LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

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

March 4, 2024

Ms. Danielle Pudvah
Chief Sustainability Officer
SRM Materials, LLC
1000 Hollingshead Cir
Murfreesboro, TN 37129

RE: Draft Permit
SRM Quarry
NPDES Permit Number AL0084486
Marshall County (095)

Dear Ms. Pudvah:

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

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

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

This permit requires Discharge Monitoring Reports (DMR) to be submitted utilizing the Department's web-based electronic reporting system. Please read Part I.D of the permit carefully and visit https://aepacs.adem.alabama.gov/nviro/ncore/external/home.

Should you have any questions concerning this matter, please contact Robert Glover at (334) 271-7975 or robert.glover@adem.alabama.gov.

Sincerely,

William D. McCliman, Chief
Mining and Natural Resource Section
Stormwater Management Branch
Water Division

WDM/rlg File: DPER/59374

cc: Robert Glover, 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

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)

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: SRM Materials, LLC
1000 Hollingshead Cir
Murfreesboro, TN 37129

FACILITY LOCATION: SRM Laceys Spring Quarry
off Vaughn Road
Laceys Springs, AL 35754
Marshall County
T6S, R1E, Sections 8, 16, and 17

PERMIT NUMBER: AL0084486

DSN & RECEIVING STREAM: 001 - 1 Tennessee 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

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	-------	25.0 mg/L	45.0 mg/L	Grab	2/Month
Nitrogen, Kjeldahl Total (as N)[2] 00623	-------	Report mg/L	Report mg/L	Grab	1/Month
Nitrite Plus Nitrate Total 1 Det. (as N)[2] 00630	-------	Report mg/L	Report mg/L	Grab	1/Month
Phosphorus, Total (as P)[2] 00665	-------	Report mg/L	Report mg/L	Grab	1/Month
Flow, In Conduit or Thru Treatment Plant[3] 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.

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[1] See Part I.C.2. for further measurement frequency requirements.
[2] Monitoring for Total Nitrite Plus Nitrate, Total Kjeldahl Nitrogen, and Total Phosphorus is applicable only during the months of April, June, August, and October.
[3] 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. The Permittee shall maintain a written log for each point source identified on Page 1 of this Permit and described more fully in the Permittee's application in which the Permittee shall record the following information:

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

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

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

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

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

9. Records Retention and Production

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

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

10. Monitoring Equipment and Instrumentation

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

D. DISCHARGE REPORTING REQUIREMENTS

1. Requirements for Reporting of Monitoring

a. Monitoring results obtained during the previous three (3) months shall be summarized for each month on a Discharge Monitoring Report (DMR) Form approved by the Department,

and submitted to the Department so that it is received by the Director no later than the 28th day of the month following the quarterly reporting period (i.e., on the 28th day of January, April, July, and October of each year).

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

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

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

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

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

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

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

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

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

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

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

Certified and Registered Mail shall be addressed to:

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

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

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

2. Noncompliance Notification

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

(1) Potentially threatens human health or welfare;

(2) Potentially threatens fish or aquatic life;

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

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

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

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

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects of such discharge to the Director within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit to the Director a written report as provided in Part I.D.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. Any written report required to be submitted to the Director in accordance with Parts I.D.2.a. and b. shall be submitted using a Noncompliance Notification Form (ADEM Form 421) available on the Department's website (http://adem.alabama.gov/DeptForms/Form421.pdf) and include the following information:

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

(2) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue; and

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

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.e. 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

a. 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:

(1) The information indicated in ADEM Admin Code r. 335-6-9-.03 and ADEM Admin. Code ch. 335-6-9 and its Appendices A and B;

(2) A description of methods which will be implemented to prevent offsite vehicle tracking onto roadways and/or into ditches at the entrances and/or exits of the Permittee's operations;

(3) A description of setbacks from waters of the State in units of linear feet on the horizontal plane; a description of the methods taken to visibly delineate setbacks from waters of the State; and a description of any other actions taken to prevent encroachment upon setbacks;

(4) A description of the methods used to delineate the boundaries of coverage under this Permit such that the boundaries are readily visible during the life of the operation;

(5) A description of any other Best Management Practices (BMPs) which will be implemented to provide control of all nonpoint source pollution that is or may be associated with the Permittee's operations;

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). The PAP Plan shall be amended if the Department determines that the existing sediment control measures, erosion control measures, or other site management practices are ineffective or do not meet the requirements of this Permit.

c. For existing sources, the PAP Plan shall be updated to include all requirements of this section within 180 days of the effective date of this permit. New sources shall submit the PAP plan with the NPDES Individual Permit application prior to coverage under this Permit.

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 provided by ADEM Admin. Code r. 335-6-6-.08(j)5. The Plan shall describe and the Permittee shall implement appropriate structural and/or non-structural spill prevention, control, and/or management pursuant to ADEM Admin. Code r. 335-6-6-.12 (r) sufficient to prevent any spills of pollutants from entering a ground or surface water of the State or a publicly or privately owned treatment works. The Plan shall include at a minimum, the engineering requirements provided in 40 C.F.R. §§112.1. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and shall prevent the contamination of groundwater. Such containment systems shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided. The Plan shall list any materials which the Permittee may utilize to contain and to absorb fuel and chemical spills and leaks. The Permittee shall maintain sufficient amounts of such materials onsite or have sufficient amounts of such materials readily available to contain and/or absorb fuel and chemical spills and leaks. Soil contaminated by chemical spills, oil spills, etc., must be immediately cleaned up or be removed and disposed of in a manner consistent with all State and federal regulations.

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

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

discharge would exceed any applicable discharge limitation specified in Part I.A. of this Permit.

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

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

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

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

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

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

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

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

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

(i) An upset occurred;

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

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

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

d. A discharge which is an overflow from a treatment facility or system, or an excess discharge from a point source associated with a treatment facility or system and which

results from a 24-hour precipitation event larger than a 10-year, 24-hour precipitation event is not eligible to be considered as a result of an upset unless:

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

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

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

C. PERMIT CONDITIONS AND RESTRICTIONS

1. Prohibition against Discharge from Facilities Not Certified

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

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

2. Permit Modification, Suspension, Termination, and Revocation

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

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

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

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

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

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

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

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

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

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

3. Automatic Expiration of Permits for New or Increased Discharges

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

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

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

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

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

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

(2) Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual

obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.

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

4. Transfer of Permit

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

5. Groundwater

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

6. Property and Other Rights

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

D. RESPONSIBILITIES

1. Duty to Comply

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

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

c. For any violation(s) of this Permit, the Permittee is subject to a civil penalty as authorized by the AWPCA, the AEMA, the FWPCA, and Code of Alabama 1975, §§22-22A-1 et. seq., as amended, and/or a criminal penalty as authorized by Code of Alabama 1975, §22-22-1 et. seq., as amended.

d. The necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of this Permit shall not be a defense for a Permittee in an enforcement action.

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

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

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

2. Change in Discharge

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

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

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

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

4. Compliance with Water Quality Standards and Other Provisions

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

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

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

5. Compliance with Statutes and Rules

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

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

6. Right of Entry and Inspection

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

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

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

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

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

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

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

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

c. Failure of the Permittee to submit to the Department a complete application for reissuance of this Permit at least 180 days prior to the expiration date of this Permit will void the automatic continuation of this Permit 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. BOD - means the five-day measure of the pollutant parameter biochemical oxygen demand

6. Bypass - means the intentional diversion of waste streams from any portion of a treatment facility.

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

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

9. 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.

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

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

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

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

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

15. 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).

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

17. DO - means dissolved oxygen.

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

19. 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.

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

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

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

23. 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).

24. 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.

25. 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.

26. 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.

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

28. MGD - means million gallons per day.

29. 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.)

30. 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.

31. 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.

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

33. 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.

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

35. 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).

36. 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.

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

38. 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

39. 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.

40. 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.

41. 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".

42. 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.

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

44. 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.

45. 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.

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

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

48. TRC - means Total Residual Chlorine.

49. TSS – means the pollutant parameter Total Suspended Solids

50. 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.

51. 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.

52. 24-hour precipitation event - means that amount of precipitation which occurs within any 24-hour period.

53. 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.

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

55. 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.

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

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

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

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

by the TMDL, if necessary. Any revised BMP plans must be submitted to the Department for review. The facility must include in the BMP plan a monitoring component to assess the effectiveness of the BMPs in achieving the allocations.

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

NPDES INDIVIDUAL PERMIT RATIONALE

Company Name:	SRM Materials, LLC
Facility Name:	SRM Lacey Spring Quarry
County:	Marshall
Permit Number:	AL0084486
Prepared by:	Robert Glover
Date:	March 4, 2024
Receiving Waters:	Tennessee River
Permit Coverage:	Crushed and Broken Limestone, Dolomite, Sandstone, Wet and Dry Preparation, Transportation and Storage, and Associated Area
SIC Code:	1422

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

This proposed permit covers a crushed and broken limestone, dolomite, sandstone, wet and dry preparation, transportation and storage, and associated area which discharge to surface and ground waters of the state.

The proposed permit authorizes treated discharges from one outfall. Outfall 001-1 discharge into the Tennessee River classified as Public Water Supply (PWS) and Fish and Wildlife (F&W) per ADEM Admin. Code ch. 335-6-11. If the requirements of the proposed permit are fully implemented, the facility will not discharge pollutants at levels that will cause or contribute to a violation of the PWS and F&W classifications.

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

Technology Based Effluent Limits (TBELs) for crushed stone mining facilities can be found in 40 CFR 436.22(1) and (2) for facilities that recycle waste water for use in processing and mine dewatering, respectively. The TBELs were promulgated for existing dischargers using the Best Practicable Control Technology Available (BPT). New Source Performance Standards (NSPS) have not yet been developed by the EPA for the Crushed Stone Subcategory.

40 CFR 436.22 includes the TBEL of 6.0 – 9.0 s.u. for pH. However, the applicable State water quality criteria for pH in streams classified as PSW and F&W are 6.0 – 8.5 s.u. per ADEM Admin. Code r.335-6-10-.09. Information provided in the Permittee's application indicated that all outfalls could discharge chronically when the discharge/stream flow ratio may be high; therefore, discharge limitations for pH of 6.0 – 8.5 s.u. are proposed for all outfalls per ADEM Admin Code r. 335-6-10-.09.

The TBELs for 40 CFR 436 Subpart B do not include limitations for Total Suspended Solids (TSS). TSS is classified as a conventional pollutant in 40 CFR 401.16 and is expected to be discharged from this type of facility. Therefore, monthly average and daily maximum effluent limitations for TSS are those proposed by the EPA for crushed stone mine drainage in the *Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Mineral Mining and Processing Pont Source Category* (July 1979).

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 WQS. The proposed permit terms and conditions are predicated on the basis of ensuring a reduction of pollutants in the discharge to a level that reduces the potential of contributing to or causing a violation of applicable State WQS.

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

If there is a reasonable potential that a pollutant present in the treated discharges from a facility could cause or contribute to a contravention of applicable State WQS above numeric or narrative criteria, 40 CFR 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 WQS.

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 proposing discharges into the Tennessee River which is included on Alabama's current CWA §303(d) list for nutrients. The Department believes that the required nutrient monitoring provides a 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.

The proposed permit does not authorize new or increased discharges of pollutants to a Tier II water. Therefore, the Antidegradation Policy (ADEM Admin. Code 335-6-10-.04) does not apply to this permit.

NPDES Individual Application - Mining (Form 315)

version 3.4

(Submission #: HPW-4GFN-KC5DW, version 3)

Details

Submission ID HPW-4GFN-KC5DW

Form Input

Processing Information

Is this a coalbed methane operation?
No

Please indicate the purpose of this application:
Initial Permit Application for New Facility

General Instructions

NPDES Individual Permit Application ◆ Mining Operations (Form 315)

This form should be used to submit an application for an NPDES individual permit to authorize discharges from surface & underground mineral, ore, or mineral product mining, quarrying, excavation, borrowing, hydraulic mining, storage, processing, preparation, recovery, handling, loading, storing, or disposing activities, and associated areas including pre-mining site development, construction, excavation, clearing, disturbance, and reclamation.

Incomplete or incorrect answers or missing signatures will delay processing. Attach additional comments or information as needed. Commencement of activities applied for as detailed in this application are not authorized until permit coverage has been issued by the Department.
For assistance, please click here to determine the permit staff responsible for the site or call (334) 394-4372.

Please click here for the Alabama 303(d) list of Impaired Waters

Please click here for Information on Alabama TMDLs

Permittee Information

Permittee

Permittee Name
SRM Materials, LLC

Mailing Address

1000 HOLLINGSHEAD CIR

MURFREESBORO, TN 37129

Responsible Official

Prefix
Ms.

First Name	Last Name
Danielle	*Pudvah*

Title
Chief Sustainability Officer

Organization Name
SRM Materials, LLC

Phone Type	Number	Extension
Mobile	8509333210	

Email
dpudvah@smyrnareadymix.com

Mailing Address

1000 HOLLINGSHEAD CIR

MURFREESBORO, TN 37129

Facility/Operations Information

Facility/Operations Name
SRM Laceys Spring Quarry

Permittee Organization Type
LLC

Parent Corporation and Subsidiary Corporations of Applicant, if any:
none

Landowner(s) Name, Address and Phone Number:
APA Enterprises, LLC
111 Holston Drive
Guntersville, AL 35976

Sub-contractor(s)/Operator(s), if known:
SRM Materials, LLC

Is the "Company/Permittee" properly registered and in good standing with the Alabama Secretary of State's office?
Yes

Facility/Operations Address or Location Description

off Vaughn Road

Laceys Springs, AL 35754

Facility/Operations County (Front Gate)
Marshall

Do the operations span multiple counties?
No

Detailed Directions to the Facility/Operations
From the intersection of I565 and Hwy 231, travel south on Hwy 231 for approximately 14-miles. After crossing the Tennessee River, turn left onto Old River Road. Old River Road turns slightly right and becomes River Loop Road. Turn left onto McCutcheon Loop Road and travel about a mile. McCutcheon Loop Road becomes Vaughn Road.

Please refer to the link below for Lat/Long map instruction help:
Map Instruction Help

Facility/Operations Front Gate Latitude and Longitude
34.534476,-86.553832

Township(s), Range(s), Section(s) (Note: If you are submitting multiple TRSs, please separate each TRS by a semicolon. Example: T19S,R1E,S15; T20S,R2E,S16)
T6S, R1E, S8, 16, and 17

SIC Code(s) [Please select your primary SIC code first]:
1422-Crushed and Broken Limestone

NAICS Code(s) [Please select your primary NAICS code first]:
212312-Crushed and Broken Limestone Mining and Quarrying

Facility/Operations Contact

Prefix
Mr.

