LANCE R. LEFLEUR
DIRECTOR

ROBERT J. BENTLEY
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

DEC - 2 2016

Gerrit Posthumus
Director of Operations
Imerys Refractory Minerals USA, Inc.
377 Highway 131
Eufaula, AL 36072

RE: Draft Permit
Riddle Pit
NPDES Permit No. AL0083216
Barbour County (005)

Dear Mr. Posthumus:

Transmitted herein is a draft of the above referenced permit. Please review the enclosed draft permit carefully. Please submit any comments on the draft permit to the Department within 30 days from the date of receipt of this letter.

Since the Department has made a tentative decision to issue the above referenced permit, ADEM Admin. Code r. 335-6-6-.21 requires a public notice of the draft permit in a local newspaper followed by a period of at least 30 days for public comment before the permit can be reissued.

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.

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, AL 35603-1333
(256) 353-1713
(256) 340-9359 (FAX)

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

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)

Please be aware that your permit requires you to apply for participation in the Department's web-based electronic environmental (E2) reporting system for submittal of DMRs. The E2 DMR system allows ADEM to electronically validate, acknowledge receipt, and upload data to the state's central wastewater database. This improves the accuracy of reported compliance data and reduces costs to both the regulated community and ADEM. All facilities that are regulated under the NPDES will be required by federal regulation to submit E2 DMRs beginning December 21, 2016. The Permittee Participation Package may be downloaded online at **https://e2.adem.alabama.gov/npdes** or you may obtain a hard copy by submitting a written request or by emailing e2admin@adem.alabama.gov.

The Alabama Department of Environmental Management encourages you to voluntarily consider pollution prevention practices and alternatives at your facility. Pollution Prevention may assist you in complying with effluent limitations, and possibly reduce or eliminate monitoring requirements.

Should you have any questions concerning this matter, please contact Amber H. Powell by email at amber.powell@adem.alabama.gov or by phone at (334) 271-7975.

Sincerely,

Catherine McNeill

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

CAM/ahp File: DPER/48385

Enclosure

cc: Amber H. Powell, 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 Department of Labor

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDIVIDUAL PERMIT

PERMITTEE: Imerys Refractory Minerals USA, Inc.
377 Highway 131
Eufaula, Alabama 36072

FACILITY LOCATION: Riddle Pit
Off Highway 131
Eufaula, AL 36027
Barbour County
T9N, R27E, S20

PERMIT NUMBER: AL0083216

DSN & RECEIVING STREAM: 001-1 East Fork Choctawhatchee River
002-1 East Fork Choctawhatchee River

*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:

EFFECTIVE DATE:

EXPIRATION 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 4

B. REQUIREMENTS TO ACTIVATE A PROPOSED MINING OUTFALL 4

C. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS 5
1. Sampling Schedule and Frequency 5
2. Measurement Frequency 5
3. Monitoring Schedule 5
4. Sampling Location 6
5. Representative Sampling 6
6. Test Procedures 6
7. Recording of Results 7
8. Routine Inspection by Permittee 7
9. Records Retention and Production 8
10. Monitoring Equipment and Instrumentation 8

D. DISCHARGE REPORTING REQUIREMENTS 8
1. Requirements for Reporting of Monitoring 8
2. Noncompliance Notification 10
3. Reduction, Suspension, or Termination of Monitoring and/or Reporting 11

E. OTHER REPORTING AND NOTIFICATION REQUIREMENTS 12
1. Anticipated Noncompliance 12
2. Termination of Discharge 12
3. Updating Information 12
4. Duty to Provide Information 13

F. SCHEDULE OF COMPLIANCE 13

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS 14
1. Facilities Operation and Management 14
2. Pollution Abatement and/or Prevention Plan 14
3. Best Management Practices (BMPs) 14
4. Biocide Additives 15
5. Facility Identification 16
6. Removed Substances 16
7. Loss or Failure of Treatment Facilities 16
8. Duty to Mitigate 16

B. BYPASS AND UPSET 16
1. Bypass 16
2. Upset 17

C. PERMIT CONDITIONS AND RESTRICTIONS 18
1. Prohibition against Discharge from Facilities Not Certified 18
2. Permit Modification, Suspension, Termination, and Revocation 18
3. Automatic Expiration of Permits for New or Increased Discharges 19
4. Transfer of Permit 20
5. Groundwater 20

6. Property and Other Rights 20

D. RESPONSIBILITIES 20
1. Duty to Comply 20
2. Change in Discharge 21
3. Compliance with Toxic or Other Pollutant Effluent Standard or Prohibition 21
4. Compliance with Water Quality Standards and Other Provisions 21
5. Compliance with Statutes and Rules 22
6. Right of Entry and Inspection 22
7. Duty to Reapply or Notify of Intent to Cease Discharge 22

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY 24
1. Tampering 24
2. False Statements 24
3. Permit Enforcement 24
4. Relief From Liability 24

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY 24

C. AVAILABILITY OF REPORTS 24

D. DEFINITIONS 24

E. SEVERABILITY 29

F. PROHIBITIONS AND ACTIVIES NOT AUTHORIZED 29

G. DISCHARGES TO IMPAIRED WATERS 29

PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE 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. 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]
pH 00400	6.0 s.u.	-------	8.5 s.u.	Grab	2/Month
Solids, Total Suspended 00530	-------	20.0 mg/L	30.0 mg/L	Grab	2/Month
Iron, Total (as Fe) 01045	-------	0.5 mg/L	1.0 mg/L	Grab	2/Month
Aluminum, Total (as Al) 01105	-------	1.0 mg/L	2.0 mg/L	Grab	2/Month
Flow, In Conduit or Thru Treatment Plant[2] 50050	-------	Report MGD	Report MGD	Instantaneous	2/Month

B. REQUIREMENTS TO ACTIVATE A PROPOSED MINING 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 according to good engineering practices and in accordance with the Pollution Abatement and/or Prevention (PAP) Plan.

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.

---

[1] See Part I.C.2. for further measurement frequency requirements.

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

C. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Sampling Schedule and Frequency

a. The Permittee shall collect at least one grab sample of the discharge to surface waters from each constructed and certified point source identified on Page 1 of this Permit and described more fully in the Permittee's application twice per month at a rate of at least every other week if a discharge occurs at any time during the two week period, but need not collect more than two samples per calendar month. Each sample collected shall be analyzed for each parameter specified in Part I.A. of this Permit.

b. If the final effluent is pumped in order to discharge (e.g. from incised ponds, old highwall cuts, old pit areas or depressions, etc.), the Permittee shall collect at least one grab sample of the discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application each quarterly (three month) monitoring period if a discharge occurs at any time during the quarterly monitoring period which results from direct pumped drainage. Each sample collected shall be analyzed for each parameter specified in Part I.A. of this Permit.

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

2. Measurement Frequency

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

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

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

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

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

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

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

3. Monitoring Schedule

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

a. MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this Permit and every month thereafter. More frequently than monthly and monthly monitoring may be done anytime during the month, unless restricted elsewhere in

this Permit, but the results should be reported on the last Discharge Monitoring Report (DMR) due for the quarter (i.e., with the March, June, September, and December DMRs).

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

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

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

4. Sampling Location

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

5. Representative Sampling

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

6. Test Procedures

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

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

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

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

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

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

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

7. Recording of Results

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

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

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

c. The dates and times the analyses were performed;

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

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

f. The results of all required analyses.

8. Routine Inspection by Permittee

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

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

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

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

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

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

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

9. Records Retention and Production

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

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

10. Monitoring Equipment and Instrumentation

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

D. DISCHARGE REPORTING REQUIREMENTS

1. Requirements for Reporting of Monitoring

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

b. The Department utilizes a web-based electronic environmental (E2) reporting system for submittal of DMRs. Except as allowed by Part I.D.1.c. or d., the Permittee shall submit all DMRs required by Part I.D.1.a. by utilizing the E2 reporting system. The E2 reporting

system Permittee Participation Package may be downloaded online at https://e2.adem.alabama.gov/npdes

c. If the electronic environmental (E2) reporting system is down (i.e. electronic submittal of DMR data is unable to be completed due to technical problems originating with the Department's system; this could include entry/submittal issues with an entire set of DMRs or individual parameters), permittees are not relieved of their obligation to submit DMR data to the Department by the required submittal date. However, if the E2 system is down on the 28th day of the month or is down for an extended period of time as determined by the Department when a DMR is required to be submitted, the facility may submit the data in an alternate manner and format acceptable to the Department. Preapproved alternate acceptable methods include faxing, e-mailing, mailing, or hand-delivery of data such that they are received by the required reporting date. Within five calendar days of the E2 system resuming operation, the Permittee shall enter the data into the E2 reporting system unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the original submittal date (date of the fax, copy of dated e-mail, or hand-delivery stamped date).

d. The permittee may submit a request to the Department for a temporary electronic reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable. Permittees with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The Permittee shall submit the Department-approved DMR forms to the address listed in Part I.D.1.j.

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

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

g. The Permittee shall report "No Discharge During Quarterly Monitoring Period" on the appropriate DMR Form for each point source receiving pumped discharges pursuant to Part I.C.1.b. provided that no discharge has occurred at any time during the entire quarterly (three month) monitoring period.

