							
8/17/2020	021	ND							
9/1/2020	021	ND							
9/14/2020	021	ND							
Streams									
8/12/2020	477-001	1.86	589	8.0		4	0.11	0.02	
8/12/2020	477-002	0.84	1799	7.7		4	0.38	0.25	
7/17/2020	477-004		1431	6.5		6	0.77	1.71	
8/12/2020	477-021	107.93	468	9.0		6	0.12	0.02	
7/17/2020	477-022	195.83	394	8.9		6	0.17	0.03	

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Permit Limit Exceeded
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P.O. Box 1549
Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min				6.0							
	Average			Report		Report	Report	35.0	3.0	2.0		
	Max			Report	9.0	Report	Report	70.0	6.0	4.0		
	Freq	2/mth	1/Qtr	2/mth	2/mth	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail
Basins												
10/5/2020	001	ND										
10/20/2020	001	ND										
11/3/2020	001	ND										
11/17/2020	001	ND										
12/2/2020	001	ND										
12/15/2020	001	0.05		347	7.7	200	114.0	9	0.53	0.11		
10/5/2020	002	ND										
10/20/2020	002	ND										
11/3/2020	002	ND										
11/17/2020	002	ND										
12/2/2020	002	ND										
12/15/2020	002	0.01		225	7.7	140	65.0	15	0.62	0.05		
10/5/2020	011	0.62		2154	7.6	1729	900.0	2	0.48	0.06		
10/20/2020	011	1.93		2118	6.9		940.0	4	0.21	0.03		
11/3/2020	011	0.53		2094	7.5		920.0	9	0.19	0.06		
11/17/2020	011	1.23		2069	7.1		930.0	4	0.16	0.02		
12/2/2020	011	2.79		2115	6.5		940.0	6	0.20	0.05		
12/9/2020	011	7.15		2162	6.8		1000.0	4	0.18	0.05		
12/15/2020	011	2.97		2100	7.3		900.0	5	0.13	0.03		
10/5/2020	015	ND										
10/20/2020	015	ND										
11/3/2020	015	ND										
11/17/2020	015	ND										

ND = No Discharge
Permit Limit Exceeded
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12/2/2020	015	ND										
12/15/2020	015	0.01		279	7.8	142	70.0	20	0.83	0.07		
10/5/2020	021	ND										
10/20/2020	021	ND										
11/3/2020	021	ND										
11/17/2020	021	ND										
12/2/2020	021	ND										
12/15/2020	021	0.71		617	7.6	398	200.0	9	0.33	0.10		

Streams

12/9/2020	477-001	7.76		615	6.0			4	0.42	0.43		
12/9/2020	477-002	0.47		681	6.3			5	0.52	0.12		
12/14/2020	477-004			563	6.3			20	2.10	1.07		
12/14/2020	477-021	5741.23		297	6.5			61	1.86	0.20		
12/14/2020	477-022	5754.81		322	6.6			60	1.91	0.30		

ND = No Discharge
Permit Limit Exceeded
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P.O. Box 1549
Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

	Min				6.0							
	Average			Report		Report	Report	35.0	3.0	2.0		
	Max			Report	9.0	Report	Report	70.0	6.0	4.0		
	Freq	2/mth	1/Qtr	2/mth	2/mth	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail
Basins												
1/5/2021	001	ND										
1/19/2021	001	ND										
2/2/2021	001	0.01		373	7.3		130.0	6	0.42	0.08		
2/17/2021	001	0.03		429	6.3	267	145.0	4	0.31	0.09		
3/3/2021	001	0.01		406	6.9		155.0	2	0.23	0.08		
3/15/2021	001	ND										
1/5/2021	002	ND										
1/19/2021	002	ND										
2/2/2021	002	ND										
2/17/2021	002	0.01		369	6.5	222	105.0	5	0.28	0.03		
3/3/2021	002	ND										
3/15/2021	002	ND										
1/5/2021	011	2.39		2125	7.3	1786	960.0	4	0.16	0.03		
1/19/2021	011	2.07		2177	7.5		960.0	4	0.12	0.03		
2/2/2021	011	2.00		2213	7.5		1100.0	4	0.09	0.02		
2/17/2021	011	2.13		2242	7.3		1030.0	2	0.12	0.02		
3/3/2021	011	2.26		2209	7.3		980.0	4	0.09	0.03		
3/10/2021	011										Pass	Pass
3/15/2021	011	5.20		1932	7.5		930.0	4	0.17	0.04		
1/5/2021	015	ND										
1/19/2021	015	ND										
2/2/2021	015	ND										
2/17/2021	015	0.01		299	6.6		84.0	12	0.62	0.09		