First Name	Last Name
Dale	*Cathey*

Title
Vice President of Aggregates

Organization Name
SRM Materials, LLC

Phone Type	Number	Extension
Mobile	6154904661	

Email
dcathey@smymareadymix.com

Member Information

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

List of Names/Titles/Addresses, as described in the instructions above, will be entered by:
Manually Entering in Table

Name	Title/Position	Physical Address of Residence
Michael & Melissa Hollingshead	Owners	3120 Allen Barrett Rd; Murfreesboro, TN 37219
Jeff Hollingshead	Owner	911 Claude Jones Rd; Murfreesboro, TN 37219
Ryan Hollingshead	Owner	10551 Powells Chapel Rd; Lebanon, TN 37090

Other than the ◆Company/Permittee", identify the name of each corporation, partnership, association, and single proprietorship for which any individual identified above 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 (if this does not apply, then enter N/A after selecting "Manually Enter in Table"):

List of Corporations/Partnerships/etc, Names and Titles, as described in the instructions above, will be entered by:
Manually Entering in Table

Name of Corporation, Partnership, Association, or Single Proprietorship	Name of Individual	Title/Position in Corporation, Partnership, Association, or Single Proprietorship
none	none	none

Additional Contacts (1 of 2)

ADDITIONAL CONTACTS: Consultant

Contact Type
Consultant

Contact

First Name	Last Name
Sharon	*Thompson*

Title
CPESC

Organization Name
OMI, Inc.

Phone Type	Number	Extension
Mobile	2563038989	

Email
sthompson@omi-eng.com

Address
5151 Research Dr NW
Suite A
Huntsville, AL 35805

Additional Contacts (2 of 2)

ADDITIONAL CONTACTS: Environmental Contact

Contact Type
Environmental Contact

Contact

First Name	Last Name
Dale	*Cathey*

Title
Vice President of Aggregates

Organization Name
SRM Materials, LLC

Phone Type	Number	Extension
Mobile	6154904661	

Email
dcathey@smymareadymix.com

Address
1000 Hollingshead Circle
Murfreesboro, TN 37129

Compliance History

Has the applicant ever had any of the following:

Event	Apply?
An Alabama NPDES, SID, or UIC permit suspended or terminated	No
An Alabama or federal environmental permit suspended/terminated	No
An Alabama State Oil Gas Board permit or other approval suspended or terminated	No
An Alabama or federal performance/environmental bond, or similar security deposited in lieu of a bond, or portion thereof, forfeited	No

Has the applicant, parent corporation, subsidiary, general partner, LLP partner, or LLC Member had any Warning Letters, Notice of Violations (NOVs), Administrative Actions, or litigation filed by ADEM or EPA during the three year (36 month) period preceding the date on which this form is signed?
No

For this facility, 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 Department of Labor (ADOL), US Army Corp of Engineers (USACE), or other agency, to the applicant, parent corporation, subsidiary, or LLC member whether presently effective, expired, suspended, revoked, or terminated:
none

For other facilities, 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, ADOL, or USACE, to the applicant, parent corporation, subsidiary, or LLC member whether presently effective, expired, suspended, revoked, or terminated:
Jackson Quarry - AL0083305

Russellville Quarry - NPDES AL0070092; Air Permits 707-0020-X006, 707-0020-007, and 707-0020-X008

Cherokee Quarry - NPDES AL0084255; Air Permit 701-0063-X001

CORRECTION REQUEST *(CORRECTED)*
Permit number for the Concrete Plant

Need you to give us the permit number for the concrete plant, it needs to be referenced on this permit.
Created on 10/20/2023 2:01 PM by **Robert Glover**

1 COMMENT
Darby Parrish (dparrish@omi-eng.com) (10/25/2023 9:13 AM)
An NOI has not been submitted for the concrete plant, so there is no permit number yet. Language has been added to the PAP (Section III-General Info) that reflects the need to ensure that discharges associated with the concrete plant will need to be permitted.

Anti-Degradation Evaluation

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

NOTE

If the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete questions below, ADEM Form 311-Alternatives Analysis, and either ADEM Form 312 or ADEM Form 313- Calculation of Total Annualized Project Costs (Public-Sector or Private-Sector Projects, whichever is applicable). ADEM Form 312 or ADEM Form 313, whichever is applicable, must be provided for each treatment discharge alternative considered technically viable.
ADEM forms can be found on the Department's website here.

What environmental or public health problem will the discharger be correcting?
None

How much will the discharger be increasing employment (at its existing facility or as the result of locating a new facility)?
This site will initially employee 14 people to establish and operate the quarry. Once the operation is at full capacity, as many as 20 employees will be on site throughout the day, in addition to an increase in over the road haul truck drivers as well as concrete mixer operators due to the relocation of a concrete plant on site (more drivers needed to help offset longer haul distance to job sites).

How much reduction in employment will the discharger be avoiding?
None

How much additional state or local taxes will the discharger be paying?
When fully operating it is anticipated SRM Materials, LLC will pay:
$1,575,000 in sales tax
$150,000 in severance tax

What public service to the community will the discharger be providing?
SRM Materials, LLC will supply crushed limestone products to be used in construction activities.

What economic or social benefit will the discharger be providing to the community?
SRM Materials, LLC will be providing local jobs, and paying local and state taxes.

Attach Form 311 (Alternative Analysis)
Alternatives Analysis.docx - 09/01/2023 12:10 PM
Form311.pdf - 09/01/2023 12:10 PM
Comment
NONE PROVIDED

Please attach Form 312 (Public Sector Projects) or Form 313 (Private Sector Projects).
Form313 annualized project costs.pdf - 09/01/2023 02:32 PM
Comment
NONE PROVIDED

Activity Description & Information

Narrative description of activity(s):
Limestone rock will be blasted, crushed, screened, and washed. The material will be stockpiled and then transported off site.

Total Facility/Operations Area (acres)
569.00

Total Disturbed Area (acres)
569.00

Anticipated Commencement Date
04/01/2024

Anticipated Completion Date
03/31/2039

Please identify which of the following apply to this operation:

Activity/Condition	Appy?
An existing facility/operation which currently results in discharges to State waters?	No
A proposed facility/operation which will result in a discharge to State waters?	Yes
Be located within any 100-year flood plain?	Yes
Discharge to Municipal Separate Storm Sewer?	No
Discharge to waters of or be located in the Coastal Zone?	No
Need/have ADEM UIC permit coverage?	No
Be located on Indian/historically significant lands?	No
Need/have ADEM SID permit coverage?	No
Need/have ASMC permit coverage?	No
Need/have State Oil & Gas Board permit coverage?	No
Need/have ADOL permit coverage?	No
Generate, treat, store, or dispose of hazardous or toxic waste?	No
Be located in or discharge to a Public Water Supply (PWS) watershed or be located within ½ mile of any PWS well?	Yes
Incised pit	No

Does your facility/operation use cooling water?
No

Material to be Removed, Processed, or Transloaded

Material To Be Removed, Processed, Or Transloaded (Note: Sum must equal 100.)

Mineral(s)/Mineral product(s)	%
Limestone, crushed limestone and dolomite	98
Sandstone	2
	Sum: 100

Proposed Activity To Be Conducted

Type(s) of activity presently conducted at applicant's existing facility or proposed to be conducted at facility (Select Yes or No)):

Activity	Apply?
Adjacent/associated asphalt/concrete plant(s)	Yes
Alternative fuels operation	No
Auger mining	No
Cement production	No
Chemical processing or leaching	No
Chemicals used in process or wastewater treatment (coagulant, biocide, etc.)	No
Construction related temporary borrow pits/areas	No
Creek/stream crossings	No
Dredging	No
Excavation	Yes
Grading, clearing, grubbing, etc.	Yes
Hydraulic mining	No
Hydraulic mining, dredging, instream or between stream-bank mining	No
Lime production	No
Low volume sewage treatment package plant	No
Mineral dry processing (crushing & screening)	Yes
Mineral loading	Yes
Mineral storing	Yes
Mineral transportation	Yes
Mineral wet preparation	Yes
Onsite construction debris or equipment storage/disposal	No
Onsite mining debris or equipment storage/disposal	Yes
Other beneficiation & manufacturing operations	No
Pre-construction ponded water removal	No
Pre-mining logging or land clearing	Yes
Preparation plant waste recovery	Yes
Quarrying	Yes
Reclamation of disturbed areas	Yes
Solution mining	No
Surface mining	Yes
Synthetic fuel production	No
Underground mining	No
Waterbody relocation or other alteration	No
Within-bank mining	No

If the operation will include activities other than those listed above, please describe them below:
none

If the type of activity presently conducted or proposed is Mineral Transportation, please indicate which of the following apply:

Method	Apply?
Barge	No
Rail	No
Truck	Yes

Fuel - Chemical Handling, Storage, & Spill Prevention Control & Countermeasures (SPCC) Plan

Will fuels, chemicals, compounds, or liquid waste be used or stored onsite?
Yes

Please identify the fuel, chemicals, compounds, or liquid waste and indicate the volume of each:

Volume (gallons)	Contents
10,000	diesel fuel
55	diesel emission fluid, lubricants

SPCC Plan
SRM Laceys Spring signed SPCC.pdf - 10/17/2023 09:22 AM
Comment
NONE PROVIDED

ASMC Regulated Entities

Is this a coal mining operation regulated by ASMC?
No

Topographic Map Submittal

Topographic Map

Attach to this application a 7.5 minute series U.S.G.S. topographic map(s) or equivalent map(s) no larger than, or folded to a size of 8.5 by 11 inches (several pages may be necessary), of the area extending to at least one mile beyond property boundaries. The topographic or equivalent map(s) must include a caption indicating the name of the topographic map, name of the applicant, facility name, county, and township, range, & section(s) where the facility are located. Unless approved in advance by the Department, the topographic or equivalent map(s), at a minimum, must show: a) An accurate outline of the area to be covered by the permit (b) An outline of the facility (c) All existing and proposed disturbed areas (d) Location of intake and discharge areas (e) Proposed and existing discharge points (f) Perennial, intermittent, and ephemeral streams (g) Lakes, springs, water wells, wetlands (h) All known facility dirt/improved access/haul roads (i) All surrounding unimproved/improved roads (j) High-tension power lines and railroad tracks (k) Contour lines, township-range-section lines (l) Drainage patterns, swales, washes (m) All drainage conveyance/treatment structures (ditches, berms, etc.) (n) Any other pertinent or significant feature.

Topographic Map
SRM Laceys Spring revised boundary topo.pdf - 02/27/2024 06:23 PM
Comment
NONE PROVIDED

Detailed Facility Map Submittal

Detailed Facility Map
conveyors and plant layout.pdf - 01/24/2024 03:01 PM
10326-2 SRM updated water flow.pdf - 02/28/2024 02:00 PM
Comment
NONE PROVIDED

Outfalls (1 of 1)

Outfall Identifier: 001

Feature Type
Outfall (External)

Outfall Identifier
001

Outfall Status
Proposed

> Please be aware that you should only mark an outfall status as existing if (1) the Department has been previously notified that it was constructed as proposed or (2) it began discharge prior to this application. A proposed outfall is one that is being newly added to the permit OR one that has never discharged or has never been authorized by the Department to discharge. Should you have any questions about which status to select, please contact the Department's permit engineer for this site.

Receiving Water
Tennessee River

Check below if the discharge enters the receiving water via an unnamed tributary.
NONE PROVIDED

Location of Outfall
34.524089,-86.544830

303(d) Segment?
No

TMDL Segment?
No

Discharge Characterization

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

Please download the following Excel file to enter your information. Once complete, please attach to the below control.
Download spreadsheet here.

Required attachment:
Form315TableB.xlsx - 01/22/2024 01:56 PM
Comment
NONE PROVIDED

Please download the following Excel file to enter your information. Once complete, please attach to the below control.
Download spreadsheet here.

Required attachment:
Form315TableC.xlsx - 01/22/2024 01:57 PM
Comment
NONE PROVIDED

Discharge Structure Description & Pollutant Source

Please download the following Excel file to enter your information. Once complete, please attach to the below control.
Download spreadsheet here.

Required attachment:
Form315DischargeStructure.xlsx - 01/24/2024 02:00 PM
Comment
NONE PROVIDED

Variance Request

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

Pollution Abatement & Prevention (PAP) Plan Summary (1 of 1)

CORRECTION REQUEST *(CORRECTED)*
Design plans for all the outfalls

On 315 Discharge Structure form you have all the outfalls as being Pipe for discharges, if so you will need design plan for all the ponds.
Created on 10/20/2023 2:05 PM by **Robert Glover**

1 COMMENT
Darby Parrish (dparrish@omi-eng.com) (10/25/2023 12:16 PM)
The Discharge Structure Description & Pollutant Source attachment has been updated.

Outfall(s):
OF001

Outfall Questions:	Please select one:
Runoff from all areas of disturbance is controlled	Yes
Drainage from pit area, stockpiles, and spoil areas directed to a sedimentation pond	Yes
Sedimentation basin at least 0.25 acre/feet for every acre of disturbed drainage	Yes
Sedimentation basin cleaned out when sediment accumulation is 60% of design capacity	Yes
Trees, boulders, and other obstructions removed from pond during initial construction	Yes
Width of top of dam greater than 12'	Yes
Side slopes of dam no steeper than 3:1	Yes
Cutoff trench at least 8' wide	N/A
Side slopes of cutoff trench no less than 1:1	N/A
Cutoff trench located along the centerline of the dam	N/A
Cutoff trench extends at least 2' into bedrock or impervious soil	N/A
Cutoff trench filled with impervious material	N/A
Embankments and cutoff trench 95% compaction standard proctor ASTM	N/A
Embankment free of roots, tree debris, stones >6" diameter, etc.	Yes
Embankment constructed in lifts no greater than 12"	Yes
Spillpipe sized to carry peak flow from a one year storm event	N/A
Spillpipe will not chemically react with effluent	N/A
Subsurface withdrawal	N/A
Anti-seep collars extend radially at least 2' from each joint in spillpipe	N/A
Splashpad at the end of the spillpipe	N/A
Emergency Spillway sized for peak flow from 25-yr 24-hr event if discharge not into PWS classified stream	N/A
Emergency spillway sized for peak flow from 50-yr 24-hr event if discharge is into PWS classified stream	Yes
Emergency overflow at least 20' long	Yes
Side slopes of emergency spillway no steeper than 2:1	Yes

Outfall Questions:	Please select one:
Emergency spillway lined with riprap or concrete	Yes
Minimum of 1.5' of freeboard between normal overflow and emergency overflow	Yes
Minimum of 1.5' of freeboard between max. design flow of emergency spillway and top of dam	Yes
All emergency overflows are sized to handle entire drainage area for ponds in series	Yes
Dam stabilized with permanent vegetation	Yes
Sustained grade of haul road <10%	Yes
Maximum grade of haul road <15% for no more than 300'	Yes
Outer slopes of haul road no steeper than 2:1	Yes
Outer slopes of haul road vegetated or otherwise stabilized	Yes
Detail drawings supplied for all stream crossings	Yes
Short-Term Stabilization/Grading And Temporary Vegetative Cover Plans	Yes
Long-Term Stabilization/Grading And Permanent Reclamation or Water Quality Remediation Plans	Yes

Identify and provide detailed explanation for any ◆N◆ or ◆N/A◆ response(s):
Cut-off trench, spill pipe, and anti-seep collars are not included in the site-specific designs that were prepared by a PE registered in Alabama. The rip-rap lined emergency spillway will be the primary discharge structure, as the incised pit will provide settling time for stormwater prior to either being pumped to the plant or the constructed sediment basin.

No stream crossings are planned for the site.