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

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

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

submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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

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

Certified and Registered Mail shall be addressed to:

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

k. Unless authorized in writing by the Department, approved reporting forms required by this Permit or the Department are not to be altered, and if copied or reproduced, must be consistent in format and identical in content to the ADEM approved form. Unauthorized alteration, falsification, or use of incorrectly reproduced forms constitutes noncompliance with the requirements of this Permit and may significantly delay processing of any request, result in denial of the request, result in permit termination, revocation, suspension, modification, or denial of a permit renewal application, or result in other enforcement action.

l. 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;

(6) Potentially threatens fish or aquatic life;

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

(8) 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);

(9) 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

(10) 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.2.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.2.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 421 must be submitted to the Director in accordance with Parts I.D.2.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

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) Permanent, perennial vegetation has been re-established on all areas mined or disturbed for at least one year since mining has ceased in the drainage basin(s) associated with the surface discharge, or all areas have been permanently graded such that all drainage is directed back into the mined pit to preclude all surface discharges;

(3) Unless waived in writing by the Department, the Permittee has been granted, in writing, a 100% Bond Release, if applicable, by the Alabama Department of Industrial Relations and, if applicable, by the Surface Mining Commission for all areas mined or disturbed in the drainage basin(s) associated with the discharge;

(4) Unless waived in writing by the Department, the Permittee has submitted inspection reports prepared and certified by a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction which certify that the facility has been fully reclaimed or that water quality remediation has been achieved. The first inspection must be conducted approximately one year prior to and the second inspection must be conducted

within thirty days of the Permittee's request for termination of monitoring and reporting requirements;

(5) 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;

(6) 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;

(7) 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;

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

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

(10) The Permittee has certified to the Director in writing as part of the request, its compliance with (1) through (9) 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. Pollution Abatement and/or Prevention Plan

The Pollution Abatement and/or Prevention (PAP) Plan shall be prepared and certified by a registered Professional Engineer (PE), licensed to practice in the State of Alabama, and shall include at a minimum, the information indicated in ADEM Admin. Code r. 335-6-9-.03 and ADEM Admin. Code ch. 335-6-9 Appendices A and B. The PAP Plan shall become a part of this Permit and all requirements of the PAP Plan shall become requirements of this Permit pursuant to ADEM Admin. Code r. 335-6-9-.05(2).

3. 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(r)) and federal (40 C.F.R. §§112.1-.7) regulations. The Permittee shall implement appropriate structural and/or non-structural spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a

ground or surface water of the State or a publicly or privately owned treatment works. Careful consideration should be applied for tanks or containers located near treatment ponds, water bodies, or high traffic areas. In most situations this would require construction of a containment system if the cumulative storage capacity of petroleum products or other pollutants at the facility is greater than 1320 gallons. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and 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.

4. 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:

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

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

(c) Quantities to be used;

(d) Frequencies of use;

(e) Proposed discharge concentrations; and

(f) EPA registration number, if applicable.

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.

5. 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.

6. Removed Substances

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

7. Loss or Failure of Treatment Facilities

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

8. Duty to Mitigate

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

B. BYPASS AND UPSET

1. Bypass

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

b. A bypass is not prohibited if:

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

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

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

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

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

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

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

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

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

2. Upset

a. Except as provided in Parts II.B.2.b. and c., a discharge which results from an upset need not meet the applicable discharge limitations specified in Part I.A. of this Permit if:

(1) No later than 24-hours after becoming aware of the occurrence of the upset, the Permittee orally reports the occurrence and circumstances of the upset to the Director; and

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

(i) An upset occurred;

(ii) The Permittee can identify the specific cause(s) of the upset;

(iii) The Permittee's treatment facility was being properly operated at the time of the upset; and

(iv) The Permittee promptly took all reasonable steps to minimize any adverse impact to waters resulting from the upset.

b. Notwithstanding the provisions of Part II.B.2.a., a discharge which is an overflow from a treatment facility or system, or an excess discharge from a point source associated with a treatment facility or system and which results from a 24-hour precipitation event larger

than a 10-year, 24-hour precipitation event is not exempted from the discharge limitations specified in Part I.A. of this Permit unless:

(1) The treatment facility or system is designed, constructed, and maintained to contain the maximum volume of wastewater which would be generated by the facility during a 24-hour period without an increase in volume from precipitation and the maximum volume of wastewater resulting from a 10-year, 24-hour precipitation event or to treat the maximum flow associated with these volumes.

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

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

c. The Permittee has the burden of establishing that each of the conditions of Parts II.B.2.a. and b. have been met to qualify for an exemption from the discharge limitations specified in Part I.A. of this Permit.

C. PERMIT CONDITIONS AND RESTRICTIONS

1. Prohibition against Discharge from Facilities Not Certified

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

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

2. Permit Modification, Suspension, Termination, and Revocation

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

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

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

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

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

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

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

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

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

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

3. 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.

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 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 punished as provided by applicable State and Federal law.

3. Permit Enforcement

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

4. Relief From Liability

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

D. DEFINITIONS

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

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

3. 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).

4. Arithmetic Mean - means the summation of the individual values of any set of values divided by the number of individual values.

5. Bauxitic clay - means a refractory clay containing bauxite which is mined for use as a refractory material and is not usable as an aluminum ore.

6. Bauxitic clay mine - means an area, on or beneath land, used or disturbed in activity related to the extraction, removal, or recovery of bauxitic clay from natural or artificial deposits, including active mining, reclamation, and mineral storage areas.

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

11. 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.

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

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

14. Day - means any consecutive 24-hour period.

15. Department - means the Alabama Department of Environmental Management.

16. Director - means the Director of the Department or his authorized representative or designee.

17. 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).

18. Discharge monitoring report (DMR) - means the form approved by the Director to accomplish monitoring report requirements of an NPDES Permit.

19. DO - means dissolved oxygen.

20. Dry process bauxitic clay and kaolin processing plants and associated areas - means facilities engaged in crushing, screening, drying, or stockpiling of bauxitic clay or kaolin including the processing facility, plant roads, stockpiles, and any other areas associated with the facility. Facilities which use any form of wet processing or chemical treatment are excluded under this definition.

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

22. 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.

23. EPA - means the United States Environmental Protection Agency.

24. Federal Water Pollution Control Act (FWPCA) - means 33 U.S.C. §§1251 et. seq., as amended.

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

26. 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).

27. 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.

28. 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.

29. 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.

30. Kaolin - means a refractory clay containing kaolinite.

31. Kaolin mine - means an area, on or beneath land, used or disturbed in activity related to the extraction, removal, or recovery of kaolin from natural or artificial deposits, including active mining, reclamation, and mineral storage areas.

32. mg/L - means milligrams per liter of discharge.

33. MGD - means million gallons per day.

34. 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.)

35. 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.

36. 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.

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

38. 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.

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

40. 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).

41. 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.

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

43. Pollution Abatement and/or Prevention Plan (PAP Plan) – mining operations plan developed to minimize impacts on water quality to avoid a contravention of the applicable water quality standards as defined in ADEM Admin. Code r. 335-6-9-.03

44. 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.

45. 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.

46. 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".

47. 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.

48. Receiving Stream - means the "waters" receiving a "discharge" from a "point source".

49. 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.

50. 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.

51. TKN - means the pollutant parameter Total Kjeldahl Nitrogen.

52. TON - means the pollutant parameter Total Organic Nitrogen.

53. TRC - means Total Residual Chlorine.

54. TSS – means the pollutant parameter Total Suspended Solids

55. 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.

56. 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.

57. 24-hour precipitation event - means that amount of precipitation which occurs within any 24-hour period.

58. 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.

59. 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

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

NPDES INDIVIDUAL PERMIT RATIONALE

Company Name: Imerys Refractory Minerals USA, Inc

Facility Name: Riddle Pit

County: Barbour County

Permit Number: AL0083216

Prepared by: Amber H. Powell

Date: December 2, 2016

Receiving Waters: East Fork Choctawhatchee River

Permit Coverage: Dry Process Bauxitic Clay and Kaolin Mine, Dry Preparation, Transportation and Storage, and Associated Areas

SIC Code: 1459 and 1455

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

This proposed permit covers a bauxitic clay and kaolin mining pit and associated dry preparation areas.

This proposed permit authorizes treated discharges into a stream segment, other State waters, or local watershed that currently has a water quality classification of Fish and Wildlife (F&W) (ADEM Admin. Code r. 335-6-10-.09). 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 the F&W 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 for the receiving stream.

The bauxitic clay and kaolin mining discharge limitations for Total Suspended Solids, Total Iron as Fe, and Total Aluminum as Al are based on best professional judgement with consideration given to bauxite ore limitations established in 40 CFR Part 440.20.

Discharge limitations for pH of 6.0 – 8.5 s.u. are based on instream water quality standards for streams classified as Fish & Wildlife found in ADEM Admin. Code r. 335-6-10-.09. The proposed limitations have been shown to be protective of water quality. Regardless, 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.

The applicant has requested, in accordance with 40 CFR Part 122.21 and their NPDES permit application, a waiver from testing for the Part A, B, and C pollutants listed in the EPA Form 2C and 2D that are not addressed in their application. They have also certified that due to the processes involved in their mining activity these pollutants are believed to be not present in the waste stream.

The Pollution Abatement/Prevention (PAP) plan for this facility has been prepared by a professional engineer (PE) registered in the State of Alabama and is designed to ensure reduction of pollutants in the waste stream to a level that, if operated properly, the discharge will not contribute to or cause a violation of applicable State water quality standards. 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 water quality standards.

In accordance with ADEM Admin. Code R. 335-6-3-.07 the design professional engineer, 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 water quality standards, when such treatment facilities are properly operated.

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 water quality standards above numeric or narrative criteria, 40 CFR Part 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 water quality standards.

If the requirements of the proposed permit are fully implemented, there is reasonable assurance that the pollutants will not be present in the discharge at levels of concern and/or the facility will not discharge pollutants at levels that will cause or contribute to a violation of applicable State water quality standards in the receiving water.

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.

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

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

The applicant is not proposing discharges of pollutants to an ADEM identified Tier I water.

The proposed permit action authorizes new or increased discharges of pollutant(s) 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/considered information regarding (1) demonstration of necessity/importance, (2) alternatives analysis, and (3) if required, calculation(s) of total annualized costs for technically feasible treatment alternatives regarding the proposed new or increased discharges to Tier II waters. The Department has determined, based on the applicant's demonstration, that the proposed new or increased discharges to the Tier II waters are necessary for important economic or social development in the area in which the waters are located.

operational error, improperly designed treatment facilities, inadequate facilities, lack of preventive maintenance, or careless or improper operation.

60. 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.

61. Week - means the period beginning at twelve midnight Saturday and ending at twelve midnight the following Saturday.

62. 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.