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

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ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

3/3/2021	015	0.01		319	7.3		84.0	6	0.34	0.09		
3/10/2021	015										Pass	Pass
3/15/2021	015	0.01		316	7.8	170	105.0	5	0.38	0.08		
1/5/2021	021	0.01		663	7.7	457	210.0	3	0.16	0.04		
1/19/2021	021	ND										
2/2/2021	021	0.03		552	6.9		180.0	4	0.16	0.03		
2/17/2021	021	0.21		420	6.3		135.0	3	0.25	0.03		
3/2/2021	021	0.16		328	7.0		110.0	3	0.18	0.03		
3/10/2021	021										Pass	Pass
3/15/2021	021	0.37		403	7.7		130.0	3	0.28	0.03		
Streams												
3/22/2021	477-001	60.88		718	6.1			6	0.33	0.18		
3/22/2021	477-002	36.58		316	6.0			16	0.39	0.19		
3/22/2021	477-004			593	6.2			5	0.63	0.85		
3/22/2021	477-021	2874.82		192	6.3			20	0.99	0.07		
2/8/2021	477-022	2881.28		206	6.3			31	1.02	0.22		

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

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Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

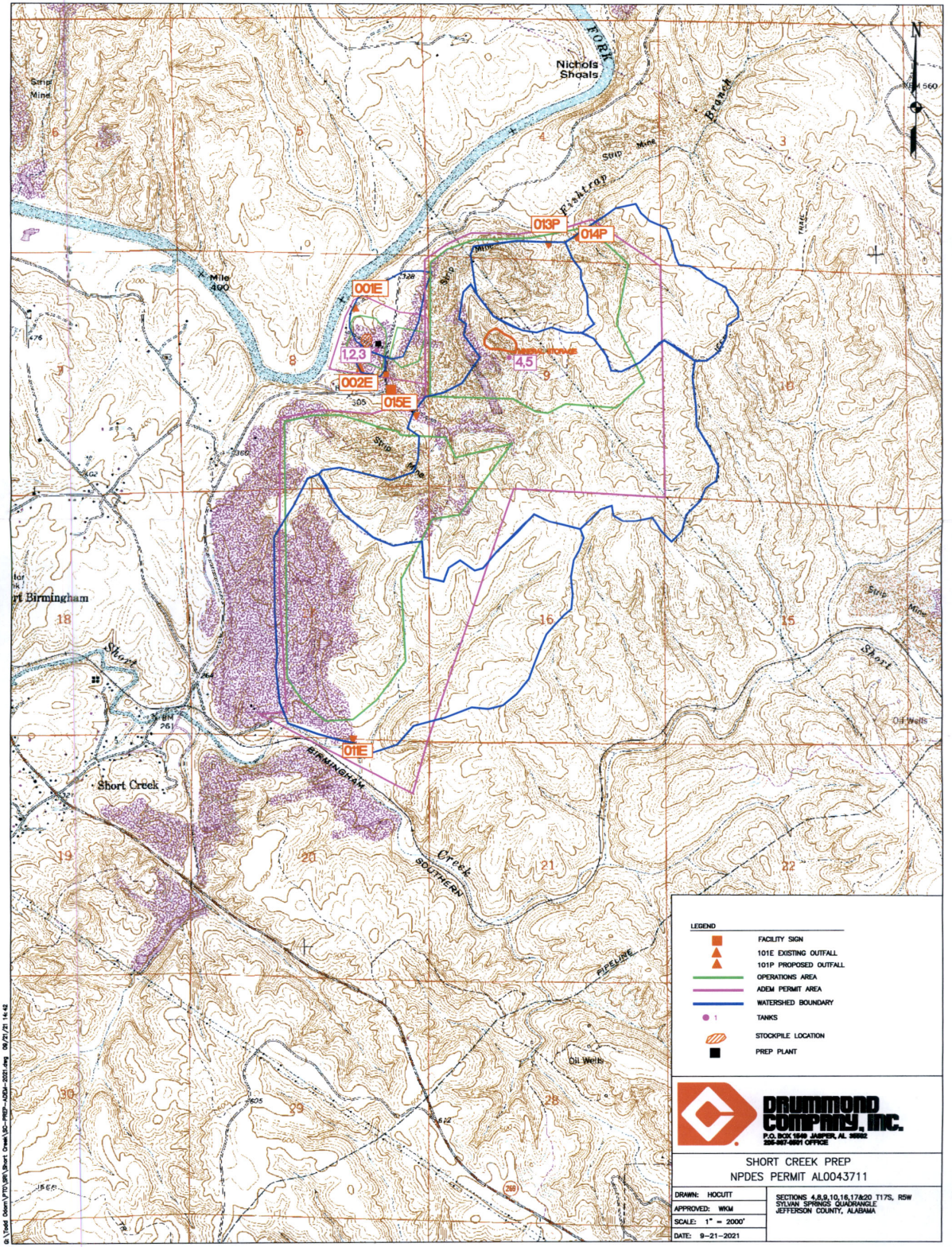
	Min				6.0							
	Average			Report		Report	Report	35.0	3.0	2.0		
	Max			Report	9.0	Report	Report	70.0	6.0	4.0		