Pollution Abatement & Prevention (PAP) Plan Review Checklist

General Information:	Please select one:
PE Seal with License #	Yes
Name and Address of Operator	Yes
Legal Description of Facility	Yes
Name of Company	Yes
Number of Employees	Yes
Products to be Mined	Yes
Hours of Operation	Yes
Water Supply and Disposition	Yes

Maps:	Please select one:
Topographic Map including Information from Part XIII (a) ◆ (o) of this Application	Yes
1◆ ◆ 500◆ or Equivalent Facility Map including Information from Part XIV of this Application	Yes

Detailed Design Diagrams:	Please select one:
Plan Views	Yes
Cross-section Views	Yes
Method of Diverting Runoff to Treatment Basins	Yes
Line Drawing of Water Flow through Facility with Water Balance or Pictorial Description of Water Flow	Yes

Narrative of Operations:	Please select one:
Raw Materials Defined	Yes
Processes Defined	Yes
Products Defined	Yes

Schematic Diagram:	Please select one:
Points of Waste Origin	Yes

Schematic Diagram:	Please select one:
Collection System	Yes
Disposal System	Yes

Post Treatment Quantity and Quality of Effluent:	Please select one:
Flow	Yes
Suspended Solids	Yes
Iron Concentration	N/A
pH	Yes

Identify and provide detailed explanation for any "N" or "N/A" response(s):
Iron is not believed to be a pollutant of concern when quarrying limestone.

Description of Waste Treatment Facility:	Please select one:
Pre-Treatment Measures	Yes
Recovery System	Yes
Expected Life of Treatment Basin	Yes
Measures for Ensuring Access to All Treatment Structures and Related Appurtenances including Outfall Locations	Yes
Schedule of Cleaning and/or Abandonment	Yes

Other:	Please select one:
Precipitation/Volume Calculations/Diagram Attached	Yes
BMP Plan for Haul Roads	Yes
Measures for Minimizing Impacts to Adjacent Stream (e.g., Buffer Strips, Berms)	Yes
Measures for Ensuring Appropriate Setbacks are Maintained at All Times	Yes
Methods for Minimizing Nonpoint Source Discharges	Yes
If Chemical Treatment Used, Methods for Ensuring Appropriate Dosage	N/A
Facility Closure Plans	Yes
PE Rationale(s) For Alternate Standards, Designs or Plans	N/A

Identify and provide detailed explanation for any "N" or "N/A" response(s):
There will be no chemical treatment of the effluent.

There are no plans for alternate standards, designs or plans at this point.

Pollution Abatement & Prevention (PAP) Plan

CORRECTION REQUEST *(CORRECTED)*
50 Foot Buffer Zone or Setback

Need language in the PAP plan about 50-foot buffer zones or setbacks from all receiving streams and tell us how you will follow it.
Created on 10/20/2023 2:13 PM by **Robert Glover**

1 COMMENT
Darby Parrish (dparrish@omi-eng.com) (10/25/2023 9:07 AM)
Additional language has been added to Section XVIII (Setbacks/Buffers) of the PAP.

Is this a coal mining operation regulated by ASMC?
No

For non-coal mining facilities, has a PAP Plan in accordance with ADEM Admin. Code r. 335-6-9-.03 been completed?
Yes

PAP Plan (non-coal mining facilities)
02.28 PAPP update with signatures.pdf - 02/28/2024 02:01 PM
Comment
NONE PROVIDED

Professional Engineer (PE)

Registration License Number
23588

Professional Engineer

Prefix
Mr.

First Name	Last Name
Keith	*Kaylor*

Title
PE

Organization Name
OMI, Inc.

Phone Type	Number	Extension
Business	2568377764	

Email
kkaylor@omi-eng.com

Address
5151 Research Dr NW
Suite A
Huntsville, AL 35805

Information for the Applicant

Please read the following information and acknowledge below:

Contact the Department prior to submittal with any questions or to request acceptable alternate content/format.

Be advised that you are not authorized to commence regulated activity until this application can be processed, publicly noticed, and approval to proceed is received in writing from the Department.

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

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

The applicant is advised to contact:
(1) The Alabama Surface Mining Commission (ASMC) if coal, coal fines, coal refuse, or other coal related materials are mined, transloaded, processed, etc.;
(2) The Alabama Department of Labor (ADOL) if conducting non-coal mining operations;
(3) The Alabama Historical Commission for requirements related to any potential historic or culturally significant sites;
(4) The Alabama Department of Conservation and Natural Resources (ADCNR) for requirements related to potential presence of threatened/endangered species;
(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.

Acknowledgement
I acknowledge I have read and understand the information above.

Additional Attachments

Additional Attachments
NONE PROVIDED
Comment
NONE PROVIDED

Application Preparer

Application Preparer

Prefix
Ms.

First Name	Last Name
Darby	*Parrish*

Title
CPESC

Organization Name
OMI, Inc.

Phone Type	Number	Extension
Mobile	3343180303	

Email
dparrish@omi-eng.com

Address
5151 Research Dr NW
Suite A
Huntsville, AL 35805

Fees Assessed

The following itemized fees have been assessed in accordance with Fee Schedule D and 335-1-6-.04(a) of ADEM Admin. Code Division 1 regulations based on the information provided in this application.

Wet Preparation, Processing, Beneficiation:
6860

Greenfield Site Fee:
1610

Fee

Fee
8470

Revisions

Revision	Revision Date	Revision By
Revision 1	7/14/2023 11:03 AM	Darby Parrish
Revision 2	10/23/2023 8:02 AM	Darby Parrish

Revision	Revision Date	Revision By
Revision 3	2/27/2024 9:17 AM	Darby Parrish

Agreements and Signature(s)

SUBMISSION AGREEMENTS

- ☑ I am the owner of the account used to perform the electronic submission and signature.
- ☑ I have the authority to submit the data on behalf of the facility I am representing.
- ☑ I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- ☑ I have reviewed the electronic form being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

Professional Engineer

A detailed, comprehensive Pollution Abatement & Prevention (PAP) Plan must be prepared, signed, and certified by a professional engineer (PE), registered in the State of Alabama, and the PE must certify as follows: I certify on behalf of the applicant, that I have completed an evaluation of discharge alternatives 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.

Signed By Keith Kaylor on 02/28/2024 at 5:27 PM

Responsible Official

This application must be signed and initialed by a Responsible Official of the applicant pursuant to ADEM Admin. Code Rule 335-6-6-.09 who has overall responsibility for the operation of the facility. I certify under penalty of law that this document, including technical information and data, the PAP Plan, including any SPCC plan, maps, engineering designs, and all other attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the PE and other person or persons under my supervision who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine or imprisonment for knowing violations. 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. I acknowledge my understanding that if coal, coal fines, coal refuse, or other coal related materials are mined, transloaded, processed, etc., that I may be required to obtain a permit from the ASMC. I acknowledge my understanding that if non-coal, non-limestone materials are mined, transloaded, processed, etc., that I may be required to obtain a permit from the ADOL. I acknowledge my understanding that if the proposed activities will be conducted in or potentially impact waters of the state or waters of the US (including wetlands), that I may be required to obtain a permit from the USACE.

Signed By Jacquelyn Pudvah on 02/28/2024 at 5:44 PM

Attachment 1 to Supplementary Form
ADEM Form 311

Alternatives Analysis

Applicant/Project: SRM Materials - Laceys Spring Quarry

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

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

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

Signature: _____
(Professional Engineer)

Date: _____

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

Calculation of Total Annualized Project Costs for Private-Sector Projects

Capital Costs to be Financed (Supplied by applicant)	$ 20,000,000.00 (1)
Interest rate for Financing (Expressed as a decimal)	.09 (i)
Time Period of Financing (Assume 10 years*)	10 years (n)
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	0.15582 (2)
Annualized Capital Cost [Calculate: (1) x (2)]	$ 3,116,400.00 (3)
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	$ 5,000,000.00 (4)
Total Annual Cost of Pollution Control Project [(3) + (4)]	$ 8,116,400.00 (5)

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

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

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.

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

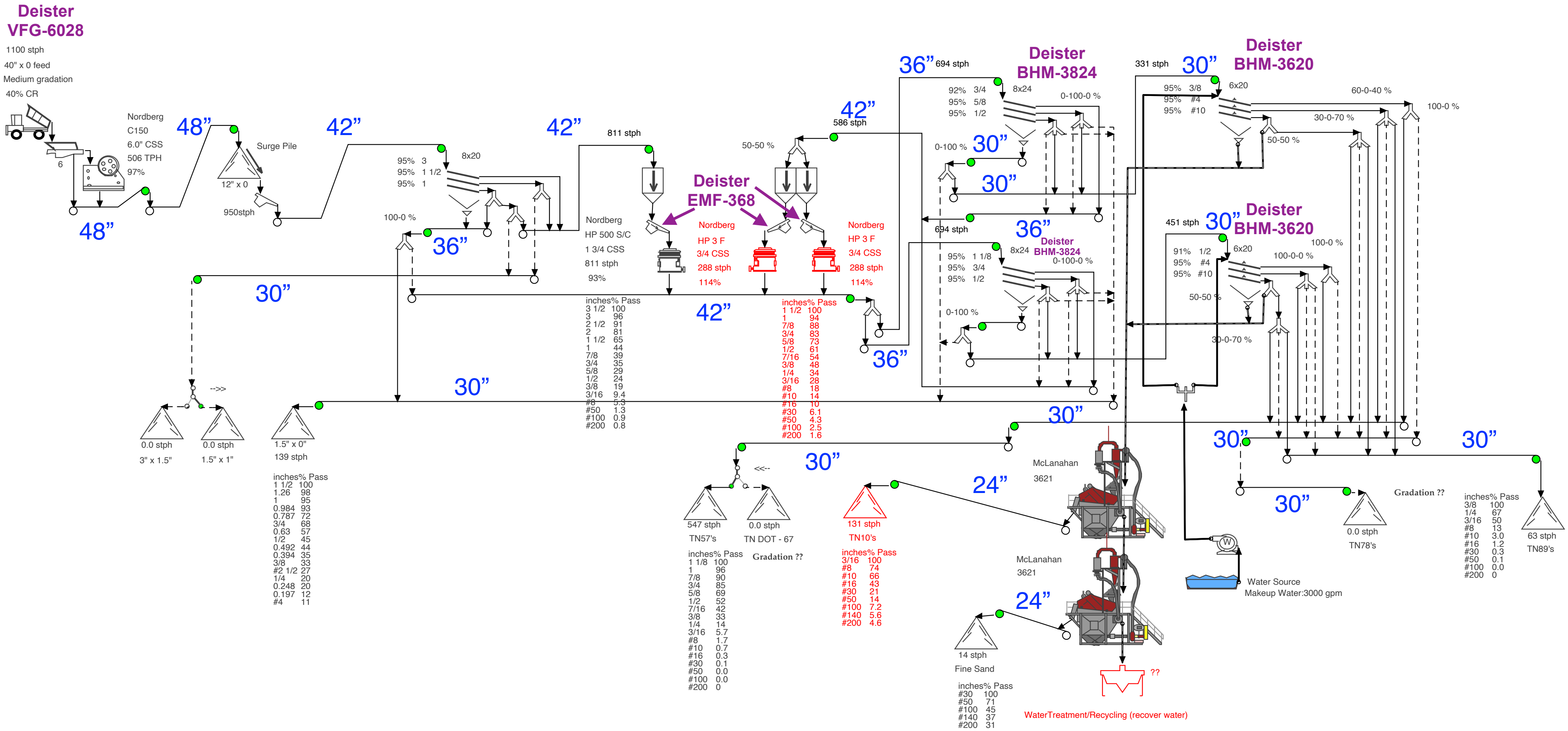
Outfall	Discharge structure Description	Description of Origin of pollutants	Surface Discharge	Groundwater Discharge	Wet Prep -Other Production Plant	Pumped or Controlled Discharge	Low Volume STP
001P	Emergency Spillway	7, 8, 10a, 10b, 10c	Yes	No	Yes	Yes	No
		10a = stormwater from processing plant					
		10b = stormwater from stockpiles					
		10c = stormwater from haul roads					
	**Stormwater will be collected in the pit and recycled for use in dust suppression at the site. If a surface discharge were to be needed, water will be pumped from the quarry pit, through BMPs, to a permitted outfall.*						

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

Outfall E/P	Information Source - # of Samples	Flow (cfs)	Flow (gpd)	Frequency (hours/day)	Frequency (days/month)	Sum/Win Temp, (°C)	pH (s.u.)	BOD5 (lbs/day)	TSS (lbs/day)	Tot Fe (lbs/day)	Tot Mn (lbs/day)	Tot Al (lbs/day)
001P	2 per month*	0.00077	500	8	15	29/12	6.0-9.0	NA	0.15	NA	NA	NA
	* *Data taken from a similar facility operated by the permittee, Cherokee Quarry (AL0084255)*											

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

Outfall E/P	Reason Believed Present	Information Source - # of Samples								
			lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L
001P	none									



Mode: Mode 5-950 TPH-Base, 57's, 89's, 10's, fines

Calculation results may differ due to variations in operating conditions and application of crushing and screening equipment. This information does not constitute an express or implied warranty, but shows results of calculations based on information provided by customers or equipment manufacturers. Use this information for estimating purposes only.

All calculations performed by AggFlow. http://www.AggFlow.com

Process Machinery, Inc.