G. 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. 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.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANGEMENT (ADEM)
OUTFALL CERTIFICATION SUMMARY

PERMITTEE NAME: Imerys Refractory Minerals USA, Inc.
FACILITY NAME: Riddle Pit
NPDES PERMIT NO: AL0083216
ADOL PERMIT NO(S):
COUNTY: Barbour County

Outfall Number	Is Outfall Certified?	Date of Certification	Outfall Latitude and Longitude	Date of ADEM Monitoring Release
001-1	☐ YES ☐ NO			
002-1	☐ YES ☐ NO			

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.

Name and Title (Print) _____ Signature _____ Date _____

☐ Responsible Official ☐ Duly Authorized Representative

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

ANTIDEGRADATION RATIONALE

Company Name: Imerys Refractory Minerals USA, Inc.

Facility Name: Riddle Pit

County: Barbour

Permit Number: AL0083216

Prepared by: Amber H. Powell

Date: December 2, 2016

Receiving Waters: East Fork Choctawhatchee River

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

Discharge Description: Dry Process Bauxitic Clay and Kaolin Mine, Dry Preparation, Transportation and Storage, and Associated Areas

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 expects that the issuance of the above referenced NPDES permit will result in an estimated $73,000 in Payroll Tax, $120,000 in Corporation Tax, $53,000 in Federal Income Tax, $63,000 FICA Tax, and $69,000 in Fuel Tax.

2. The Permittee expects to lay off 8 equipment operators if the abovementioned permit is not issued.

3. The Permittee states that the employment of local contractors who mine and haul the minerals will be maintained. Additionally, the continued employment of the workforce at various processing plants is dependent on the uninterrupted supply of minerals from the mining operations associated with this discharge point.

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

Reviewed By: Catherine McNeill CM

Date: 12-2-16

S: 129710
P: 249024.1
F: 26398.1

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

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

R#16-38921 A. Powell $1430.00

INSTRUCTIONS: PLEASE READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY BEFORE COMPLETING THIS FORM. 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 IN INK ONLY.

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 0083216	Barbour

Company/Permittee Name:			Facility Name (*e.g.*, Mine Name, Pit Name, *etc.*):		
Imerys Refractory Minerals USA, Inc.			Riddle Pit		
Mailing Address of Company/Permittee:			Physical Address of Facility (as near as possible to entrance):		
377 Highway 131			Off Hwy 131		
City:	State:	Zip:	City:	State:	Zip:
Eufaula	AL	36072	Eufaula	AL	36027
Permittee Phone Number:	Permittee Fax Number:		Latitude and Longitude of entrance:		
334-687-6846	N/A		N031° 44' 36.6"- W085° 21' 29.7"		

Responsible Official (as described on page 13 of this application):			Responsible Official Title:		
Gerrit Posthumus			Director of Operations		
Mailing Address of Responsible Official:			Physical Address of Responsible Official:		
Same as Company			Same as Company		
City:	State:	Zip:	City:	State:	Zip:
Phone Number of Responsible Official:	Fax Number of Responsible Official:		Email Address of Responsible Official:		

RECEIVED AUG -2 2016 ADEM WATER MANAGEMENT BRANCH

Facility Contact:			Facility Contact Title:	
Robin Dozier			Geologist	
Physical Address of Facility Contact:			Phone Number of Facility Contact:	Fax Number of Facility Contact:
Same as Company				
City:	State:	Zip:	Email Address of Facility Contact:	
			rdozier@ceminerals.com	

RECEIVED AUG -2 2016 abn ADEM STORM WATER

II. MEMBER INFORMATION

A. Identify the name, title/position, and unless waived in writing by the Department, the residence address of every officer, 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 (P.O. Box is Not Acceptable)
Tim J. McCarthy	President	901 East 8th Ave, King of Prussia , PA 19406
Scot A. Graddick	Vice President	130 Rockwood Drive, Americus, GA 31709
Paul V. Hall	Vice-President	Route 1, Upper River Road , Americus, GA 31709
John H. Hofeldt	Comptroller	Deerfield Road, Americus, GA 31709

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:
N/A		

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 or single proprietorship, 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: C&E Minerals (Parent Corporation)

D. Land Owner(s): Carrol Riddle

E. Mining Sub-contractor(s)/Operator(s), if known: Bledsoe Mining Co, Inc.

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 license to mine suspended or revoked?	☐	☒
(3) An Alabama or federal mining permit suspended or terminated?	☐	☒
(4) A reclamation bond, or similar security deposited in lieu of a bond, or portion thereof, forfeited?	☐	☒
(5) A bond or similar security deposited in lieu of a bond, or portion thereof, the purpose of which was to secure compliance with any requirement of the Alabama Water Improvement Commission or Alabama Department of Environmental Management, 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 months) 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:

WL – AL0078417– Issued 9/18/2015

V. OTHER PERMITS/AUTHORIZATIONS

A. List any other NPDES 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 Industrial Relations (ADIR), or other agency, to the applicant, parent corporation, subsidiary, or LLC member for this facility whether presently effective, expired, suspended, revoked, or terminated:

ADOL- will apply before operations start

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, ASMC, or ADIR, to the applicant, Parent Corporation, subsidiary, or LLC member for other facilities whether presently effective, expired, suspended, revoked, or terminated:

See attached.

VI. PROPOSED SCHEDULE

Anticipated Activity Commencement Date: Dec 2016 Anticipated Activity Completion Date: ~2021

VII. ACTIVITY DESCRIPTION & INFORMATION

A. Proposed Total Area of the Permitted Site: 25 acres Proposed Total Disturbed Area of the Permitted Site: 24 acres

B. Township(s), Range(s), Section(s): T-9-N R-27-E Sec 17 & 20

Detailed Directions to Site: From Hwy 131 & CR 79S travel west on Hwy 131. The site is on the right just past the bridge over the East Fork Choctawhatchee River.

C. Is/ will this facility:

		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 ADIR 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, trans-loaded, 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	____Chalk	____Talc	____Crushed rock (other)
____Bentonite	____Industrial Sand	____Marble	____Shale &/or Common Clay	____Sandstone
____Coal	20 Kaolin	____Coal fines/refuse recovery	____Coal product, coke	____Slag, Red Rock
____Fire clay	____Iron ore	____Dimension stone	____Phosphate rock	____Granite
80 Bauxitic Clay	____Bauxite Ore	____Limestone, crushed limestone and dolomite		

____ Gold, other trace minerals:_____ ____Other: _____

____Other:_____ ____Other:_____

____Other:_____ ____Other:_____

OTHER PERMITS / AUTHORIZATIONS (ADEM Form 315 Section V.B.)

ADEM		
AL0042331	AL0071099	AL0079243
AL0048500	AL0071145	AL0079260
AL0050067	AL0071196	AL0079367
AL0050539	AL0071668	AL0079839
AL0055930	AL0071765	AL0080187
AL0055948	AL0071838	AL0080314
AL0056227	AL0071960	AL0080349
AL0056405	AL0072001	AL0080594
AL0056821	AL0072061	AL0080845
AL0057894	AL0072079	AL0080861
AL0058114	AL0072087	AL0080969
AL0058131	AL0072133	AL0080977
AL0058149	AL0072885	AL0081094
AL0058157	AL0072893	AL0081108
AL0058271	AL0073288	AL0081132
AL0059111	AL0073628	AL0081159
AL0059838	AL0073733	AL0081183
AL0060666	AL0073849	AL0081701
AL0061841	AL0073857	AL0081736
AL0062031	AL0073881	AL0082007
AL0062065	AL0074306	AL0082031
AL0062294	AL0074403	AL0082163
AL0063959	AL0074462	AL0082180
AL0063967	AL0074624	AL0082198
AL0064009	AL0074683	AL0082511
AL0064017	AL0075451	AL0082520
AL0064548	AL0076201	AL0082678
AL0064564	AL0076210	AL0082686
AL0065871	AL0076228	AL0082821
AL0067261	AL0076406	AL0082881
AL0067521	AL0076805	AL0082899
AL0068128	AL0077062	AL0083038
AL0068284	AL0077178	AL0083062
AL0068292	AL0077488	AL0083119
AL0069213	AL0077844	
AL0069256	AL0077852	
AL0069353	AL0077879	
AL0069400	AL0077887	
AL0069426	AL0078077	
AL0069566	AL0078255	
AL0069914	AL0078417	
AL0070688	AL0078590	

OTHER PERMITS / AUTHORIZATIONS (ADEM Form 315 Section V.B.)