	Freq	2/mth	1/Qtr	2/mth	2/mth	1/Qtr	2/mth	2/mth	2/mth	2/mth	1/Qtr	1/Qtr
Collect Date	Outfall	Flow	Depth	Cond	pH	TDS	SO4	TSS	Fe	Mn	Cerio Acute	Pimep Acute
		MGD	Feet	µS/cm	S.U.	mg/l	mg/l	mg/l	mg/l	mg/l	pass/fail	pass/fail
Basins												
4/6/2021	001	0.01		339	6.5	221	110.0	3	0.20	0.14		
4/19/2021	001	ND										
5/6/2021	001	0.10		324	6.9		96.0	4	0.51	0.15		
5/19/2021	001	ND										
6/2/2021	001	ND										
6/15/2021	001	0.03		379	7.0		130.0	2	0.39	0.74		
4/6/2021	002	ND										
4/19/2021	002	ND										
5/6/2021	002	ND										
5/19/2021	002	ND										
6/2/2021	002	ND										
6/15/2021	002	ND										
4/6/2021	011	1.87		1998	6.9	1820	900.0	4	0.11	0.06		
4/19/2021	011	2.29		2157	6.9		1000.0	3	0.24	0.09		
5/6/2021	011	3.32		2148	7.0		960.0	3	0.32	0.06		
5/19/2021	011	4.57		2147	7.4		960.0	2	0.11	0.07		
6/2/2021	011	1.94		2211	7.7		1100.0	2	0.22	0.06		
6/9/2021	011										Pass	Pass
6/15/2021	011	2.20		2334	7.2		1100.0	2	0.14	0.19		
4/6/2021	015	0.01		339	6.9	246	100.0	6	0.43	0.33		
4/19/2021	015	0.01		404	7.7		105.0	4	0.70	0.36		
5/6/2021	015	0.01		372	8.1		115.0	12	0.84	0.18		
5/19/2021	015	ND										