SRM-Alabama River Plant

David H. Miles

Plant Stage #1: Page #1

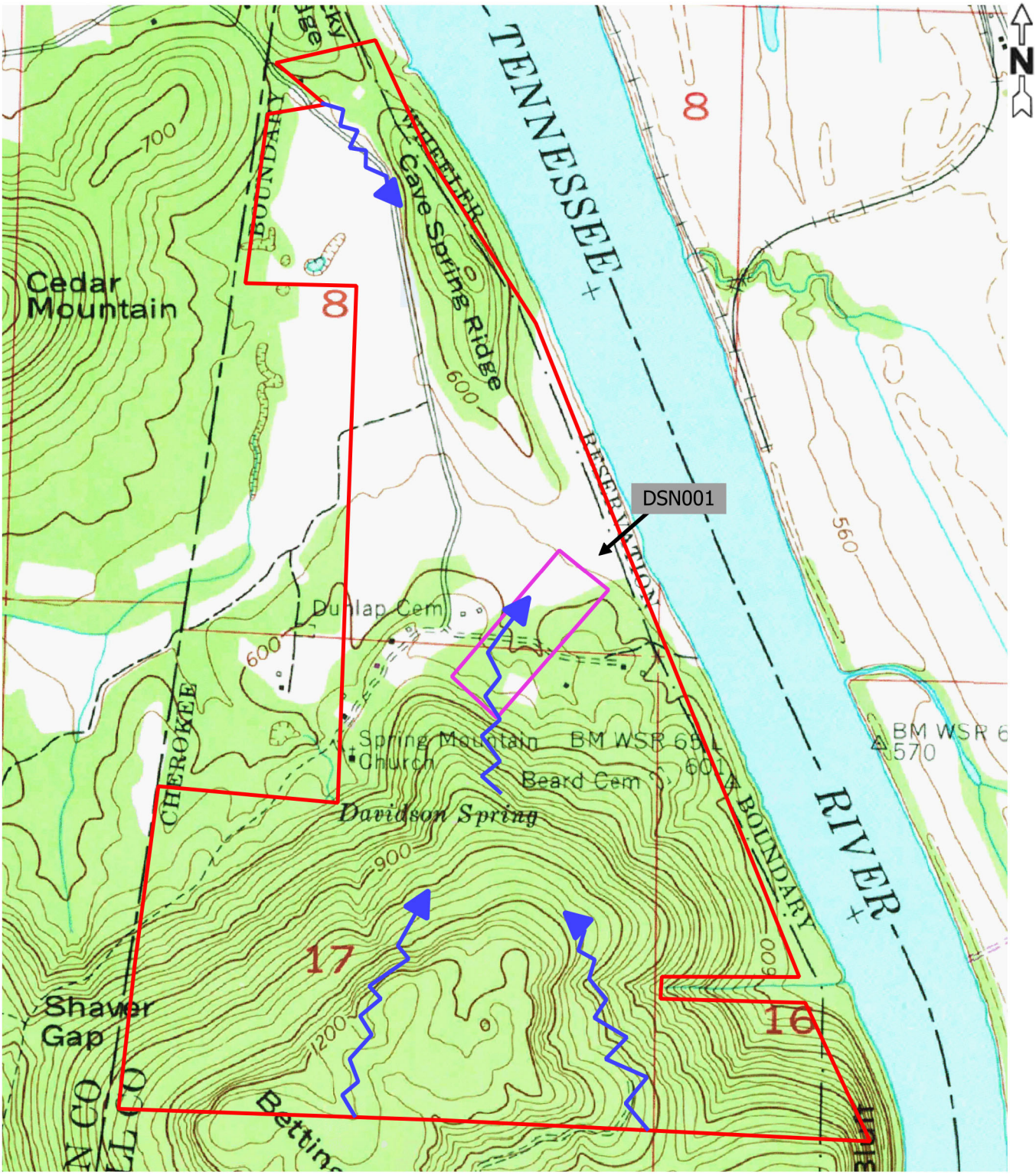
Date: August/25/2023

OMI, Inc.

5151 Research Dr. NW
Huntsville, AL 35805

PH: (256) 837 - 7664

FAX: (256) 837 - 7677



SOURCE: USGS TOPOGRAPHIC MAPS 2023

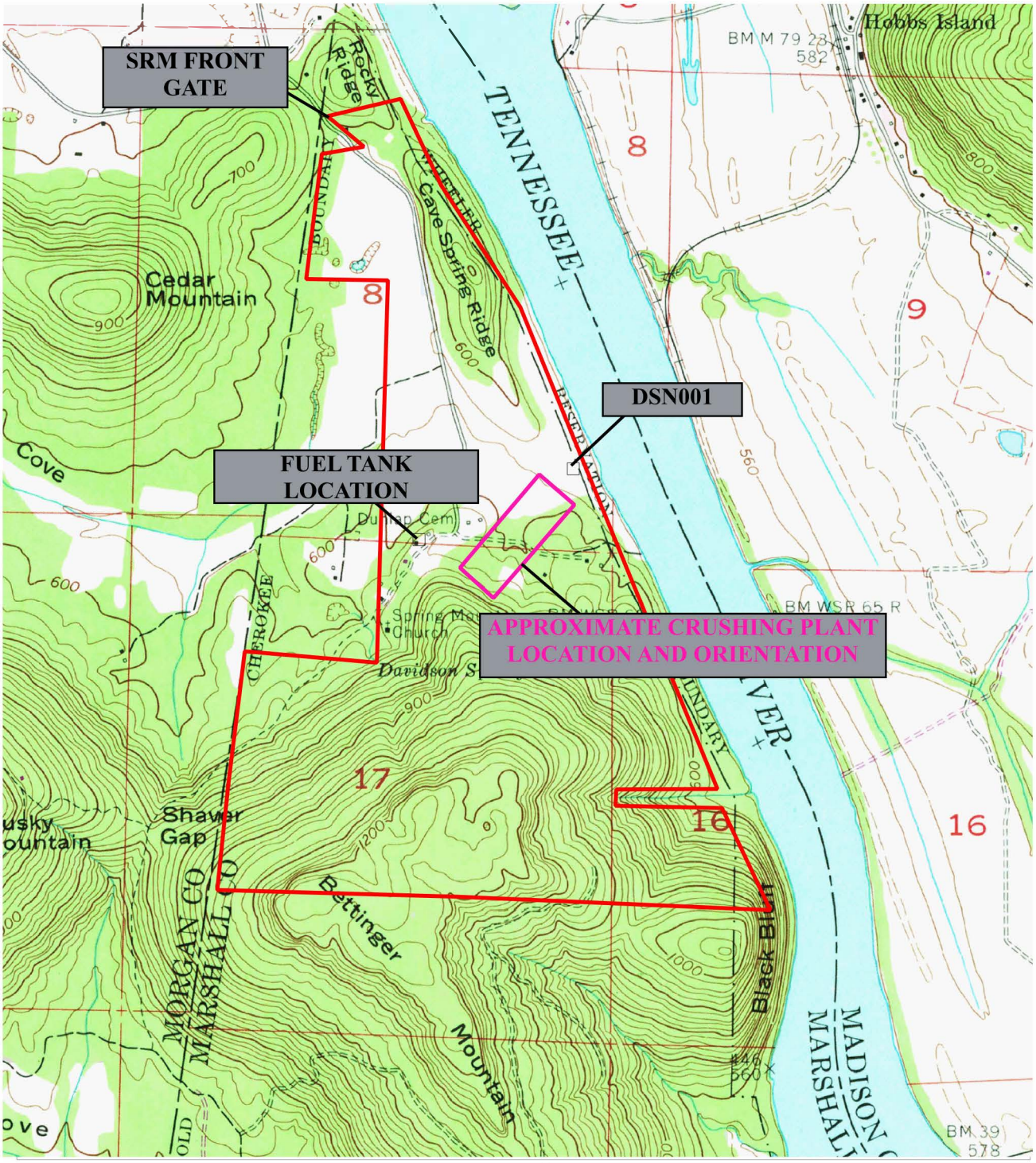
Job Name: SRM MATERIALS QUARRY LACEYS SPRING QUARRY LACEYS SPRING, ALABAMA T6S, R1E, S8,16, and, 17	WATER FLOW MAP OMI DRAWING NO. 10326-2 BLUE ARROWS INDICATE DIRECTION OF FLOW	Job No:10326 Date: 2/27/2024 Scale: 1" =1,166' Drawn By HLN

OMI, Inc.

5151 Research Dr. NW
Huntsville, AL 35805

PH: (256) 837 - 7664

FAX: (256) 837 - 7677



BASEMAP: USGS TOPOGRAPHIC MAP 2023

PROJECT NAME: SRM MATERIALS QUARRY LACEYS SPRING QUARRY LACEYS SPRING, ALABAMA T6S, R1E, S8,16, and 17	SITE TOPOGRAPHIC MAP OMI DRAWING NO: 10326-1	JOB NO: 10326 DATE: 02/21/2024 SCALE: 1" = 2000' DRAWN BY: HLN

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC) PLAN

SRM LACEYS SPRING QUARRY
OFF VAUGHN ROAD
LACEYS SPRING, ALABAMA 35754
MORGAN AND MARSHALL COUNTIES

for

SRM MATERIALS, LLC
1000 HOLLINGSHEAD CIRCLE
MURFREESBORO, TENNESSEE 37129

PREPARED BY

OMI, INC.
5151 RESEARCH DRIVE, SUITE A
HUNTSVILLE, ALABAMA 35805

October 10, 2023

OMI Job No. 10326

Table of Contents

APPENDICES

Spill Prevention, Control, and Countermeasures Plan (SPCC)
Laceys Spring Quarry
SRM Materials, LLC
OMI Job#: 10326

1.0 PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify:

- I am familiar with the requirements of 40 CFR 112.
- I or my designated agent has visited and examined the facility.
- This SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and with the requirements of this part.
- Procedures for required inspections and testing have been established.
- This SPCC Plan is adequate for the facility.

Name: Keith J. Mandel, P.E.

Signature, Stamp and Date: 10/10/2023

ALABAMA LICENSED No. 18224 PROFESSIONAL ENGINEER KEITH JEROME MANDEL

Title: Principal Engineer
OMI, Inc.
5151 Research Drive NW, Suite A
Huntsville, Alabama 35805
256-837-7664

Registration: Professional Engineer - Alabama #18224

This SPCC Plan was prepared for the facility referenced herein. This SPCC Plan is not fully implemented unless it accurately reflects the physical characteristics of the facility and the practices and procedures implemented by personnel associated with the facility. In addition, this certification does not relieve the owner or operator of the facility to prepare and fully implement this plan in accordance with the requirements of 40 CFR 112.

2.0 MANAGEMENT APPROVAL

SRM Materials, LLC is committed to the prevention of discharges of oil to navigable waters and to maintaining the spill prevention control and countermeasures contained in this SPCC Plan through regular review, updating, and implementation of the Plan.

A complete copy of this plan will be maintained at the facility. In addition, the plan will be readily available to the Environmental Protection Agency (EPA) Regional Administrator (EPA Region 4) during normal business hours.

Authorized Facility Representative:

Name: Danielle Pudvah
Title: Chief Sustainability Officer

Signature: _____

Date: _____

3.0 FACILITY AND EMERGENCY CONTACT LIST

Contact Name	Primary Contact and/or 24-hour Emergency Phone Number
Dale Cathey, SRM - Vice President of Aggregates	Office: (615) 355-1028 Cell: (615) 490-4661
Jeremy Harris, SRM - Environmental Manager	Cell: (423) 402-1498
Danielle Pudvah, SRM - Chief Sustainability Officer	Cell: (850) 933-3210
U.S. Environmental Protection Agency - Region 4 (Atlanta, GA)	(404) 562-9900
U.S. Coast Guard National Response Center	(800) 424-8002
Huntsville Fire & Rescue Hazmat Team	(256) 427-7401 911
Hardiman Remediation Services	(256) 423-8964
Alabama Department of Environmental Management – Decatur Field Office	(256) 353-1713 (800) 843-0699
Laceys Spring Volunteer Fire Department	(256) 881-8038
US Ecology Emergency Response	(800) 839-3975

4.0 SPCC PLAN REVIEW AND EVALUATION

In accordance with 40 CFR §112.5(b), a review and evaluation of this Plan will be conducted at least once every five (5) years. As a result of this review and evaluation, the facility will amend the SPCC Plan within six (6) months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review.

Any technical amendments of this SPCC Plan will be certified by a Professional Engineer in accordance with 112.3(d). Technical amendments are those that require the application of good engineering practices and do not include changes that would require engineering judgement (i.e., telephone numbers, names on lists, change of ownership). All Plan amendments will be implemented as soon as possible, but no later than six (6) months following the amendment of the Plan. Additionally, the Plan will be amended within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil in quantities that may be harmful into or upon the navigable waters of the United States or adjoining shorelines.

The date of issuance of this SPCC is October 10, 2023; the first review will be due by October 9, 2028.

Review Date	Reviewer	Amended Plan (Yes/NO)	Description of Review Amendment	Affected Page(s)	P.E. Certification (Y/N)

5.0 CROSS REFERENCE TABLE

40 CFR Reference	SPCC Plan Section Number	Requirement	Page Number
§112.3(d)	Section 1.0	Professional Engineer Certification	1
§112.7	Section 2.0	Management Approval	2
§112.5	Section 4.0	Plan Review and Evaluation	4
§112.7(a)(3)	Section 6.0	Facility Information	6
§112.7(a)(4)	Section 8.6	Discharge Reporting	10
§112.7(a)(5)	Section 8.7	Discharge Response Procedures	13
§112.7(b)	Section 8.8	Spill Predictions, Volumes, and Control	15
§112.7(c)	Section 8.9	Containment and Diversionary Structures	16
§112.7(d)	Section 8.10	Practicability Determination	17
§112.7(e)	Section 8.11	Inspections, Tests, and Records	17
§112.7(f)	Section 8.12	Personnel, Training, and Discharge Prevention Measures	18
§112.7(g)	Section 8.13	Security	18
§112.7(h)	Section 8.14	Transfer Procedures	18
§112.8(b)	Section 9.1	Facility Drainage	20
§112.7(c)	Section 9.2	Bulk Storage Containers	20
§112.7(d)	Section 9.3	Facility Transfer Operations	22
§112.20(e)	Section 10.0	Applicability of Substantial Harm Criteria	24

6.0 FACILITY INFORMATION

40 CFR 112.7(a)(3)

The subject property is located off Vaughn Road approximately 1,300-ft south of the intersection of Vaughn Road with McCutcheon Loop Road and includes part of Sections 8, 16, and 17, Township 6 South, Range 1 East in Morgan and Marshall counties. The subject property will be developed into a limestone quarry, to include wet and dry preparation, transportation, and storage.

A Site Location Map identifying the location of the facility is included in Appendix A.

6.1 Topography and Surface Drainage

The entrance to the facility is off Vaughn Road, with a ridge present between Vaughn Road and the Tennessee River. At the highest elevation, the ridge is approximately 690-ft above mean sea level (MSL), with drainage flowing to the west toward Vaughn Road and to the east toward the Tennessee River. Outparcels 1, 2, and 3 are located east of Vaughn Road and will include a concrete batch plant on Outparcel 1. While the final use for the other two outparcels has not been determined, permit coverage, to include any necessary modifications or additional permits, will be submitted as required. This SPCC Plan and the site Pollution Abatement & Prevention Plan will also need to be updated based on the final planned use of Outparcels 2 and 3.

Stormwater drainage from these outparcels will be routed to sediment basins that will allow for the treatment of suspended solids. Water from the basins will be recycled and used in the plants and for washing out concrete trucks. Advancement of mining operations will create an incised pit, allowing stormwater associated with mining operations to be contained in a sump within the pit. Stormwater drainage from the double-walled fuel tank on site will be routed either to the active mining pit or any of the ponds associated with permitted outfalls.

7.0 PETROLEUM STORAGE AREAS

40 CFR 112.7(a)(3)(i)

Petroleum storage at the facility consists of a 10,000-gallon diesel double-walled aboveground storage tank (AST), as well as 55-gallon containers of diesel exhaust fluid and lubricants.

7.1 Aboveground Storage Tanks

The following table provides a summary of all ASTs with a capacity of 55-gallons or greater, including contents, storage capacity, container structure and type, secondary containment, and location. Specifications for the 10,000-gallon double walled AST were obtained from the manufacturer and are included in Appendix D.

Table 7.1: Petroleum Storage Areas - Aboveground Storage Tanks

Contents	Storage Capacity (gal)	Container Structure & Type	Secondary Containment	Location
Diesel	10,000	Double-walled steel	Integral second tank wall	Near the southwest corner of the crushing plant
Diesel exhaust fluid, lubricants	55	Single-walled steel	Active measures	Near the southwest corner of the crushing plant

8.0 DISCHARGE HANDLING, CONTROLS, AND SPILL RESPONSE

8.1 Discharge Prevention Measures

40 CFR 112.7(a)(3)(ii)

Discharge prevention measures are those steps or procedures taken to minimize the potential for a discharge of oil products at the facility. This includes an evaluation of the following:

a. Above ground valve and pipeline examinations
b. Above ground piping protection from vehicular traffic
c. The loading, unloading and transfer of oil at the facility

Above ground valve and pipeline examinations. Above ground value and piping shall be inspected on a regular basis and note the conditions of pipes, flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, metal surfaces and those areas where the piping has a high potential for leaking. All above ground piping shall be marked with the product content, origin and direction of flow. Also, the piping needs to be marked, preferably with intermittent color-coding to indicate the type of product.