ADIR

6899	7960	8995	9427	10584	11684	12307	12845
7271	7974	8996	9449	10586	11685	12308	12851
7316	8017	8997	9450	10587	11688	12309	12876
7440	8017	8998	9451	10588	11712	12310	12877
7441	8131	9036	9452	10589	11713	12311	12878
7450	8239	9037	9453	10590	11714	12312	12879
7639	8309	9064	9478	10591	11715	12362	12941
7640	8309	9065	9479	10593	11753	12367	12946
7641	8322	9066	9496	10628	11811	12368	12947
7680	8324	9067	9497	10629	11812	12369	12984
7681	8329	9068	9498	10630	11813	12370	12988
7708	8354	9117	9499	10728	11814	12395	12989
7709	8356	9118	9500	10732	11823	12396	12996
7710	8357	9119	9768	10750	11824	12404	13031
7712	8438	9120	10153	10757	11825	12405	13032
7725	8672	9139	10222	10758	11826	12429	13034
7726	8753	9141	10223	10760	11827	12430	13035
7727	8754	9230	10249	10761	11828	12496	13036
7762	8755	9231	10250	10799	11848	12517	13039
7769	8756	9233	10259	10800	11849	12518	13218
7770	8757	9273	10260	10835	11850	12535	
7771	8771	9274	10261	10837	11851	12536	
7828	8795	9275	10262	10858	11852	12540	
7829	8798	9276	10263	10872	11878	12541	
7830	8799	9278	10264	10873	11879	12542	
7850	8823	9279	10295	10883	11880	12543	
7851	8845	9292	10312	10885	11881	12595	
7855	8847	9293	10313	10928	11882	12596	
7861	8848	9294	10352	10929	11883	12597	
7862	8849	9295	10353	10961	11948	12598	
7863	8876	9296	10354	10962	11949	12608	
7906	8877	9297	10377	10970	11950	12654	
7915	8878	9298	10378	11001	11951	12686	
7916	8879	9299	10379	11002	11959	12687	
7917	8880	9302	10419	11020	11960	12731	
7918	8881	9376	10420	11021	11991	12732	
7919	8882	9377	10474	11022	11992	12733	
7933	8914	9378	10476	11023	12011	12734	
7934	8915	9395	10477	11576	12012	12741	
7935	8953	9396	10478	11577	12064	12773	
7936	8954	9397	10503	11583	12090	12774	
7939	8955	9421	10504	11584	12091	12775	
7955	8958	9422	10505	11625	12236	12776	
7957	8973	9424	10506	11626	12250	12777	
7958	8974	9425	10549	11627	12251	12825	
7959	8977	9426	10550	11628	12252	12826	

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
- ☒ Construction related temporary borrow pits/areas
- ☒ Mineral transportation ___rail ___barge __X__truck
- ☐ Preparation plant waste recovery
- ☐ Hydraulic mining, dredging, instream or between stream-bank mining
- ☒ Grading, clearing, grubbing, *etc.*
- ☐ Pre-construction ponded water removal
- ☒ Excavation
- ☒ Pre-mining logging or land clearing
- ☐ Waterbody relocation or other alteration
- ☐ Creek/stream crossings
- ☒ 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: _____

B. Primary SIC Code: 1459 Description: Bauxite Clay Mining

Secondary SIC Code(s): 1455 Description: Kaolin

C. Narrative Description of the Activity: Clay is mined from the mining area with excavators and trucks. The mined clay is stockpiled and/or hauled to the processing plant located in Andersonville, GA.

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	*Contents*	*Volume*	*Contents*	*Volume*	*Contents*
1,000 gallons	Diesel	_____ gallons	_____	_____ gallons	_____
_____ gallons	_____	_____ gallons	_____	_____ gallons	_____

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: _____

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

XII. TOPOGRAPHIC MAP SUBMITTAL

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

(a) An outline of legal boundary of entire property (property lines and lease boundaries)
(b) An outline of the facility
(c) All existing and proposed disturbed areas
(d) Location of 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
(k) Buildings and structures, including fuel/water tanks
(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

XIII. DETAILED FACILITY MAP SUBMITTAL

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

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

XIV. RECEIVING WATERS

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

Action	Outfal l E/P	Receiving Water	Latitude	Longitude	Distance to Rec. Water	Disturbed Acres	Drainage Acres	ADEM WUC	303(d) Segment (Y/N)	TMDL Segment *
Issue	001P	East Fork Choctawhatchee River	31° 44' 54"	85° 21'23"	920'	16	18	F&W	N	N
Issue	002P	East Fork Choctawhatchee River	31° 44' 51"	85° 21' 35"	200'	8	8	F&W	N	N

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

XV. DISCHARGE CHARACTERIZATION

A. Modified EPA Form 2C Submittal

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

☐ No, the applicant does not request a waiver and a complete modified EPA Form 2C is attached.

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

Outfall E/P	Information Source - # of Samples	Flow cfs	Flow gpd	Frequency hours/day	Frequency days/mth	Sum/Win Temp, °C	pH s.u.	BOD_5 lbs/day	TSS lbs/day	Tot Fe lbs/day	Tot Mn lbs/day	Tot Al lbs/day
001P	DSP -1	0.025	15,915	*Precip Driven	*Precip Driven	28°/10°	7.4	0.013	0.798	0.096	0.028	0.013
002P	DSP -1	0.011	7,073	*Precip Driven	*Precip Driven	28°/10°	7.4	0.006	0.354	0.043	0.012	0.006
*Discharges will be precipitation driven except when pit watering activities are occurring.												

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

Outfall E/P	Reason Believed Present	Information Source - # of Samples										
			lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day
None Expected												

XVI. DISCHARGE STRUCTURE DESCRIPTION & POLLUTANT SOURCE

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

Outfall	Discharge structure Description	Description of Origin Of pollutants	Surface Discharge	Groundwater Discharge	Wet Prep -Other Production Plant	Pumped or Controlled Discharge	Low Volume STP	Other
001P	Pipe / Spillway	8, 9, 10	X	X	N/A	X	N/A	N/A
002P	Pipe / Spillway	8, 9, 10	X	X	N/A	X	N/A	N/A

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

XVII. PROPOSED NEW OR INCREASED DISCHARGES

A. Pursuant to ADEM Admin. Code Chapter 335-6-10-.12(9), responses to the following questions must be provided by the applicant requesting NPDES permit coverage for new or expanded discharges of pollutant(s) to Tier 2 waters (except discharges eligible for coverage under general permits). As part of the permit application review process, the Department is required to consider, based on the applicant's demonstration, 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 this Part (XVII.B.), Part XVIII, and XIX. **Attach additional sheets/documentation and supporting information as needed.**

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

None

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

There will be no new hires to work this facility. Contractors will be transferred from a current site to this site to work.

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

If, the application is not approved, mining could not proceed. Therefore, the company would have to layoff 8 equipment operators. The support personnel: (two administrative, three clerical, three maintenance and thirty-four Truck Drivers) are responsible for the entire operation. Their activities are not site specific, but they are dependent on the continued availability of permitted mine sites.

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

The mining will be done by Bledsoe mining and an estimate of the taxes that will be paid by the contractor for this facility are as follows: *Taxes paid on an estimated $400,000 to local contractors; Payroll taxes $ 73,000.00, State and Federal Corporation taxes $120,000.00 Federal Income taxes $53,000.00, FICA $63,000.00, Fuel taxes $69,000.00. *Note: these numbers are estimated and were generated for ADEM permitting. Actual values will be determined as the project is completed.*

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

The company will help provide **bauxite clay materials** to industries worldwide. The material mined is mainly kaolin, bauxitic kaolin, and bauxite. The products created from these materials are refractory products. Refractory products are materials that can withstand high temperature cycles without deterioration. These products are used in investment castings, furnace liners and kiln bricks. Kaolin is also used to make proppants, which are small, spherical beads that are used by the petroleum industry to seal fractures in oil-bearing rock formations to improve well recovery. The location of the operation will also be convenient for local residents providing job opportunities for people in the Edgefield area. The payrolls cycle through the local economy. Charitable contributions include Chamber of Commerce and United Way.

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

The employment of the local contractors who mine and haul the ores will be maintained. The continued employment of the workforce at various processing plants is dependent on the uninterrupted ore supply from the mining operations associated with the discharge point. The payrolls cycle through the local economy.

XVIII. ALTERNATIVES ANALYSIS – ADEM Form 311 3/02

Pursuant to ADEM Admin. Code Chapter 335-6-10, an evaluation of the discharge alternatives identified below has been completed and the following conclusions were reached. All proposed new or expanded discharges of pollutant(s) covered by the Individual NPDES permitting program are subject to the provisions of the anti-degradation policy. As part of the permit application review process, the Department is required to determine, based on the applicant's demonstration, that 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. As a part of this demonstration, a registered professional engineer (PE) licensed to practice in the State of Alabama must complete an evaluation of the discharge alternatives, to include calculation of total annualized project costs (Item XIX) for each technically feasible alternative. Technically feasible alternatives with total annualized pollution control project costs that are less than 110% of the preferred alternative total annualized pollution control project costs for the Tier 2 new or increased discharge proposal are considered viable alternatives. **Supporting documentation is attached, referenced, or otherwise handled as appropriate.**

Alternative	Viable	Non-Viable	Reason/Rationale For Indicating Non-Viable
1) Treatment/Discharge Proposed In This Application	X		
2) Land Application		X	
3) Pretreatment/Discharge to POTW By SID Permit		X	
4) Relocation of Discharge		X	
5) Reuse/Recycle – Pollution Prevention		X	
6) Other Process/Treatment Alternatives		X	
7) Underground Injection By UIC Permit		X	
8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM		X	
9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM		X	

COMMENTS: _____

XIX. CALCULATION OF TOTAL ANNUALIZED PROJECT COSTS FOR PRIVATE SECTOR PROJECTS - ADEM Form 313 8/02
(ADEM Form 312 3/02 - Public Sector Project is available upon request)

This item must be completed for each technically feasible alternative evaluated in Item XVIII. **Copy, complete, and attach additional blocks/sheets and supporting information as needed.**

Capital Costs of pollution control project to be expended or financed by applicant (Supplied by applicant)	$ 200,000 (1)	* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.
Interest Rate for Financing (Expressed as a decimal)	N/A (i)	
Time Period of Financing (Assume 10 years *)	10 years (n)	
Annualization Factor ** = $\frac{i}{(1+i)^{10}-1} + i$ i = Interest Rate	N/A (2)	** Or refer to Appendix B (application information) for calculated annualization factors.
Annualized Capital Cost [Calculate: (1) x (2)]	$ 200,000 (3)	
Annual Cost of Operation & Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration & replacement) ***	$ 50,000 (4)	*** 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).
Total Annual Cost of Pollution Control Project [(3) + (4)]	**$ 250,000 (5)**	

XVIII. ALTERNATIVE ANALYSIS ATTACHMENT

1) Treatment/Discharge Proposed in this Application **Viable**

2) Land Application **Non-Viable**
Stormwater runoff's best method of collection is settling basins. Runoff water will be from the affected areas around the mining site during rain events. The basin is designed to have a capacity of 0.25 acre-feet/per acre of disturbed area. The basin would only discharge if rainwater accumulation exceeded this amount. It is not feasible to irrigate or to pump water out of a sediment basin. Silt is the main pollutant and the best water quality is obtained by using settling basins.