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i

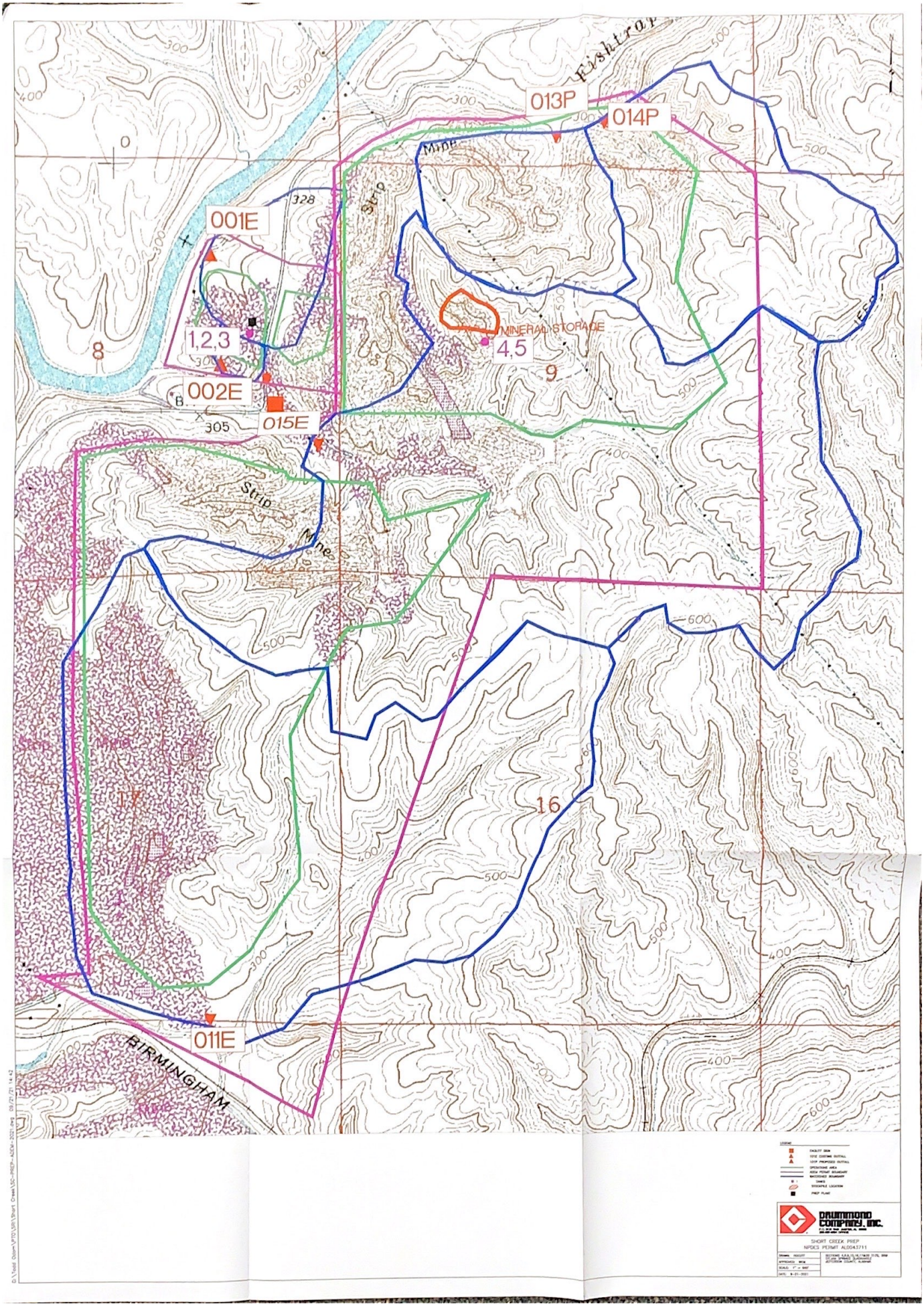
Date Printed: 10/11/2021
Company: Drummond Co., Inc
P.O. Box 1549
Jasper, Al 35502
ASMC #: P-3200 - Short Creek Prep Plant **NPDES #:** AL0029289, AL0043711