Aboveground piping protection from vehicular traffic. All aboveground piping is and shall remain protected from vehicular traffic by means of bumper poles, barriers, clearance and warning signs or verbally warned upon entering the facility. All the current aboveground piping is within the protection of the containment area. No bumpers or other means of protection are required.

The loading, unloading and transfer of oil at the facility. The facility personnel, when present, shall oversee vendors unloading oil to the facility. All facilities must comply with the minimum requirements of the U.S. Department of Transportation regulations for loading and unloading including but not limited to:

- No smoking while loading or unloading. Smoking on or about any motor vehicle whole loading or unloading any oil materials is forbidden.
- Keep fire away while loading and unloading. Extreme care shall be taken in the loading or unloading materials into or from any motor vehicle to keep fire away and to prevent persons in the vicinity from smoking, lighting matches, or carrying any flame or lighted cigar, pipe or cigarette.
- Handbrake set while loading and unloading. No hazardous material shall be loaded into or on, or unloaded from, any motor vehicle unless the handbrake is securely set, and all other reasonable precautions are taken to prevent motion of the motor vehicle during such loading or unloading process.
- Attendance requirements while loading and unloading. A qualified person must attend a cargo tank at all times while it is being loaded. The person who is responsible for

loading the cargo tank is also responsible for ensuring that it is so attended. A qualified person "attends" the loading or unloading of a cargo tank if, throughout the process, he is alert and is within 7.62 m (25 feet) of the cargo tank. The qualified person attending the unloading of a cargo tank must have an unobstructed view of the cargo tank and delivery hose to the maximum extent practicable during the unloading operation.

- Engine stopped. Unless the engine of a cargo tank motor vehicle is to be used for the operation of a pump, oil may not be loaded into, or on, or unloaded from any cargo tank motor vehicle while the engine is running.

Prior to delivering fuel to the site the vendor shall either notify the plant manager, who shall confirm the types and amounts of fuel to be delivered to each tank or check the site levels on the tank to assure sufficient space for the delivery.

The facility uses automatic check valves for tank loading procedures. This check valve is a one-way system that eliminates back flow.

Warning signs will be used at the facility to prevent vehicles from departing prior to completely disconnecting from transfer lines. The sign is not currently present but shall be installed. The signage shall instruct the attendant loading or unloading to examine the values, hoses, connections, fittings and lowermost drain and outlets of their vehicle for leakage prior to loading, unloading or departure.

8.2 Discharge & Drainage Controls

40 CFR 112.7(a)(3)(iii)

Arrows depicting the direction of flow across the site are shown on the Water Flow Map included in Appendix A.

8.2.1 Aboveground Storage Tanks

Integral secondary containment for the diesel fuel tank acts as a means of detecting a release of product through either inherent design or constructed secondary containment. Additional freeboard is not required for double-walled tanks since precipitation cannot accumulate in the interstice.

8.3 Spill Response

40 CFR 112.7(a)(3)(iv)

In the event of an oil discharge or leak, SRM Materials, LLC personnel identifying the discharge or leak shall immediately notify the Plant Manager, then take appropriate action to promptly contain and/or clean-up the spill and prevent any further leak or spill. Sufficient equipment and materials are maintained at the site for quick response in containment and clean-up of petroleum leaks and/or spills. Spill response equipment includes sorbent material, absorbent pads and booms, brooms, shovels, and empty drums. Spills will be contained and cleaned using the proper spill response equipment. The facility will provide spill response equipment to contain a minimum of 55-gallons of oil. These supplies and equipment are inspected quarterly or after any supplies are utilized to ensure that adequate amounts are always present. In the event of a spill, all pertinent information on the discovery, cause, corrective action, clean-up, and notification should be thoroughly documented on the Spill Report Form. Personnel observing the leak or spill will take whatever action is necessary to prevent or minimize spilled liquid from entering the facility drainage system or otherwise reaching a waterway. Details for spill response procedures are provided in Section 8.7 of this Plan.

8.4 Methods of Disposal of Recovered Materials

40 CFR 112.7(a)(3)(v)

Waste material generated during cleanup activities must be characterized in accordance with federal and state regulations. Contaminated absorbent material will be placed in drum(s) and disposed of by the appropriate method (fuel recycler or disposal facility). The Plant Manager will arrange for the cleanup and/or disposal of spill residual. If the discharge requires the use of an environmental remediation contractor, such contractor shall arrange for the proper disposal of recovered materials.

8.5 Emergency Contact List

40 CFR 112.7(a)(3)(vi)

A list of SRM Materials, LLC personnel, emergency contacts, appropriate agencies, and emergency response contractors are included in Section 3.0 of this plan.

8.6 Discharge Reporting

40 CFR 112.7(a)(4)

Immediately report any spill, including spill identified in secondary containment, to the Plant Manager. If the Plant Manager determines the spill meets the criteria listed in Sections 8.6.1 and 8.6.2, State and/or Federal regulatory agencies are to be contacted. The facility shall follow the state and federal reporting requirements summarized below.

8.6.1 State Reporting Requirements

For purposes of this Plan, a release to the environment is defined as a release off-site, a release to the ambient air or to navigable waterways, or a release on-site which has not been contained to prevent its migration off-site or into groundwater, except 25-gallons or greater oil release shall always be reported per Alabama Administrative Code 335-6-15.23.

Spill events discharging oil, hazardous substances, industrial solid waste, or other substances in a quantity equal to or greater than the reportable quantity listed in 40 CFR 302.4, in any 24-hour period, are subject to notification requirements. Upon the determination that a reportable discharge has occurred, notification shall be made to the Alabama Department of Environmental Management (ADEM) by the Plant Manager, as soon as possible, but not later than two hours after the discovery of the spill or discharge.

The initial notification shall provide, to the extent known, the information in the following list:

1. Name, address, and telephone number of the person making the telephone report.
2. Date, time, and location of the spill or discharge.
3. Description or identification of the oil, petroleum product, hazardous substances or the substances discharged or spilled.

4. Estimate of the quantity discharged or spilled.
5. Duration of the incident.
6. Name of the surface water or a description of the waters of the state affected or threatened by the discharge or spill.
7. Source of the discharge or spill.
8. Description of the extent of actual or potential water pollution or harmful impacts to the environment and the identification of any environmentally sensitive areas or natural resources at risk.
9. Names, addresses, and telephone number of the responsible person and the contact person at the location of the discharge or spill.
10. Description of any actions that have been taken, are being taken, and will be taken to contain and respond to the discharge or spill.
11. Any known or anticipated health risks.
12. Any other information that may be significant to the response action.

The Plant Manager shall also notify the ADEM as soon as possible whenever necessary to provide information that would trigger a change in the response to the spill or discharge. If the discharge or spill could be harmful to public health or wellbeing of the environment, the Plant Manager, shall immediately notify and cooperate with local emergency authorities in providing support to implement appropriate notification and response actions. In the absence of a local emergency authority, the responsible person shall take reasonable measures to notify potentially affected persons of the imminent health threat. Notification shall also be given to adjacent property owners and residents that may adversely be affected.

8.6.2 Federal Reporting Requirements

Whenever a facility has discharged more than 1,000-gallons of oil in a single discharge as described in §112.1(b), or discharged more than 42-gallons of oil in each of two discharges as described in §112.1(b), occurring within any twelve-month period, the facility must submit the following information to the Environmental Protection Agency (EPA) Regional Administrator within 60 days from the time the facility becomes subject to this section:

1. Your name, location, organization, and telephone number.
2. Name and address of the party responsible for the incident.
3. Date and time of incident.
4. Location of incident.
5. Source and cause of the release or spill.
6. Types of materials released of spilled.
7. Quantity of materials released or spilled.
8. Danger or threat posed by the release or spill.
9. Number and types of damage and/or injuries (if any).
10. Corrective action and countermeasures taken.
11. Whether an evacuation may be needed.
12. Names and/or organizations who have been contacted.

A complete copy of all information provided to the Regional Administrator shall also be sent to the ADEM. After review of the SPCC Plan and all other information submitted, the Regional Administrator may require the owner or operator of the facility to amend the SPCC Plan. Any amendment required by the Regional Administrator shall become part of the Plan within 30 days, or other specified effective date, after the notice to require any amendment to the Plan. Amendments to the Plan shall be implemented no later than six months after the amendment becomes part of the Plan unless the Regional Administrator specifies another date.

8.7 Discharge Response Procedures

40 CFR 112.7(a)(5)

8.7.1 Immediate Actions

SRM Materials, LLC shall use the following procedures in response to a discharge:

1. Activate internal facility alarms or communication systems, where applicable, to notify and/or evacuate and account for all facility personnel.
2. Notify appropriate State or local agencies with designated response roles if their help is needed.

3. If an evacuation is not required and the fire or release can be approached safely, attempt to stop the spread of the release or put out small fires using onsite equipment. Only personnel with hands-on fire extinguisher training should use fire extinguishers.
4. Whenever there is a release, fire, or explosion, the Plant Manager and/or the emergency response contractor (ERC) must immediately identify the character, exact source, amount, and extent of any released materials. The Plant Manager and/or ERC may do this by observation or review of safety data sheets (SDS) and facility records or manifests.
5. Concurrently, the Plant Manager and/or ERC must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).
6. If the Plant Manager determines that the facility has had a release to the environment which is not incidental, or a fire/explosion which could threaten human health or the environment outside the facility, they must report their findings as follows:
    a. If the assessment indicates that evacuation of local areas may be advisable, the Plant Manager must immediately notify appropriate local authorities identified in Section 8.6. The Plant Manager must be available to help appropriate officials decide whether local areas should be evacuated; and
    b. The Plant Manager must immediately notify the National Response Center (24-hour toll free number 800-424- 8802). The report must include:
        (i) Name and telephone number of Dispatcher or person making report.
        (ii) Name and address of facility.
        (iii) Time and type of incident (i.e., release, fire).
        (iv) Name and quantity of material(s) involved, and whether it is an extremely hazardous substance (EHS), to the extent known.
        (v) The extent of injuries, if any.

(vi) The possible hazards to human health, or the environment, outside the facility.

7. During an emergency, the Plant Manager must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous materials at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
8. If the facility stops operations in response to a fire, explosion or release, the Plant Manager must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

8.7.2 Follow-up Actions

1. Immediately after an emergency, the Plant Manager must arrange for the disposal of recovered materials, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the facility can demonstrate that the recovered material is not a hazardous waste, the facility becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 40 CFR parts 262, 263, and 265.
2. The Plant Manager must ensure that, in the affected area(s) of the facility:
   a. No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed.
   b. All emergency equipment listed in the plan is cleaned and fit for its intended use before normal operations are resumed.

8.8 Spill Predictions, Volumes, and Control

40 CFR 112.7(b)

8.8.1 Aboveground Storage Tanks

The following table presents the applicable methods of secondary containment, discharge rate, general direction of flow from equipment failure, and expected volume. Probable direction of flow is shown on the Site Layout Map in Figure 2.

Table 8.8.1: Spill Predictions, Volumes, and Control - Aboveground Storage Tanks					
Tank No.	**Passive Secondary Containment**	**Active Secondary Containment**	**Rate of Discharge**	**Direction of Flow**	**Potential Release Volume (gal)**
Diesel tank	Integral second tank wall	Sorbent materials, booms,	Gradual to Instantaneous	South towards active mining pit	Up to 10,000

8.9 Containment and Diversionary Structures

40 CFR 112.7(c)

Appropriate containment, diversionary structures, and/or spill response equipment to prevent a discharge as described in §112.1(b) and in Section 8.8 of this plan have been provided for this facility. At a minimum, the facility will use one or more of the following prevention systems or its equivalent:

1. Dikes, berms, or retaining walls sufficiently impervious to contain oil.
2. Curbing.
3. Culverting, gutters, or other drainage systems.
4. Weirs, booms, or other barriers.
5. Spill diversion ponds.
6. Retention ponds.
7. Sorbent materials.

8.10 Practicability Determination

40 CFR 112.7(d)

SRM Materials, LLC has determined the secondary containment provided by the double walled construction of the 10,000-gallon diesel fuel tank will prevent discharges as described in §112.1(b).

8.11 Inspections, Tests, and Records

8.11.1 Periodic Integrity Testing - Aboveground Storage Tanks

40 CFR 112.7(e)

In accordance with the Steel Tank Institute standard SP-001, periodic tank inspections are to be performed by the facility. The inspector shall be knowledgeable about storage facility operations, the type of tank and its associated components, spill control, and characteristics of liquid stored. The inspector must also be familiar with pumping, piping, and valve operations of the tank system. The following table lists the inspection requirements for the tanks at the facility:

Table 8.11.1: Inspection Requirements for Aboveground Storage Tanks

Container Number	Container Structure & Type	Storage Capacity (gal)	AST Category	Release Prevention	Inspection Type
Tank 1	Double-walled steel	10,000	Category 1	Spill Catch Box	External inspection monthly and annually

Monthly and Annual Inspection Checklists are included in Appendix B.

8.12 Personnel, Training, and Discharge Prevention Procedures

40 CFR 112.7(f)

The Technical Services Department is responsible for properly instructing the necessary employees in the operation and maintenance of equipment to prevent a discharge and this SPCC Plan.

The facility manager shall schedule and conduct spill prevention briefings for the necessary personnel at intervals frequent enough to maintain knowledge and skills adequate to execute the provisions of this SPCC Plan. The briefings shall review actual events that occurred on the site, equipment failures or malfunctions and any newly adopted preventative measures. All new hires shall be trained on the provisions of this SPCC Plan. Once a year, refresher training shall be conducted. Sign-in sheets noting the topics of discussion at each briefing or training session shall be maintained. Also,

- Facility personnel have been instructed by management in the operation and maintenance of oil pollution prevention equipment and pollution control laws and regulations.

- Annual spill prevention briefings are provided by the Department of Technical Services for operating personnel to ensure adequate understanding of the SPCC Plan. These briefings highlight any past spill events or failures and recently developed precautionary measures. Training is held on oil spill prevention, containment, and retrieval methods. Records of these briefings and spill prevention training are kept on the form provided as Appendix E. Instructions and phone numbers regarding the reporting of a spill to the National Response Center and the state are listed in Section 3.0 and are posted in the Technical Services office.