3) Pretreatment/Discharge to POTW by SID **Non-Viable**
It is not feasible to pump to a POTW since there is not one in the area. Also, the treatment would be to remove silt from the stormwater runoff and the Public Treatment system is not applicable for this particular treatment.

4) Relocation of Discharge **Non-Viable**
Sediment basins are designed and placed in hollows in order to catch stormwater runoff from the uphill areas. Relocation is not feasible due to terrain.

5) Reuse/Recycle-Pollution Prevention **Non-Viable**
Re-cycling of stormwater runoff is not applicable for this type of operation. Relocating or bypassing a discharge in a natural state during storm events will destroy biological systems that are dependent on stormwater surges down stream from the facility.

6) Other Process/Treatment Alternatives **Non-Viable**
Other processes or treatments are not feasible to collect silt and fine clays. Surface water directed to settling ponds is the best management. Groundwater seepage from an open pit mine will be pumped into a settling basin until it reaches full capacity.

7) Underground Injection by UIC Permit. **Non-Viable**
A UIC permit is not applicable in this type of operation. Silt and fine clays are being treated as pollutants. The best water quality to be obtained in this situation is by using settling basins.

XX. POLLUTION ABATEMENT PLAN (PAP) SUMMARY

Outfall(s): 001 - 002

Y	N	N/A	
X			Runoff from all areas of disturbance is controlled
X			Drainage from pit area, stockpiles, and spoil areas directed to a sedimentation pond
X			Sedimentation basin at least 0.25 acre/feet for every acre of disturbed drainage
X			Sedimentation basin cleaned out when sediment accumulation is 60% of design capacity
X			Trees, boulders, and other obstructions removed from pond during initial construction
X			Width of top of dam greater than 12'
X			Side slopes of dam no steeper than 3:1
X			Cutoff trench at least 8' wide
X			Side slopes of cutoff trench no less than 1:1
X			Cutoff trench located along the centerline of the dam
X			Cutoff trench extends at least 2' into bedrock or impervious soil
X			Cutoff trench filled with impervious material
X			Embankments and cutoff trench 95% compaction standard proctor ASTM
X			Embankment free of roots, tree debris, stones >6" diameter, etc.
X			Embankment constructed in lifts no greater than 12"
X			Spillpipe sized to carry peak flow from a one year storm event
X			Spillpipe will not chemically react with effluent
X			Subsurface withdrawal
X			Anti-seep collars extend radially at least 2' from each joint in spillpipe
X			Splashpad at the end of the spillpipe
X			Emergency Spillway sized for peak flow from 25-yr 24-hr event if discharge not into PWS classified stream
	X2		Emergency spillway sized for peak flow from 50-yr 24-hr event if discharge is into PWS classified stream
X			Emergency overflow at least 20' long
X			Side slopes of emergency spillway no steeper than 2:1
		X3	Emergency spillway lined with riprap or concrete
X			Minimum of 1.5' of freeboard between normal overflow and emergency overflow
X			Minimum of 1.5' of freeboard between max. design flow of emergency spillway and top of dam
X			All emergency overflows are sized to handle entire drainage area for ponds in series
X			Dam stabilized with permanent vegetation
X			Sustained grade of haul road <10%
X			Maximum grade of haul road <15% for no more than 300'
X			Outer slopes of haul road no steeper than 2:1
X			Outer slopes of haul road vegetated or otherwise stabilized
	X1		Detail drawings supplied for all stream crossings
X			Short-Term Stabilization/Grading And Temporary Vegetative Cover Plans
X			Long-Term Stabilization/Grading And Permanent Reclamation or Water Quality Remediation Plans

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

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

X1: No stream crossings
X2: Receiving waters are not PWS
X3: Spillway stabilized with heavy natural vegetation is a valid alternative

XXI. POLLUTION ABATEMENT PLAN (PAP) REVIEW CHECKLIST

Y	N	N/A	
X			PE Seal with License #
X			Name and Address of Operator
X			Legal Description of Facility
			General Information:
X			Name of Company
X			Number of Employees
X			Products to be Mined
X			Hours of Operation
X			Water Supply and Disposition
			Topographic Map:
X			Mine Location
	X		Location of Prep Plant
X			Location of Treatment Basins
X			Location of Discharge Points
X			Location of Adjacent Streams
			1"- 500' or Equivalent Facility Map:
X			Drainage Patterns
X			Mining Details
X			All Roads, Structures Detailed
X			All Treatment Structures Detailed
			Detailed Design Diagrams:
X			Plan Views
X			Cross-section Views
X			Method of Diverting Runoff to Treatment Basins
			Narrative of Operations:
X			Raw Materials Defined
X			Processes Defined
X			Products Defined
			Schematic Diagram:
X			Points of Waste Origin
X			Collection System
X			Disposal System
			Post Treatment Quantity and Quality of Effluent:
X			Flow
X			Suspended Solids
X			Iron Concentration
X			pH
			Description of Waste Treatment Facility:
X			Pre-Treatment Measures
X			Recovery System
X			Expected Life of Treatment Basin
X			Schedule of Cleaning and/or abandonment
			Other:
X			Precipitation/Volume Calculations/Diagram Attached
X			BMP Plan for Haul Roads
X			Measures for Minimizing Impacts to Adjacent Stream i.e., Buffer Strips, Berms, etc.
X			Methods for Minimizing Nonpoint Source Discharges
X			Facility Closure Plans
	X		PE Rationale(s) For Alternate Standards, Designs or Plans

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

No Alternative Standards
Haul Road BMPs shown in PAP plan
No Prep Plant on-site

XXII. 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.

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

The applicant is advised to contact:

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

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

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

XXIII. PROFESSIONAL ENGINEER (PE) CERTIFICATION

A detailed, comprehensive Pollution Abatement/Prevention Plan (PAP) must be prepared, signed, and certified by a professional engineer (PE), registered in the State of Alabama 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."

Address 535 Herron Street, Montgomery, Al 36104 PE Registration # 20897

Name and Title (type or print) Steven E. Speaks, PE/PLS Phone Number 334-262-1091

Signature Steven E. Speaks Date Signed 08-04-2016

XXIV. RESPONSIBLE OFFICIAL SIGNATURE*

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

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

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

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

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

Name (type or print) Gerrit Posthumus Official Title Director of Operations

Signature Date Signed 04-15-2016

*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.

Imerys Refractory Minerals USA, Inc.

Riddle Pit 1
Located in Sections 17 & 20, T-9-N, R-27-E
Lawrenceville Quadrangle
Barbour County, Alabama

Date: 7/29/2016

OUTFALL TABLE		
POINT	LATITUDE	LONGITUDE
001P	31° 44' 54"	85° 21'23"
002P	31° 44' 51"	85° 21' 35"

Mining Limits

LARRY E. SPEAKS & ASSOCIATES
CONSULTING ENGINEERS & LAND SURVEYORS
535 HERRON STREET
MONTGOMERY, AL. 36104
TEL.-334/262-1091

POLLUTION ABATEMENT PLAN

For

Riddle Pit

Prepared for:

IMERYS REFRACTORY MINERALS USA, INC.

Prepared by:

Larry E. Speaks & Associates, Inc.
535 Herron Street
Montgomery, Al 36104

Certified by:
Steven E. Speaks
Professional Engineer and Professional Land Surveyor
No. 20897

INITIAL ISSUANCE: July 2016

Contents

I. INTRODUCTION: 3
II. OPERATOR: 3
III. GENERAL INFORMATION: 3
IV. TOPOGRAPHIC MAP: 4
V. METHOD OF DIVERTING SURFACE WATER RUNOFF: 4
VI. NARRATIVE OF OPERATIONS: 4
VII. QUALITY AND QUANTITY CHARACTERISTICS OF THE WASTE: 4
VIII. WASTE TREATMENT FACILITIES: 4
IX. SEDIMENT CONTROL FOR HAUL ROADS: 5
X. DAM FOR THE SEDIMENT BASIN: 6
XI. LOCATION OF ALL STREAMS ADJACENT TO MINING AREA AND 7
MEASURES TO MINIMIZE IMPACTS TO ADJACENT STREAMS: 7
XII. NON-POINT SOURCE APPLICATION: 7
XIII. WATER SUPPLY AND DISPOSITION: 7
XIV. RECLAMATION PROCEDURE: 8
XV. DESIGN DATA: 8

I. INTRODUCTION:

This document has been prepared for an initial issuance for a NPDES permit AL00_____ for Imerys Refractory Minerals USA, Inc. The **Riddle Pit** facility is located in Section 17 & 20, T-9-N, R-27-E in Barbour County, Alabama. This application has been prepared in accordance with the rules and regulations of the Alabama Department of Environmental Management. A thorough field review has been accomplished preceding the approval and submittal of this application. Field checks were made of the entire sedimentation basin system to determine compliance with ADEM rules and regulations.

The pollution abatement plan is presented in two parts which includes a brief narrative presented herein and the Pollution Abatement plans which are attached hereto. The narrative is intended to address the format as outlined by the ADEM Water Division - Water Quality and Control Program, Rules and Regulations, as well as present the basis for the designs as further detailed in the "Pollution Abatement Plan". Drawings as presented in the "Pollution Abatement Plan" were derived from rules and regulations of the ADEM as well as from other generally accepted design data sources primarily from the Natural Resource Conservation Service. Generally, the narrative will follow the outline of chapter 6 - 9 - .03, Surface Mining Rules and Regulations from the ADEM Rules and Regulations.

II. OPERATOR:

The primary operator of this plant is Imerys Refractory Minerals USA, Inc. which has its office business address as follows:

377 Highway 131
Eufaula, AL 36072

III. GENERAL INFORMATION:

The pit will employ approximately 6-8 individuals from Eufaula and the surrounding area. Imerys Refractory Minerals USA, Inc.is a Foreign Corporation formed in Delaware.

The Mullite Company of America dba Eufaula Minerals, the facility will mine bauxite ore, bauxite clay and kaolin. These materials will be hauled from the site to the company's home office where they will be used in a processing operation to make various products. Hours of operation are generally 7:00 am to 4:00 pm, Monday through Friday.