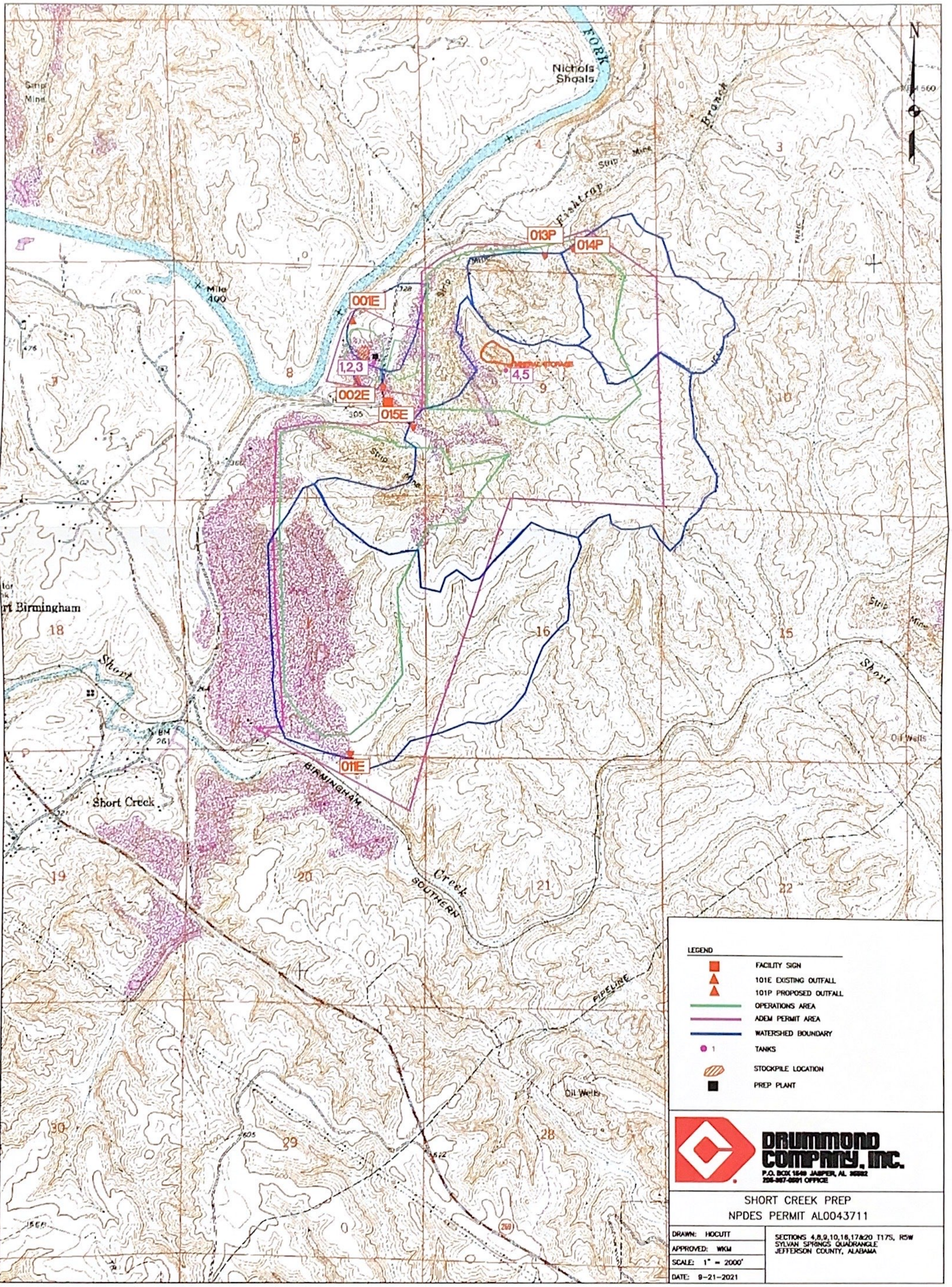
6/2/2021	015	ND									
6/9/2021	015									Pass	Pass
6/15/2021	015	ND									
4/6/2021	021	0.14	402	6.6	283	130.0	6	0.17	0.06		
4/19/2021	021	ND									
5/6/2021	021	ND									
5/19/2021	021	0.05	437	6.2		140.0	1	0.12	0.07		
6/2/2021	021	ND									
6/9/2021	021									Pass	Pass
6/15/2021	021	0.14	511	7.3		180.0	2	0.18	0.07		
Streams											
6/10/2021	477-001	31.15	901	7.6			6	0.48	0.28		
6/10/2021	477-002	21.39	354	7.7			43	1.45	0.25		
6/10/2021	477-004		901	7.3			15	1.30	1.21		
6/10/2021	477-021	1830.37	347	7.7			30	0.94	0.15		
6/10/2021	477-022	1834.25	352	7.7			26	0.97	0.13		

ND = No Discharge
Permit Limit Exceeded
Samples collected by DCI, Inc.Stream 477-004 is obstructed by beavers. Analysis by SAI Gulf, LLC and Guardian Systems. Toxicity monitored from outfall 011 and i



G:\Todd Odom\PTO\BR\Short Creek\SC-PREP-AUGM-2021.dwg 09/21/21 14:42


013P
014P
001E
002E
015E
011E
1,2,3
4,5
MINERAL STORAGE
Fishtrap
Mine
Strip
None
BIRMINGHAM
DRUMMOND COMPANY, INC.
SHORT CREEK PREP
NPDES PERMIT AL0043711


N
Nichols Shoals
FORK
Fishtrap
Branch
Strip Mine
Mile 400
013P
014P
001E
002E
015E
011E
1,2,3
4,5
Strip Mine
Short Creek
Short Creek
BIRMINGHAM
SOUTHERN
Creek
PIPELINE
Oil Wells
3
4
5
6
7
8
9
10
15
16
18
19
20
21
22
28
29
30
LEGEND
FACILITY SIGN
101E EXISTING OUTFALL
101P PROPOSED OUTFALL
OPERATIONS AREA
ADEM PERMIT AREA
WATERSHED BOUNDARY
1 TANKS
STOCKPILE LOCATION
PREP PLANT
DRUMMOND COMPANY, INC.
OFFICE
SHORT CREEK PREP
NPDES PERMIT AL0043711
DRAWN: HOCUTT
APPROVED: WKM
SCALE: 1" = 2000'
DATE: 9-21-2021
SECTIONS 4,8,9,10,16,17&20 T17S, R5W
SYLVAN SPRINGS QUADRANGLE
JEFFERSON COUNTY, ALABAMA