8.13 Security

40 CFR 112.7(g)

The following safety measures are in place:

1. Location: site is naturally secured by topography
2. Starter Control – When the facility is closed for business, the starter controls on all pumps do not function because the electricity is disconnected.
3. Loading and unloading: field pipe has check valve and locking cap
4. Lighting to assist in discovery of a discharge or vandalism

8.14 Transfer Procedures

40 CFR 112.7(h)

SRM Materials, LLC receives shipments of diesel fuel for the ASTs via tank truck. SRM Materials, LLC personnel and tank truck operators are responsible for monitoring loading/unloading operations. Piping utilized during the loading of the AST contains a check valve, which only allows flow into the AST. All loading and/or unloading connections and facility piping are capped when not in use. The 10,000-gallon tank includes an overfill chamber that diverts overfilled product into secondary containment that accommodates 110% - 120% of the tank's capacity. The secondary

containment is fully enclosed, rain-shielded and seal-welded. Tank trucks are inspected by facility personnel prior to filling and departure. During the loading/unloading process, all vehicles are prevented from moving by physical barriers such as wheel chocks and are inspected for leaks prior to departure. Drainage in the loading/unloading area flows south towards a detention pond. All valves are closed and locked prior to departure.

Facility trucks utilize the 10,000-gallon diesel fuel tank for fueling during daily operations. The dispenser is located atop the tank, providing protection from vehicular traffic. Facility trucks are also prevented from moving by physical barriers such as wheel chocks. Facility trucks are inspected for leaks by SRM Materials, LLC personnel prior to departure.

8.15 Field Constructed Aboveground Storage Tanks

40 CFR 112.7(i)

Not applicable; field-constructed containers are not located at this facility.

8.16 Conformance with Applicable Standards

40 CFR 112.7(j)

The completed sight will be relatively flat and slope gently away from the containment area. Stormwater discharges from the property to the Tennessee River and are visually inspected periodically. Grab samples will be collected following the monitoring requirements specified in the facility's NPDES permit to detect possible system upsets.

9.0 SPECIFIC REQUIREMENTS

40 CFR 112.8(a)

The facility has met the general requirements for the plan listed under §112.7 and the specific discharge prevention and containment procedures §112.8.

9.1 Facility Drainage

40 CFR 112.8(b)

Discharges associated with the 10,000-gallon diesel fuel tank are contained by the integral second tank wall. Should a release occur, booms and active measures can be placed down-gradient to quickly prevent product from reaching the detention pond. If the product overwhelms the booms and other active measures, the product will flow to a detention pond where additional measures can be taken to prevent a release from the property. Direction of flow is shown on the Water Flow Map in Appendix A.

9.2 Bulk Storage Containers

40 CFR 112.8(c)

As defined in §112.2, oil-filled operational equipment is not considered a bulk storage container.

9.2.1 Container Compatibility

40 CFR 112.8(c)(1)

All oil containers are compatible in material and construction with the contents at the storage temperature and pressure.

9.2.2 Secondary Containment

40 CFR 112.8(c)(2)

Secondary containment for the 10,000-gallon diesel fuel tank is provided by the integral design of the double-walled AST. Specifications for the diesel fuel tank were obtained from the manufacturer and are included in Appendix D.

9.2.3 Drainage of Diked Areas

40 CFR 112.8(c)(3)

Not applicable; diked areas are not located at this facility.

9.2.4 Corrosion Protection

40 CFR 112.8(c)(4)

Not applicable; partially buried or bunkered tanks are not located at this facility.

9.2.5 Partially buried or Bunkered Tanks

40 CFR 112.8(c)(5)

Not applicable; partially buried or bunkered tanks are not located at this facility.

9.2.6 Inspections and Tests

40 CFR 112.8(c)(6)

Inspections and integrity testing of ASTs will be conducted by SRM Materials, LLC in accordance with good engineering practices and Section 8.11.1 of this Plan. Records of inspections and tests are signed by the inspector and stored at the facility for a minimum of three years.

9.2.7 Internal Heating Coils

40 CFR 112.8(c)(7)

Not applicable; bulk storage containers utilizing internal heating coils are not located at this facility.

9.2.8 Discharge Avoidance

40 CFR 112.8(c)(8)

Each bulk storage container installation is engineered or updated in accordance with good engineering practices to avoid discharges. All tanks have a fast response system for determining the liquid level of each bulk storage container. The following table shows the discharge avoidance device provided on each bulk storage container:

Table 9.2.8: Discharge Avoidance Controls

Container Number	Container Structure & Type	Storage Capacity (gal)	Discharge Avoidance
Tank 1	Double-walled steel	10,000	Spill catch box

9.2.9 Effluent Treatment Facilities

40 CFR 112.8(c)(9)

Not applicable; the facility does not operate any treatment facilities subject to this Plan.

9.2.10 Visible Discharges

40 CFR 112.8(c)(10)

The facility will correct visible discharges which result in a loss of oil from a container, including seams, gaskets, piping, pumps, valves, rivets, and bolts. The facility will remove any accumulation of oil in storage rooms.

9.2.11 Portable Storage Containers

40 CFR 112.8(c)(11)

Portable storage containers at the facility include delivery trucks and potentially small portable containers such as 55-gallon drums. Active measures, such as booms and sorbent materials, will be used to contain discharges from delivery trucks. If any 55-gallon drums are temporarily located at the facility, they will be stored inside a building where secondary containment is provided by concrete floors and active measures. If any 55-gallon drums are temporarily stored outside, the drums shall be placed on spill trays.

9.3 Facility Transfer Operations

9.3.1 Buried Piping

40 CFR 112.8(d)(1)

There will be no buried piping at the facility.

9.3.2 Terminal Connections

40 CFR 112.8(d)(2)

Piping will be capped or blank-flanged when not in service or is in standby service for an extended time.

9.3.3 Pipe Support

40 CFR 112.8(d)(3)

Pipe supports are designed to minimize abrasion and corrosion and to allow for expansion and contraction. Pipe supports are visually inspected during monthly inspections.

9.3.4 Inspection of Aboveground Valves and Piping

40 CFR 112.8(d)(4)

Aboveground piping and valves are examined monthly to assess their condition. Inspection includes aboveground valves, piping, appurtenances, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. Observations are noted on the monthly inspection checklist provided in this Plan.

9.3.5 Vehicular Warning

40 CFR 112.8(d)(5)

Warning signs are posted at appropriate locations throughout the facility to prevent vehicles from damaging aboveground piping and appurtenances. The signage shall instruct the attendant loading or unloading to examine the values, hoses, connections, fittings and lowermost drain and outlets of their vehicle for leakage prior to loading, unloading or departure.

10.0 APPLICABILITY OF SUBSTANTIAL HARM CRITERIA

40 CFR 112.20(e)

SUBSTANTIAL HARM CRITERIA CHECKLIST
(Facility Response Planning)

Laceys Spring Quarry	**SRM Materials, LLC** **off Vaughn Road** **Laceys Springs, Alabama 35754**

SUBSTANTIAL HARM CRITERIA CHECKLIST:
This checklist certifies that the facility listed above is not a Substantial Harm Facility that requires the preparation of a Facility Response Plan under the Oil Pollution Act (OPA) of 1990. By this certification, the facility is not subject to the OPA facility response planning requirements for this facility

	Yes	***No***
1. Does the facility transfer oil over water to or from vessels and does the facility have a total storage capacity greater than or equal to 42,000 gallons?		*X*
2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank?		X
3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?		X
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?		X
5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable spill in an amount greater than or equal to 10,000 gallons within the last *5* years?		X

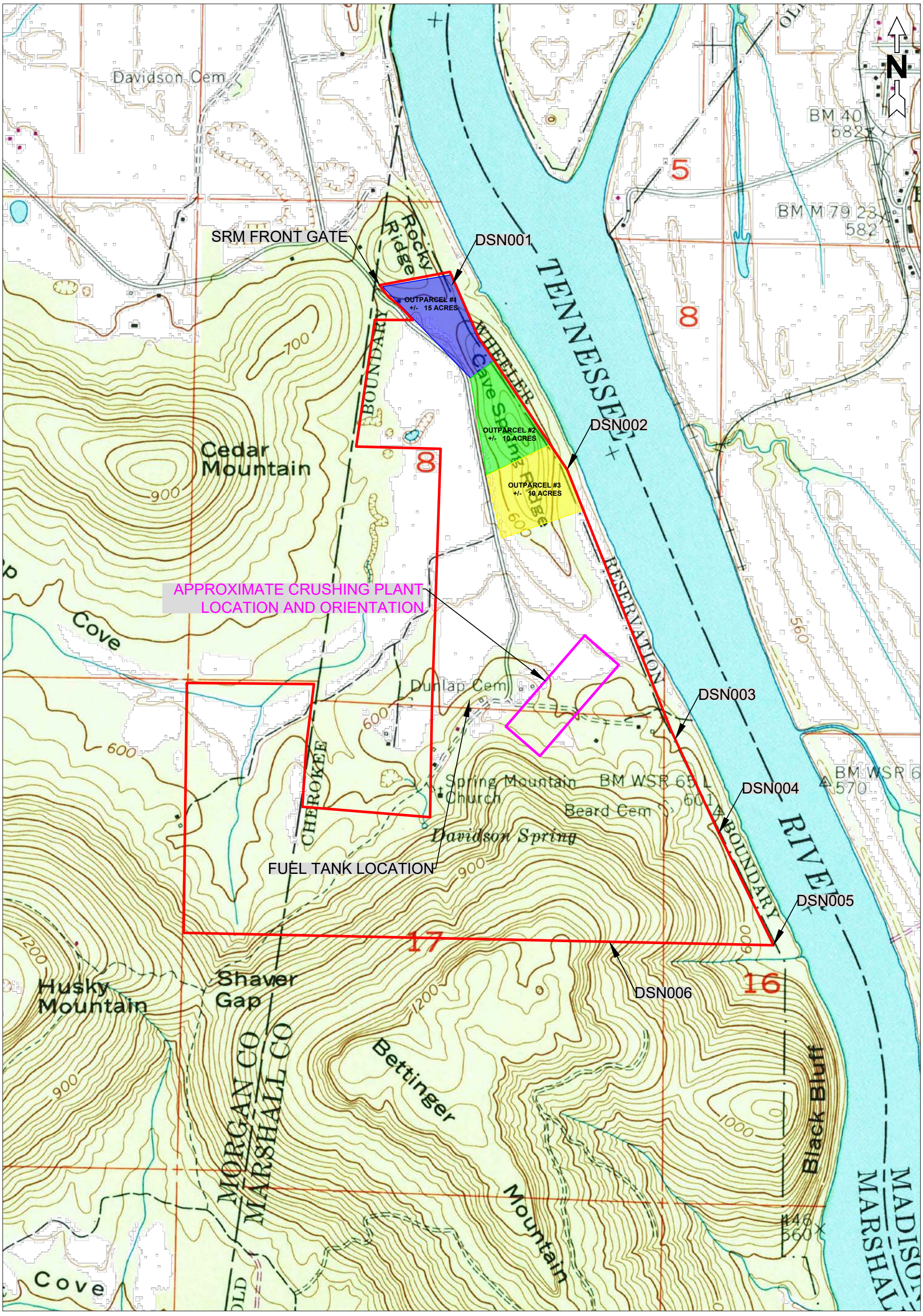
CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

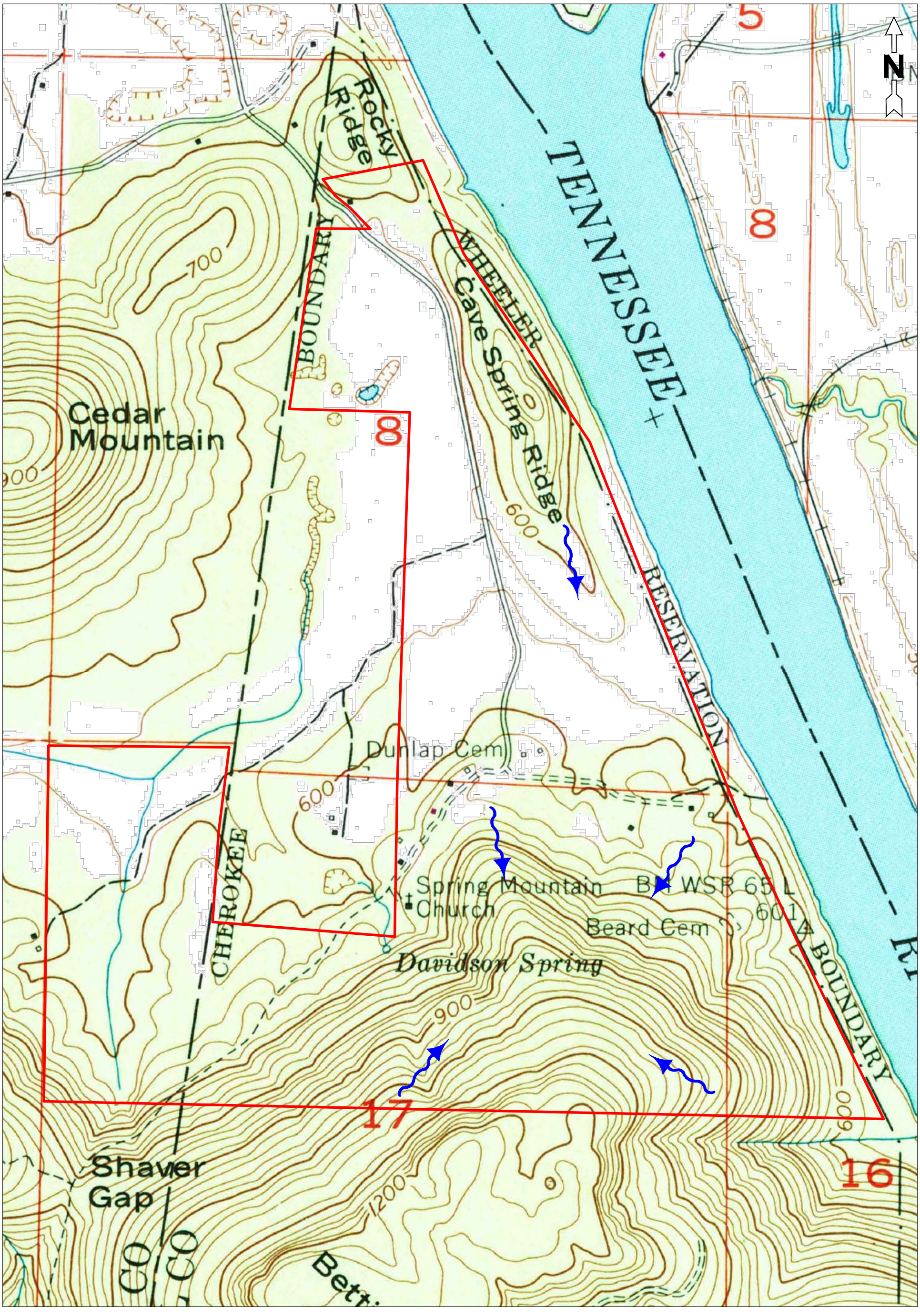
Danielle Pudvah, Chief Sustainability Officer
Name and Title of Responsible Official

_____ _____
Signature *Date*

APPENDIX A



JOB NAME: SRM MATERIALS, LLC LACEYS SPRING QUARRY LACEYS SPRING, ALABAMA T6S, R1E, S8, 16, and 17	**OMI, Inc.** 5151 Research Dr. NW Huntsville, AL 35805 Ph: (256) 837-7664 Fax: (256) 837-7677	TOPOGRAPHIC MAP	JOB NO.: 10326 DATE: 09-14-2023 SCALE: 1" = 1000' DRAWN BY: DAH DWG NO: 10326-1



JOB NAME:
SRM MATERIALS, LLC
LACEYS SPRING QUARRY
LACEYS SPRING, ALABAMA
T6S, R1E, S8, 16, and 17

OMI, Inc.
5151 Research Dr. NW
Huntsville, AL 35805
Ph: (256) 837-7664
Fax: (256) 837-7677

WATER FLOW MAP

Blue arrows indicate the direction of flow.