All surface water from the stockpile areas and haul road is diverted back into the previously constructed sedimentation ponds shown on the plan. This allows all solids to settle before discharging into Abbie Creek. All water which must be removed from any of the pit areas will be pumped to sedimentation pond(s) before discharging from the site thus eliminating the necessity of direct pumped discharges.

IV. TOPOGRAPHIC MAP:

Design plans submitted with this document provide an existing contour map. The "Pollution Abatement" layout shows the planned general layout of the mined areas, stockpile areas, sedimentation ponds and the runoff locations.

V. METHOD OF DIVERTING SURFACE WATER RUNOFF:

The "Pollution Abatement Plan" shows the general contour of the land. All disturbed areas drain back to a mined pond or a sedimentation pond. Spoil piles are situated so any silt carried by drainage will be treated in the previously excavated pond or the mined areas.

VI. NARRATIVE OF OPERATIONS:

Bauxitic clay and kaolin are the only raw materials mined. The material is hauled directly from the site or stockpiled onsite and later hauled from the site. A flow schematic has been provided on the Pollution Abatement Plan. The main waste product that results from the mining is overburden from the mining operation. The overburden is used to construct the dam at the sedimentation pond or the berms shown, or stockpiled and later carried back to the previously mined area.

VII. QUALITY AND QUANTITY CHARACTERISTICS OF THE WASTE:

The only waste product which is a by-product of this operation is the overburden. Clays and sands will settle into the sediment ponds. The ponds will be cleaned out as needed to provide adequate sediment area for incoming materials. Regarding pH, the waste effluent is neutral in nature and should be in the range of 6 to 8.5. Fe should not exceed 0.5 mg/L (monthly average) and 1.0 mg/L (daily max). AL should not exceed 2.0 mg/l (daily max) and 1.0 mg/L (monthly average). TSS will not exceed 20 mg/L (daily max) and 30 mg/L (monthly average). The flow is unknown and depends upon weather conditions, amount of rain, etc. The temperatures should be around 85 F (25 C) summer, 60 F (16 C) winter.

VIII. WASTE TREATMENT FACILITIES:

As previously discussed, the treatment process for water quality control is to be the constructed sedimentation pond. Details are presented in the "Pollution Abatement Plans – Detail Sheets". Pollution abatement facilities should be designed and constructed so as to control both spoil runoff and pit drainage. Pumping or pit de-watering activities shall be directed into an existing pit or treatment basin. Discharges as a result of pumping shall be monitored in accordance with the NPDES permit (to be issued) and shall meet the limitations of the NPDES permit.

The sediment basin(s) should have a minimum capacity to store 0.25 acre feet/ acre of disturbed area in the drainage area. Removal of solids should be accomplished where the sediment accumulation reaches 60% of the design capacity. However, with the amount of material being constantly removed from the mined pond, this should never occur.

The expected life of the treatment basin is for the life of the permit.

Treatment Structure Calculations

Rational Method Q= CIA

Q=cfs C= Runoff Coefficient I=Rainfall Intensity In/hr (2yr) A=Area (Acres)

POINT	Area (ac)	C	I_2 (in/hr)	Q_2 (CFS)
001P	18	0.3	3.492	18.859
002P	8	0.3	3.067	7.360

		REQUIRED	
POINT	Pond Size (min) (ac-ft)	Primary Spillway	Secondary Spillway
001P	4.00	18"	5' x 1'
002P	2.0	18"	5' x 1'

IX. SEDIMENT CONTROL FOR HAUL ROADS:

a) the grade shall not to exceed 10 percent;

b) the maximum grade shall not to exceed 15 percent for 300 feet;

c) the roads shall not to be more than 300 feet of 15 percent maximum grade for each 1,000 feet of road constructed;

d) the haul road, wherever possible, should be located so that runoff from the road enters a sediment basin constructed for the mining operation. Any exception must be communicated to the engineer immediately;

e) outer slopes for haul roads shall not to be steeper than 2:1 and are required to be seeded with annual and perennial grasses with at least 80 percent cover to avoid erosion;

f) Stream crossings should be avoided; however any crossings which are necessary and which meet technical staff approval should be detailed with drawings and any other pertinent data in this report, using best engineering practices.

Pit roads will be ditched and stabilized so that runoff will be a collected as illustrated on the site plan map and by sediment basins.

X. DAM FOR THE SEDIMENT BASIN:

The dam for the sediment basins have been designed and are required to be built using the following as minimum criteria:

a) the dam for the sediment basin top width is required to be no less than 12 feet wide.

b) the slope on either side of the dam is required to be no steeper than 3:1.

c) the dam is required to be constructed with a cutoff trench at least 8 feet wide. The side slopes is designed to be no less than 1:1. The cutoff trench shall be located on the dam centerline and be of sufficient depth (not less than 2 feet) to extend into a relatively impervious material from which the core of the dam shall be constructed.

d) Trees, boulders and other obstructions are to be removed from pond's dam area during initial construction.

e) the entire embankment and cutoff trench shall be compacted to 95% density.

f) the material placed in the embankment is required to be free of sod, roots, stones over 6 inches in diameter and other objectionable materials.

g) the fill material should be placed and spread over the entire fill area, starting at the lowest point of the foundation, in layers not to exceed 08 inches in thickness.

h) the spillpipe is sized to adequately carry the expected peak flow from a two-year frequency storm or smaller event.

i) the spillpipes are required to be made of a material capable of withstanding any chemical reactions caused by the quality of water being discharged.

j) the spillpipe is required to be equipped with a device, or constructed, such to ensure that subsurface withdrawal is accomplished in order to help prevent floating solids from discharging.

k) the spillpipes are required to be equipped with anti-seep collars at each joint which radiate at least 2 feet from the pipe in all directions. The collars and their connections to the pipe should be watertight.

l) a splash pad or rip-rap is required to be placed under the discharge of the spillpipe, or the location of the discharge set, so as to ensure that the discharge does not erode the dam or pipe can be constructed to be level with the natural ground.

m) the emergency spillway has been designed to safely carry the expected peak flow from a 25 year, 24 hour storm or shorter duration. The slope of the entrance and to the exit to the emergency overflow is required to be constructed with a control section at least 20 feet long. The side slopes of the emergency overflow shall not be steeper than 2:1. The emergency overflow should be rip-rapped, vegetated or concreted in order to prevent erosion.

n) the spillway is required to have a minimum of 1 ½ feet of freeboard between the normal overflow and the emergency overflow. There should be at least 1 ½ feet of freeboard between the maximum design flow elevation in the emergency overflow and the top of the dam.

o) if basins are built in a series, then the emergency overflow for each is designed to accommodate the entire drainage area.

p) the dam shall be sowed with both perennial and annual grasses in order to ensure erosion is minimized. The necessary erosion control measures should be place at the toe of the dam prior to completion of construction activity.

q) Areas in which surface mined minerals are stockpiled, and areas in which refuse resulting from any type of mining operation is or has been deposited, should be provided with diversion ditches or other appropriate methods of intercepting surface water in such a way as to minimize the possibility of sediment laden, acidic or toxic waters from such areas, being deposited into a stream.

XI. LOCATION OF ALL STREAMS ADJACENT TO MINING AREA AND MEASURES TO MINIMIZE IMPACTS TO ADJACENT STREAMS:

Included with the NPDES application preceding this pollution abatement plan is a drawing which has been reproduced from the USGS quad sheet at a 1" = 2000' scale showing the adjacent streams. Also, included with the application are three maps of various scales presenting the information required by the application. The mining operation should provide a 50 ft buffer zone around streams where practical. If a buffer zone cannot be maintained ADEM should be contacted regarding construction of a designed berm to protect streams.

XII. NON-POINT SOURCE APPLICATION:

By virtue of the fact that all disturbed areas are graded such that the drainage will carry yard dust to the pond, non-point sources of pollution do not result from this project. If non-point sources arise due to changes in the mining plan or other reasons not know at the time of the plan, then drainage from these areas must be treated by BMP's (typically check dams and silt fencing).

XIII. WATER SUPPLY AND DISPOSITION:

The eventual receiving waters will be Cedar Creek. All discharges are predicted to meet effluent limitations due to settling time required in the sedimentation ponds.

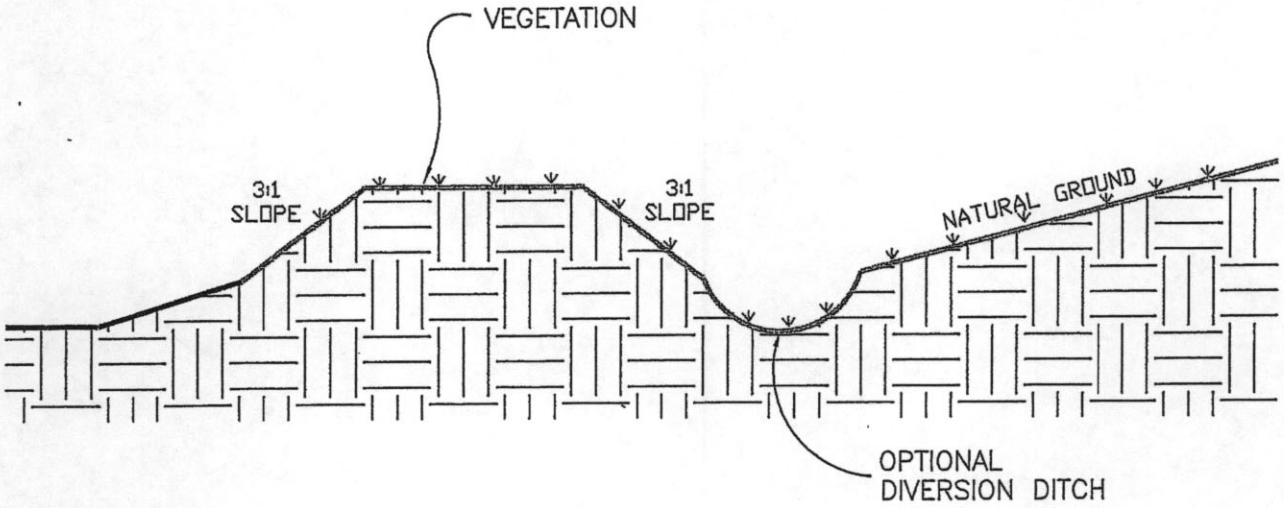
XIV. RECLAMATION PROCEDURE:

As mining is completed in an area, the area shall be dressed to eliminate any piles of dirt, or low areas which will hold water, with terraces to keep erosion to a minimum, and grassed. A sump shall be maintained at the low end of all reclamation work until a satisfactory stand of grass is obtained. Disturbed areas without construction activity for more than 21 days should be temporarily seeded and fertilized.