JOB NO.: 10326
DATE: 10-5-2023
SCALE: 1" = 700'
DRAWN BY: DAH
DWG NO: 10326-1A

APPENDIX B

STI SP001 Monthly Inspection Checklist

General Inspection Information:

Inspection Date: _____ Prior Inspection Date: _____ Retain until date: _____

Inspector Name (print): _____ Title: _____

Inspector's Signature _____

Tank(s) inspected ID Tank 10,000-gallon double-walled diesel AST

Regulatory facility name and ID number (if applicable) SRM Materials, LLC; Laceys Spring Quarry

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable). Inspections of multiple tanks may be captured on one form as long as the tanks are substantially the same.
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly or take other corrective action. Inspect the liquid for regulated products or other contaminants and dispose of properly.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- **After severe weather (snow, ice, wind storms) or maintenance (such as coating) that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required as soon as the equipment is safely accessible after the event.**

	ITEM	STATUS	COMMENTS / DATE CORRECTED
	Tank and Piping		
1	Is tank exterior (roof, shell, heads, bottom, connections, fittings, valves, etc.) free of visible leaks? **Note***: If "No", identify tank and describe leak and actions taken.*	□ Yes □ No	
2	Is the tank liquid level gauge legible and in good working condition?	□ Yes □ No □ N/A	
3	Is the area around the tank (concrete surfaces, ground, containment, etc.) free of visible signs of leakage?	□ Yes □ No	

4	Is the primary tank free of water or has another preventative measure been taken? NOTE: Refer to paragraphs 6.10 and 6.11 of the standard for alternatives for Category 1 tanks. N/A is only appropriate for these alternatives.	□ Yes □ No □ N/A	
5	For double-wall or double bottom tanks or CE-ASTs, is interstitial monitoring equipment (where applicable) in good working condition?	□ Yes □ No □ N/A	
6	For double-wall tanks or double bottom tanks or CE-ASTs, is interstice free of liquid? Remove the liquid if it is found. If tank product is found, investigate possible leak.	□ Yes □ No □ N/A	
	Equipment on tank		
7	If overfill equipment has a “test” button, does it activate the audible horn or light to confirm operation? If battery operated, replace battery if needed.	□ Yes □ No □ N/A	
8	Is overfill prevention equipment in good working condition? If it is equipped with a mechanical test mechanism, actuate the mechanism to confirm operation.	□ Yes □ No □ N/A	
9	Is the spill container (spill bucket) empty, free of visible leaks and in good working condition?	□ Yes □ No □ N/A	
10	Are piping connections to the tank (valves, fittings, pumps, etc.) free of visible leaks? **Note***: If "No", identify location and describe leak.*	□ Yes □ No	
11	Do the ladders/platforms/walkways appear to be secure with no sign of severe corrosion or damage?	□ Yes □ No □ N/A	
	Containment (Diking/Impounding)		
12	Is the containment free of excess liquid, debris, cracks, corrosion, erosion, fire hazards and other integrity issues?	□ Yes □ No □ N/A	
13	Are dike drain valves closed and in good working condition?	□ Yes □ No □ N/A	
14	Are containment egress pathways clear and any gates/doors operable?	□ Yes □ No □ N/A	
	Concrete Exterior AST (CE-AST)		
15	Inspect all sides for cracks in concrete. Are there any cracks in the concrete exterior larger than 1/16”?	□ Yes □ No □ N/A	
16	Inspect concrete exterior body of the tank for cleanliness, need of coating, or rusting where applicable. Tank exterior in acceptable condition?	□ Yes □ No □ N/A	
17	Visual inspect all tank top openings including nipples, manways, tank top overfill containers, and leak detection tubes. Is the sealant between all tank top openings and concrete intact and in good condition?	□ Yes □ No □ N/A	
	Other Conditions		
18	Is the system free of any other conditions that need to be addressed for continued safe operation?	□ Yes □ No	

Additional Comments:

STI SP001 Annual Inspection Checklist

General Inspection Information:

Inspection Date: _____ Prior Inspection Date: _____ Retain until date: _____

Inspector Name (print):_____ Title: _____

Inspector's Signature: _____

Tank(s) inspected: ID 10,000-gallon double-walled diesel tank

Regulatory facility name and ID number (if applicable): SRM Laceys Spring Quarry

Inspection Guidance:

- This checklist is intended as a model. Locally developed checklists are acceptable as long as they are substantially equivalent (as applicable).
- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector per paragraph 4.1.2 of the standard.
- Remove promptly standing water or liquid discovered in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility should regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for at least 36 months.
- Complete this checklist on an annual basis, supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

	ITEM	STATUS	COMMENTS / DATE CORRECTED
	Tank Foundation/Supports		
1	Free of tank settlement or foundation washout?	☐Yes ☐No	
2	Concrete pad or ring wall free of cracking and spalling?	☐Yes ☐No ☐N/A	

3	Tank supports in satisfactory condition?	☐Yes ☐No ☐N/A	
4	Is water able to drain away from tank if tank is resting on a foundation or on the ground?	☐Yes ☐No ☐N/A	
5	Is the grounding strap between the tank and foundation/supports in good condition?	☐Yes ☐No ☐N/A	
Tank Shell, Heads and Roof			
6	Free of visible signs of coating failure?	☐Yes ☐No	
7	Free of noticeable distortions, buckling, denting, or bulging?	☐Yes ☐No	
8	Free of standing water on roof?	☐Yes ☐No ☐N/A	
9	Are all labels and tags intact and legible?	☐Yes ☐No	
Tank Manways, Piping, and Equipment			
10	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	☐Yes ☐No ☐N/A	
Tank Equipment			
11	Normal and emergency vents free of obstructions?	☐Yes ☐No	
12	Normal vent on tanks storing gasoline equipped with pressure/vacuum vent?	☐Yes ☐No ☐N/A	
13	Are flame arrestors free of corrosion and are air passages free of blockage?	☐Yes ☐No ☐N/A	
14	Is the emergency vent in good working condition and functional, as required by manufacturer? Consult manufacturer's requirements. Verify that components are moving freely (including long-bolt manways).	☐Yes ☐No ☐N/A	
15	Is interstitial leak detection equipment in good condition? Are windows on sight gauges clear? Are wire connections intact? If equipment has a test function, does it activate to confirm operation?"	☐Yes ☐No ☐N/A	

16	Are all valves free of leaks, corrosion and other damage? Follow manufacturers' instructions for regular maintenance of these items. Check the following and verify (as applicable): □ Anti-siphon valve □ Check valve □ Gate valve □ Pressure regulator valve □ Expansion relief valve □ Solenoid valve □ Fire valve □ Shear valve	☐Yes ☐No ☐N/A ☐Yes ☐No ☐N/A ☐Yes ☐No ☐N/A ☐Yes ☐No ☐N/A ☐Yes ☐No ☐N/A ☐Yes ☐No ☐N/A ☐Yes ☐No ☐N/A	
17	Are strainers and filters clean and in good condition?	☐Yes ☐No ☐N/A	
Insulated Tanks			
18	Free of missing insulation? Insulation free of visible signs of damage? Insulation adequately protected from water intrusion?	☐Yes ☐No ☐N/A	
19	Insulation free of noticeable areas of moisture?	☐Yes ☐No ☐N/A	
20	Insulation free of mold?	☐Yes ☐No ☐N/A	
21	Free of visible signs of coating failure?	☐Yes ☐No ☐N/A	
Tank / Piping Release Detection			
22	Is inventory control being performed and documented if required?	☐Yes ☐No ☐N/A	
23	Is release detection being performed and documented if required?	☐Yes ☐No ☐N/A	
Other Equipment			
24	Are electrical wiring and boxes in good condition?	☐Yes ☐No ☐N/A	
25	Has the cathodic protection system on the tank been tested as required by the designing engineer?	☐Yes ☐No ☐N/A	

Additional Comments:

APPENDIX C

APPENDIX C
Spill Reporting Form

Part A: Discharge Information	
General information: SRM Materials, LLC; Laceys Spring Quarry Name: Address: Telephone:	
Type of oil:	Discharge Date and Time:
Quantity released:	Discovery Date and Time:
Quantity released to a waterbody:	Discharge Duration:
Location/Source:	
Actions taken to stop, remove, and mitigate impacts of the discharge:	
Affected media: ☐ air ☐ water ☐ soil	☐ storm water sewer/POTW ☐ dike/berm/oil-water separator ☐ other: _____
Notification person:	Telephone contact: Business: 24-hr:
Nature of discharges, environmental/health effects, and damages: Injuries, fatalities or evacuation required?	

APPENDIX D

CLARK WELDING SERVICE
Remit to:
369 Callahan Ave
Appalachia, VA 24216

Phone # 276-565-3607 **Fax #** 276-565-2550

Date	Invoice #	Terms	Due Date
5/13/2021	16056		5/13/2021

Customer P.O. #	SRM HUNTSVILLE
Product Serial #	C-052103

Bill To

JAT Oil & Supply, Inc.
P.O. Box 5288
Chattanooga, TN

Ship To

HUNTSVILLE, AL

SRM

Item Code	Description
SCTK-10000	10,000 Gallon above ground self-contained horizontal UL-142 storage tank on 8" H-Beam skids. Inner Tank: 96" Diameter x 320" L (UL-142) Outer Containment: 108" W x 360" L x 66"H Mild Carbon Steel. Thickness: Inner Tank - 1/4" Outer Containment - 3/16" Bottom with 10GA Walls 24" Manway in inner tank. (5) 4" FNPT openings for accessories in tank. (1) 8" FNPT Opening for emergency vent in inner tank. (2) 6" FNPT Openings for emergency vents in outer containment. (2) 3" Atmospheric vents (1) in inner tank (1) in outer containment. Openings for monitoring and drain in outer containment. Lifting lugs on top. Pull eyes in skids. Overfill chamber. Diverts overfilled product into secondary containment. Secondary containment accommodates 110 - 120% of the tank's capacity, is fully enclosed, rain-shielded and seal welded (not open top). Exterior Coating: Red oxide primer. (Paint optional)
NOTE	Pre-owned inner tank, NEW outer, secondary containment. $6,545 savings from a complete new tank. - Price of new tank is $29,649. Pre-owned tanks pass a thorough, stringent integrity check, ensuring that they are adequate for customer use. Tanks meet UL142 standard. Tanks are thoroughly cleaned and tested at the beginning and end of the project. Clark Welding provides the same warranty with pre-owned/ refurbished tanks, as a new tank.
PRI-PAINT	Painted TBD
PLAELEC	6'W x 4'D Platform on end of tank for equipment
	TYPICAL OPTIONS (DEDUCT IF NOT NEEDED)
200TG	OPW 200TG Level Gauge - Reads in Feet & Inches
EVENT8	8" Threaded male emergency vent - 1 - inner tank

Thank you for your business.

CLARK WELDING SERVICE

Remit to:
369 Callahan Ave
Appalachia, VA 24216

Phone # 276-565-3607 **Fax #** 276-565-2550

Date	Invoice #	Terms	Due Date
5/13/2021	16056		5/13/2021

Customer P.O. #	SRM HUNTSVILLE
Product Serial #	C-052103

Bill To

JAT Oil & Supply, Inc.
P.O. Box 5288
Chattanooga, TN

Ship To

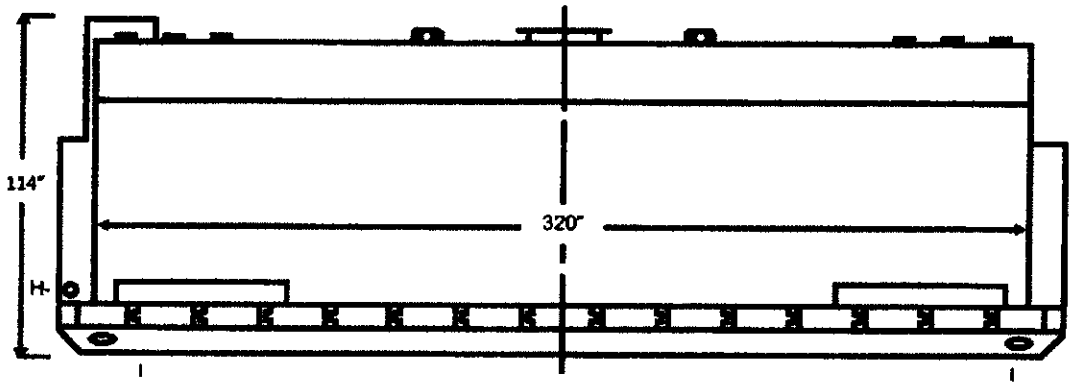
HUNTSVILLE, AL

Item Code	Description
EVENT6	6" Threaded male emergency vent - 2 - outer containment
LADDER	Vertical Straight Access Ladder - No Landing Platform - Painted Safety Yellow
LP3-96	3" Fill pipe with ball valve, check valve, cam and cap for loading with transport trailer.
BOXLP	OPTIONAL: Spill catch box for 3" fill
NOTE	Dispensing equipment / pump not quoted
RPM	Freight/ Delivery - Huntsville, AL
	SUBTOTAL
	25% Deposit due at time of order
NOTE	Remaining 75% to be billed upon delivery

Thank you for your business.

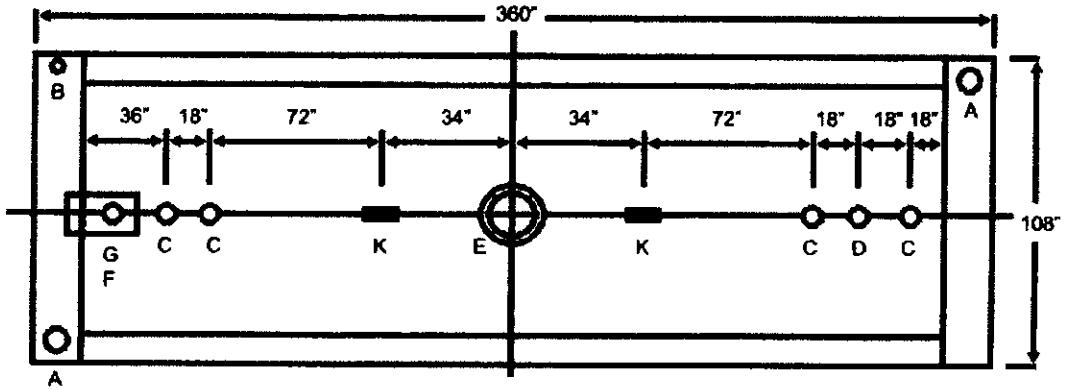
ALL PAST DUE ACCOUNTS ARE SUBJECT TO A SERVICE CHARGE OF 1.5 % PER MONTH.
CASH, CHECK AND ALL MAJOR CREDIT CARDS ACCEPTED. ADDITIONAL FEES MAY APPLY.