XV. DESIGN DATA:

			Pond	Pond Size (min)	Pond Dimensions		
Point	Drainage Acres	Disturbed Acres	(ac-ft)	(cu. Feet)	Length	Width	Depth
001P	18.0	16	4.00	174,240	300	58	10
002P	8.0	8	2.00	87,120	214	41	10

	REQUIRED	
POINT	Primary Spillway	Secondary Spillway
001P	18"	5' x 1'
002P	18"	5' x 1'

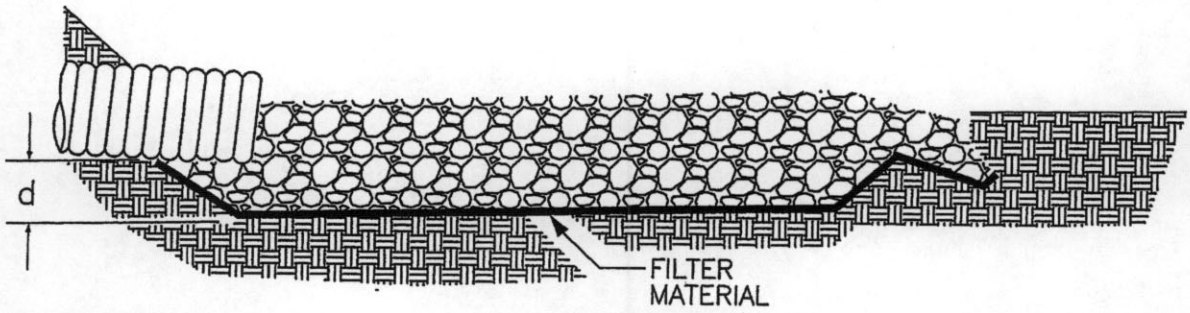


NOTES:

1. TO BE USED TO DIVERT STORMWATER RUNOFF TO PERMITTED DISCHARGE POINTS
2. CONSTRUCT IN 6 INCH TO 9 INCH UNCOMPACTED LIFTS TO FORM THE EMBANKMENT WITH SIDE SLOPES 3:1 OR FLATTER
3. OVERBUILD AT LEAST 10% FOR SETTLEMENT
4. USE MOIST CLAY MATERIAL IN THE CORE OF THE BERM WITH MORE PERMEABLE MATERIALS IN THE SHELL OF THE BERM
5. ONCE CONSTRUCTED, SPREAD TOPSOIL OVER BERM AND ESTABLISH VEGETATION
6. INSPECT AFTER EVERY STORM EVENT
7. MONITOR FOR EROSION, SETTLEMENT, SEEPAGE, OR SLUMPING AND REPAIR AS NEEDED
8. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES 1/2 THE HIEGHT OF THE BERM

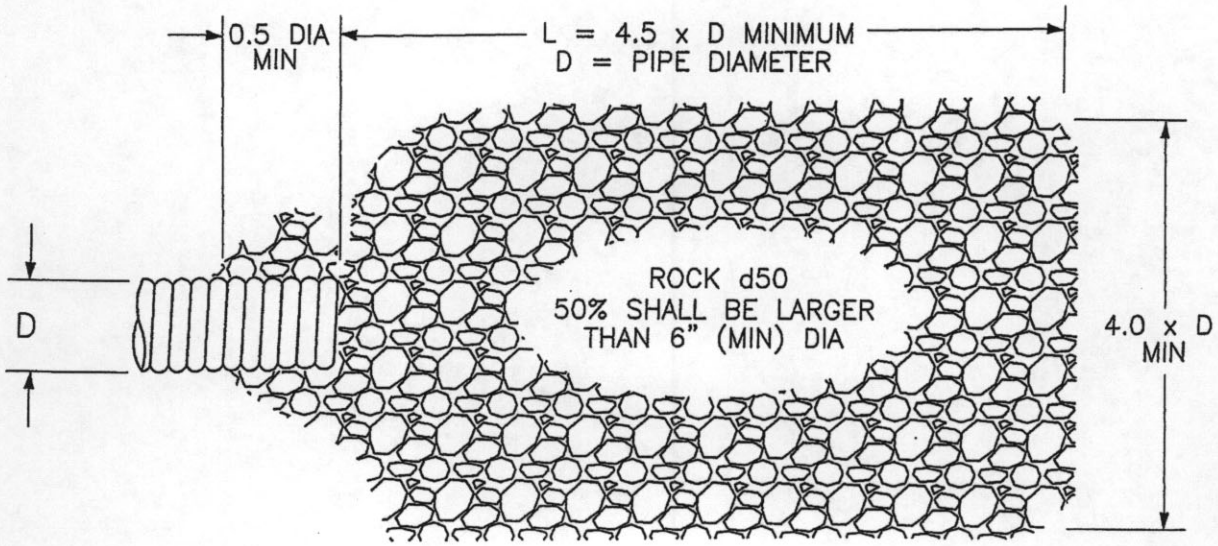
EARTHEN BERM

SIDE VIEW



THICKNESS (d) = 1.5 x MAX ROCK DIAMETER (6" MIN)

OVERHEAD VIEW



NOTES:

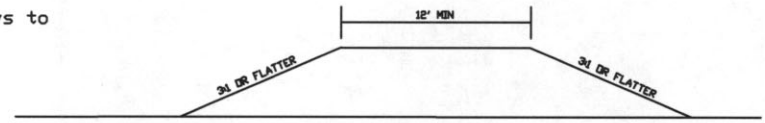
1. "L" = LENGTH OF APRON. DISTANCE "L" SHALL BE SUFFICIENT TO DISSIPATE ENERGY AND MINIMIZE EROSION DAMAGE.
2. APRON SHALL BE SET AT A ZERO GRADE WITH NO OVERFALL AND ALIGNED STRAIGHT.
3. FILTER MATERIAL SHALL BE FILTER FABRIC OR MINIMUM 6" THICK GRADED GRAVEL LAYER. AVOID DAMAGE TO THE FABRIC WHEN PLACING ROCK.
4. A CONCRETE SPLASH BLOCK MAY ALSO BE USED.
5. AFTER RAIN EVENTS, CHECK FOR EROSION AROUND OR BENEATH AND FOR ROCK DISPLACEMENT.

OUTLET PROTECTION

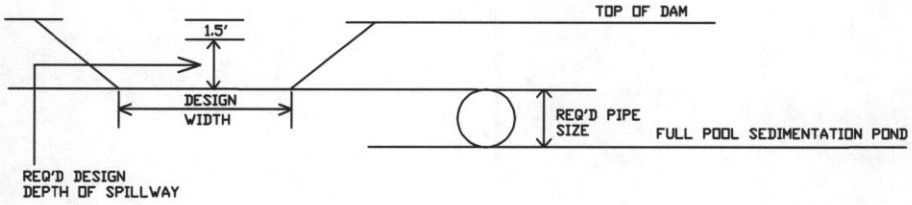
TYPICAL SECTION FOR DAM CONSTRUCTION

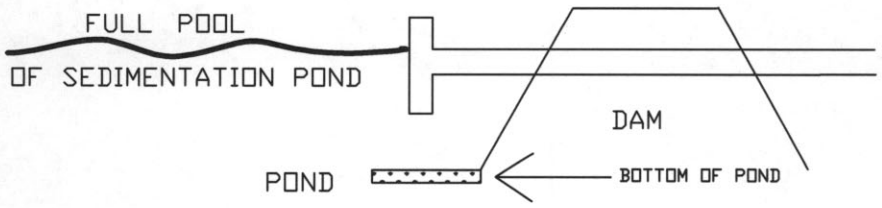
CONSTRUCTION REQUIREMENTS FOR DAM

1. All trees, boulders and other obstructions to be removed from proposed pond area.
2. All materials excavated from pond shall be placed up stream from the pond so any silt from the excavated material will go back into the pond.
3. All embankment shall be compacted to 95 percent density.
4. Spillpipe shall be equipped with anti-seep collars at each joint to radiate at least 2 feet from the pipe in all directions. All connections shall be watertight.
5. The spillpipe shall be laid as shown in detail to prevent any floating solids from being discharged.
6. Final elevation of all dams, pipes and emergency spillways to be determined in field, depending upon size of pond.



TYPICAL SECTION FOR SPILLWAY & SUBSURFACEWITHDRAWAL CONSTRUCTION



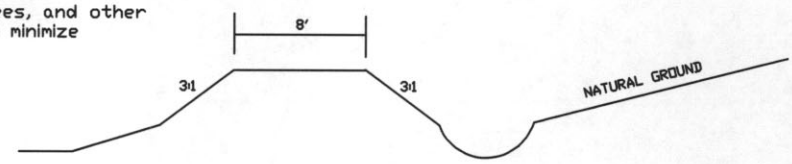


LARRY E. SPEAKS & ASSOCIATES
CONSULTING ENGINEERS & LAND SURVEYORS
535 HERRON STREET
MONTGOMERY, AL. 36104
TEL.-334/262-1091

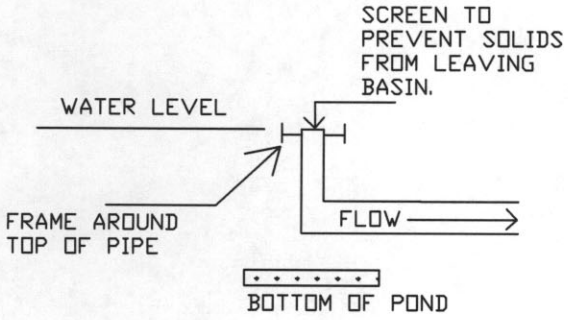
TYPICAL SECTION
FOR
DITCH AND OR BERM TO
DIVERT WATER

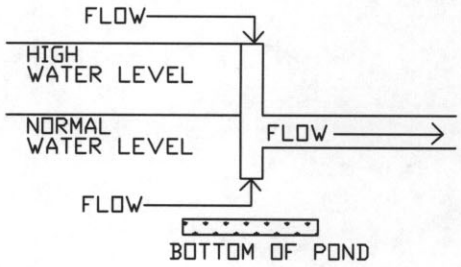
EROSION CONTROL AND RECLAMATION PROCEDURE

1. The areas not being used for daily mining or haul roads shall be grassed with both perennial and annual grasses to ensure erosion is kept to a minimum. The grassed areas shall be limed and fertilized as necessary to establish and maintain an adequate stand of grass.
2. As mining is completed in an area, the area shall be dressed to eliminate any piles of dirt, or low areas which will hold water, with terraces to keep erosion to a minimum, and grassed as detailed in Paregraph 1 above. A sump shall be maintained at the low end of all reclamation work until a satisfactory stand of grass is obtained.
3. During construction and reclamation, erosion control measures such as hay bales, riprap, cleared trees, and other acceptable methods will be utilized as needed to minimize erosion.

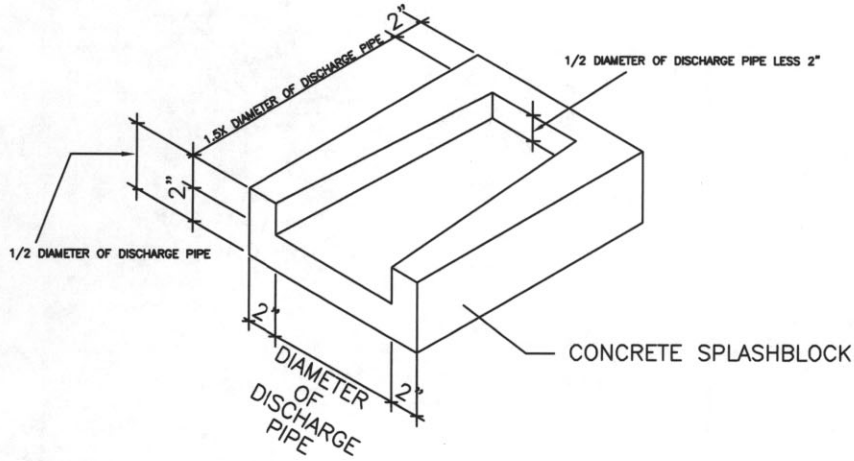


TYPICAL SECTION
FOR
PIPE/OUTFALL
CONSTRUCTION





TYPICAL SECTION
FOR
SPLASHPAD CONSTRUCTION



LARRY E. SPEAKS
&
ASSOCIATES
CONSULTING ENGINEERS
&
LAND SURVEYORS
535 HERRON STREET
MONTGOMERY, AL. 36104
TEL.-334/262-1091

Imerys Refractory Minerals USA, Inc.
Riddle Pit
Located in Sections 17 & 20, T-9-N, R-27-E
Lawrenceville Quadrangle
Barbour County, Alabama

Pollution Abatement Plan

0 200 400 Feet

PIT AREA

STOCKPILE AREA

DSN 001-1
Latitude:031° 44' 54"
Longitude:-085° 21' 23"

DSN 002-1
Latitude:031° 44' 51"
Longitude:-085° 21' 35"

EXISTING POND
NO PLANNED IMPACTS

PROPOSED HAUL ROAD BMPS
- ROAD SHOULDER ARE TO BE GRASSED.
- CHECK DAMS ARE TO BE PLACED EVERY 250'
- CHECK DAMS WILL TRAP FUGITIVE SEDIMENT FROM THE TRAVEL LANE OF THE DIRT ROAD.

DRAINAGE PIPE

HWY 131

ENTRANCE
Latitude:031° 44' 37"
Longitude:-085° 21' 30"

14+88

0+00

Date: 07/29/2016

LARRY E. SPEAKS & ASSOCIATES
CONSULTING ENGINEERS & LAND SURVEYORS
535 HERRON STREET
MONTGOMERY, AL. 36104
TEL.-334/262-1091

Spill Prevention Control and Countermeasure Plan
for
Imerys Refractory Minerals USA, Inc. –
Riddle Pit
Located in T-9-N, R-27-E, Sections 17 & 20
Barbour County, Alabama

This is to certify that I, Steven E. Speaks, a Registered Engineer in the State of Alabama, am familiar with the Imerys Refractory Minerals USA, Inc., **Riddle Pit**, located in Barbour County, Alabama, and, to the best of my knowledge, all information herein is true and correct, and the Spill Prevention Control and Countermeasure Plan has been prepared in accordance with good engineering practices.

ALABAMA PROFESSIONAL ENGINEER AND LAND SURVEYOR REGISTERED No. 20897 STEVEN E. SPEAKS

Steven E. Speaks
Alabama Registration No. 20897
Date: 08-01-2016

This plan has been reviewed by the management of Imerys Refractory Minerals USA, Inc., and we hereby adopt this SPCC Plan into the operation of our facility at the **Riddle Pit**, in Barbour County, Alabama.

Gerrit Posthumus
Director of Operations

Date: 06.24.16.

Spill Prevention Control and Countermeasure Plan
For
Imerys Refractory Minerals USA, Inc.,
Riddle Pit
April 2016

Located On: T-9-N, R-27-E, Sections 17 & 20
Barbour County, Alabama

Phone Number: (334) 687-6846

Name and Address of Responsible Official(s):

Mr. Gerrit Posthumus
377 Highway 131
Eufaula, Al 36072

Robin Dozier
377 Highway 131
Eufaula, Al 36072

1. This facility has never experienced a spill from their fuel tank.

2. The only fuel onsite is a portable 1,000 gallon tank of diesel fuel. This tank is kept on a trailer and is taken to different sites. The fuel tank will not be stored onsite. If any spill should occur while a tank is onsite, ADEM will be notified, and the contaminated soils will be treated according to ADEM rules and regulations.

3. The nearest navigable water course is East Fork Choctawhatchee River. The distances to these water courses will vary depending on where the tank is being used.

4. If a spill should occur, the polluted soil in the area will be excavated and disposed of in accordance with existing State and Federal regulations.

5. A written record shall be maintained by the Superintendent of any spill which occurs, and the action taken to dispose of all spilled material and the cleanup procedures.

6. The Superintendent will make periodic inspections of the refueling area to detect signs of minor spills. If spills are evident, the polluted soil will be removed to the nearest landfill and the area refilled.

7. All personnel who are in any way connected with use of fuel oil, maintenance of the facility or responsible for storm water drainage and spill cleanup will be made familiar with this plan.

8. Potential Sources of Spills:

   A. Tank or Tank Valve Rupture:

   Prevention: Properly maintain tanks and keep them in good condition. Visually inspect tanks periodically for leaks.

B. Tank Overfill:

Prevention: Personnel should follow correct operating procedures when refueling tank with diesel fuel and stay with equipment at all times during refueling operations. Key personnel should always know when the tank is onsite.

C. Hose Rupture During Refueling and Spillage from Hoses after Disconnection:

Prevention: Periodic inspection of transport unloading hoses, the replacement of hoses as necessary, and use of the proper hose drainage procedure.

In the event of an oil spill call:

Emergency Management Agency	1-800-843-0699
National Response Center	1-800-424-8802
ADEM	1-334-271-7700

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. Take actions to take for containment and cleanup

Specifically, the employees of Imerys Refractory Minerals USA, Inc., **Riddle Pit**, know that this plan is to minimize contamination of public water by spills of fuel oil and diesel fuel in/or adjacent to public water and to provide a reporting procedure to be followed by plant supervisors and management in reporting such spills.

LARRY E. SPEAKS & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS

535 Herron Street
Montgomery, Alabama 36104
Telephone: 334.262.1091
Facsimile: 334.262.2211

AIRPORTS
BRIDGE DESIGN
CONSTRUCTION MANAGEMENT
ENVIRONMENTAL PERMITS
HIGHWAY DESIGN
LAND DEVELOPMENT PLANNING & DESIGN
LAND USE STUDIES
MUNICIPAL WORKS
PARKS & RECREATION FACILITIES

SEWAGE COLLECTION, TREATMENT & DISPOSAL
SOLID WASTE LANDFILLS
STORM DRAINAGE STUDIES & DESIGN
SUBDIVISIONS
SURVEYING: LAND SURVEYS
CONSTRUCTION SURVEYS
TOPOGRAPHIC MAPS
WATER SUPPLY, TREATMENT & DISTRIBUTION

August 2, 2016

Alabama Department of Environmental Management
Mining & Natural Resource Section
1400 Coliseum Blvd
Montgomery, AL 36130-1436

ATTN: Amber Powell

RE: Initial Issuance of Imerys Refractory Minerals USA, Inc.
Riddle Pit

Dear Ms. Powell:

Enclosed you find the following in reference to the above mentioned site:

1. ADEM Form 315
2. PAP Plan and Maps
3. SPCC Plan
4. Check no. 15212 in the amount of $7,430.00 - Dry Prep Fee & Green Field Fee

Should you have any questions or need additional information, please do not hesitate to call.

Sincerely,

Clint Davis

RECEIVED
AUG - 2 2016
WATER

abn
RECEIVED
AUG - 2 2016

Enclosures

cc: Mr. Robin Dozier w/ enclosures
File: 82-6U