SIDE

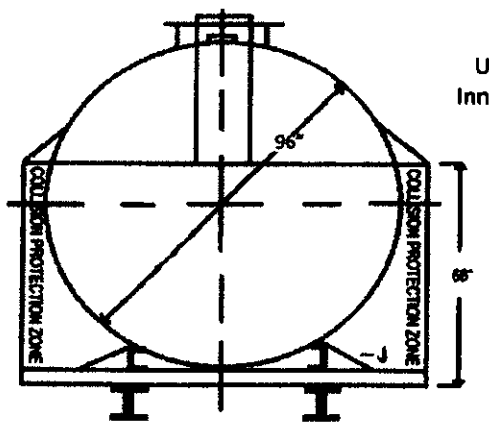


8" I Beam Skids

TOP



END



UL-142
Inner Tank

SPECIFICATIONS	
OPERATING PRESSURE	ATMOSPHERIC
SPECIFIC GRAVITY	1.0
TANK MATERIAL	MILD CARBON STEEL
THICKNESS - INNER THICKNESS - OUTER	HEADS: 1/4" SHELL: 5/16" BOTTOM: 3/16" WALLS: 10GA
CONSTRUCTION	INNER - LAP WELD OUTSIDE ONLY OUTER - LAP WELD OUTSIDE ONLY
TANK TEST	INNER - 5 PSIG OUTER - 2 PSIG AND FULL VACUUM
INT. FINISH	NONE
EXT. FINISH	SHOP PRIMER

A. 6" FNPT Emergency Vent Opening Through Secondary Containment Only
B. 2" Vent
C. 4" FNPT Opening
D. 6" FNPT Opening for Fill
E. 18" Loosebolt Primary Tank Emergency Vent Manway
F. Overfill Collector Box
G. 4" Primary Tank Vent
H. Drain
I. Pull Eye
J. Tank Support
K. Lifting Lugs

CLARK
WELDING SERVICE

10,000 GALLON ABOVE GROUND HORIZONTAL 110% + CAPACITY SELF CONTAINED SKID TANK

APPENDIX E

APPENDIX E
Record of Annual Discharge Prevention Briefings and Training

Briefings will be scheduled and conducted by the facility owner or operator for operating personnel at regular intervals to ensure adequate understanding of this SPCC Plan. The briefings will also highlight and describe known discharge events or failures, malfunctioning components, and recently implemented precautionary measures and best practices. Personnel will also be instructed in operation and maintenance of equipment to prevent the discharge of oil, and in applicable pollution laws, rules, and regulations. Facility operators and other personnel will have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

Date	Subjects Covered	Employees in Attendance	Instructor(s)

1. Land Application **is not a viable** option due to the increased costs associated with the design, construction, operation, and maintenance of a pumping and spraying system. Once mining operations begin, the area of the pit and the quantity of captured stormwater will increase, while the available area for land application will be reduced.

2. Pretreatment of discharge to a Publicly Owned Treatment Works (POTW) **is not a viable option** due to the absence of an available POTW within a reasonable distance from the proposed facility. The nearest treatment facility, South Parkway Water Treatment Plant, is operated by the City of Huntsville and is approximately six miles from the proposed facility.

3. Relocation of discharges from the proposed facility **is not a viable option** because the proposed facility will create an incised pit as mining operations proceed. The outfalls associated with Outparcels 1, 2, and 3 are located at natural low points within the drainage basin(s).

4. Reusing/recycling stormwater from the facility **is a viable option**, as stormwater runoff will be routed to the incised pit and/or treatment basins. Accumulated stormwater will then be used for dust suppression and for washing out concrete trucks. Only during periods of major rainfall events will any stormwater runoff be pumped from the incised pit to the treatment basins and eventual discharge.

5. Due to the nature of the mining activity, there are **no viable process alternatives**. Treatment alternatives planned for the site are based on the Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas, as well as accepted industry practices as designed by a Professional Engineer in the state of Alabama.

6. On-site/Subsurface disposal **is not a viable option** due to increased costs associated with the study, design, construction, and the long-term operation and maintenance of an underground injection well. If subsurface disposal was to be utilized, blasting operations necessary for mining to proceed could alter the stability of the formation, leading to the water re-entering the active mining area.

POLLUTION ABATEMENT & PREVENTION PLAN

SRM LACEYS SPRING QUARRY
OFF VAUGHN ROAD
LACEYS SPRING, ALABAMA 35754
MARSHALL COUNTY

for

SRM MATERIALS, LLC
1000 HOLLINGSHEAD CIRCLE
MURFREESBORO, TENNESSEE 37129

PREPARED BY

OMI, INC.
5151 RESEARCH DRIVE, SUITE A
HUNTSVILLE, ALABAMA 35805

January 24, 2024

OMI Job No. 10326

Pollution Abatement and/or Prevention Plan (PAPP)
Laceys Spring Quarry
SRM Materials, LLC
OMI Job#: 10326

Table of Contents

Appendices

APPENDIX A –FIGURES

Topographic Map - OMI Drawing No. 10326-1
Water Flow Map – OMI Drawing No. 10326-2
Outparcel Map – OMI Drawing No. 10326-3
Figure 1 – Schematic Diagram for Crushing and Screening with Wet Preparation

APPENDIX B – BMP TYPICALS

Sediment Basin
Construction Entrance
Preservation of Vegetation
Buffer Zone
Mulching, Temporary & Permanent Seeding
Silt Fence
Check Dam
Diversions

APPENDIX C – Sediment Basin Design – prepared by Brian Lee, PE with Adams Construction and Associates (ACAI); provided by Mr. Dale Cathey with SRM Materials, LLC

I. INTRODUCTION

OMI, Inc. (OMI) has prepared this Pollution Abatement and Prevention Plan (PAPP) for the Laceys Spring Quarry (Facility) located within an unincorporated area of Morgan and Marhsall Counties, Alabama. The Facility is applying for an Alabama Department of Environmental Management (ADEM) National Pollutant Discharge Elimination System (NPDES) Individual Permit (herein after the "Permit") for discharges from mining and processing (wet or dry) of limestone and areas associated with these activities. ADEM Admin. Code r. 335-6-9-.03 requires all surface mining operations to be conducted "…in such a manner as to minimize their impact on water quality to avoid contravention of applicable water quality standards. To this end, all surface mine operators shall provide the Department with a pollution abatement and/or prevention plan."

This PAPP is formatted following the outline given in ADEM Administrative Code Chapter 335-6-9-.03 (2) (a)-(k). Drawings, as presented in this PAPP, were derived from the rules and regulations of the ADEM Administrative Code R. 335-6-9, Appendix A, Appendix B, and from the *Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas Manual Volume 1, 2022*, published by the Alabama Soil and Water Conservation Committee, as well as other generally accepted design data sources.

II. OWNER/OPERATOR INFORMATION

According to the respective county GIS parcel information maps, the site is in Sections 8, 16, and 17 in Township 6 South, Range 1 East as shown on the United States Geological Survey (USGS), New Hope, Alabama Quadrangle, 7.5 min. Topographic map in Appendix A (OMI Drawing No. 10326-1). Entrance to the site is located off Vaugn Road, approximately 0.2-mile south of the intersection with McCutcheon Loop Road. Approximate front gate coordinates are 34.534476° north latitude, and -86.553832° west longitude (WGS84). Landowners of the property are as follows:

APA Enterprises, LLC

111 Holston Drive

Guntersville, AL 35976

SRM Materials, LLC (SRM) is the operator that will be conducting mining activities at the Facility. Contact information for individuals with SRM is included below.

Dale Cathey, Vice President of Aggregates
1000 Hollingshead Circle
Murfreesboro, Tennessee 37129
(615) 490-4661
dcathey@smyrnareadymix.com

Danielle Pudvah, Chief Sustainability Officer
1000 Hollingshead Circle
Murfreesboro, Tennessee 37129
(615) 471-4180
dpudvah@smyrnareadymix.com

III. GENERAL INFORMATION

The Facility will typically operate six days a week from 6:00 am to 6:00 p.m. Variations in schedule may be a result of acquisition of large volume orders requiring more production and extended hours of operation or weather, equipment breakdowns, and adequate stockpile quantities requiring less hours. This site will initially employee fourteen people to establish and operate the quarry. Once the operation is at full capacity, as many as twenty employees will be on site throughout the day.

SRM will quarry limestone and a small quantity of sandstone. Once permit coverage has been finalized, work will begin on site to clear trees from the three outparcels near the entrance, as well as in the area associated with the crushing plant as shown on OMI Drawing No. 10326-1 in Appendix A. Mining of material will begin south of the crushing plant and will continue to the south toward the permit boundary.

Mined material will pass through three crushers and three screens to produce assorted sizes of rock that will be sold and transported by trucks to various construction sites in Alabama and Mississippi.

Water for the Facility's dust suppression system and wash plant will be obtained from the collected stormwater contained within the active pit.

A Notice of Intent (NOI) is currently being prepared for coverage underneath Industrial General Permit ALG110000 for discharges associated with the operation of a concrete batch plant that will be located on Outparcel Three as shown on the Outparcel Map, OMI Drawing No. 10326-3 in Appendix A.

IV. TOPOGRAPHIC MAP

OMI Drawing No. 10326-1 in Appendix A shows an overall topographic map of the proposed site and includes the plant location, fuel tank location, and DSN001.

V. METHOD OF DIVERTING SURFACE WATER RUNOFF

A sediment basin has been designed to provide treatment for stormwater generated during preliminary land disturbance activities. Active mining of limestone will create additional areas that allow stormwater to collect and stay within the active pit. These small settling ponds capture runoff so that the water can be recycled through the plant. Each settling pond, as well as the designed sediment basin, will be monitored to ensure that it continues to function as constructed. SRM does not plan or anticipate a discharge to surface water, as accumulated stormwater is needed for operations on site.

Any runoff from minor areas of disturbance on site that is not directed towards the sediment basin or into the active mining pit will have effective Best Management Practices (BMPs) put in place and maintained until areas are permanently stabilized. BMPs will be selected and maintained according to the *Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas Manual Volume 1, 2022*, published by the Alabama Soil and Water Conservation Committee.

VI. RAW MATERIALS, PROCESSES AND PRODUCTS

Limestone and a small percentage of sandstone will be mined at this Facility. The rock will initially be mined by drilling, blasting, and loading into a portable jaw crusher which will then feed the crushed rock through a portable screen. Most of this rock will be used for BMPs while site preparations are underway to prepare the location of the permanent plant.

After completion of the initial BMPs and the construction of the permanent plant, the blasted rock will be loaded onto offroad trucks and dumped into a stationary jaw plant. From this jaw plant, the material will travel along a series of conveyors into additional crushers and screens, (see attached proposed plant layout Figure 1 in Appendix A). The material will then be conveyed into stockpiles, loaded on dump trucks, and hauled to various construction sites around Alabama and Mississippi.

Rock sizes shall include various classes of rip rap, surge rock, 1 ½" base, 3/4" base, limestone sand, #78 stone, and #67 stone. There should be no points of waste origin at the plant site except where the wash plant water flows back into the sump in the active pit. The collection of this sediment will be removed as needed. The sediment will be placed in the spoil piles or mixed with the base products.

VII. SCHEMATIC DIAGRAM

A Schematic Diagram for Crushing and Screening with Wet Preparation can be found in Appendix A.

VIII. POST TREATMENT QUANTITY AND QUALITY OF EFFLUENT

Mining will create low areas within the active pit that provide areas where stormwater collects, and suspended solids are allowed to settle. As more material is removed and the active pit increases in size, settling time will also increase, providing more treatment time to allow solids to settle out. As

discussed in Section V, stormwater collected in the active pit will be used on site. There should be no surface water discharge associated with the pit. The pH of the effluent must be between 6.0su and 8.5su, as required by ADEM Admin. Code 335-6-10-.09(2)(e)2 for waters classified as Public Water Supply (PWS).

IX. WASTE TREATMENT FACILITIES

As stated in Section V, runoff from the site will be directed into the active mining pit. This water will supply the dust suppression system and be used to wash out concrete trucks. In the event a surface discharge becomes necessary, water from the pit will be pumped to the designed sediment basin associated with DSN001.

Sediment controls will be constructed per Appendix A of the Surface Mining Rules found in ADEM Admin. Code 335-6-9. Removal of solids from treatment structures will occur as needed. As material is dampened through wet suppression or a washing operation, the sediment-laden runoff will be diverted into the active mining pit. The sediment is allowed to fall to the bottom of a pond within the pit; water will be allowed to leave the pit by pumping or gravity. The pond within the pit will be cleaned out prior to sediment accumulation reaching 60% of the capacity of the pond. Sediment removed from the pond will be utilized on site. This process will continue throughout the life of the quarry. Based on the initial geologic study, the quarry has an expected life of more than 50 years.

X. SEDIMENT CONTROLS FOR HAUL ROADS

Haul roads will have a sustained grade of 10% or less, with the outer slopes no steeper than 3:1. Haul roads will be mostly on solid rock. Where haul trucks leave solid rock and are on earthen soil, these roads will drain back to the solid rock channels and into the settlement ponds. The surface of the earthen haul roads should be topped with a graded surge size rock; side slopes of the haul roads will be grassed or rocked.

XI. WATER USE CLASSIFICATION

The Facility is located within the Tennessee River watershed, with DSN001 discharging to the Tennessee River. According to the Water Quality Layer (2022) found on ADEM's ArcGis website, this segment of the Tennessee River is classified as Fish and Wildlife (F&W) and PWS. This segment of the Tennessee River is also on the 2022 Alabama §303(d) List for nutrient impairment due to agriculture. Nutrients are not a pollutant of concern resulting from the mining of limestone.

XII. NON-POINT SOURCE POLLUTION

All disturbed areas will be graded so that the drainage will enter the designed sediment basin or the active mining pit. As such, non-point sources of pollution do not result from this project. Any runoff from minor areas of disturbance on site that is not directed toward the sediment basin or mining pit will have effective BMPs put in place. BMPs shall be maintained until areas are permanently stabilized.

XIII. SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

A Spill Prevention Control & Countermeasures Plan is provided under separate cover.

XIV. RUNOFF CALCULATIONS

Runoff calculations are included with the sediment basin design details in Appendix C.

XV. RECLAMATION PROCEDURE

As mining activities are completed, the area will be top-dressed to eliminate any piles of dirt, stone, or low areas. The pit area will be utilized as a pond/lake for recreational purposes. During reclamation, measures such as hay bales, riprap, and other BMPs will be utilized as needed to minimize erosion.

XVI. BMPs

Please see Section V for information regarding the designed sediment basin, as well as other BMPs that will be used at the Facility.

XVII. RECLAMATION PROCEDURES

The owner shall provide and maintain temporary erosion and sediment controls designed to protect the site from soil erosion, as well as to provide protection of adjacent properties and waters from damage by sediment transport and deposition during land disturbance activities. Stabilization measures will be implemented pursuant to the *Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas Manual Volume 1, 2022*, published by the Alabama Soil and Water Conservation Committee.

Permanent erosion control shall be implemented as soon as areas of temporary erosion control are no longer needed. This pit could be active for many decades.

XVIII. SETBACKS/BUFFERS

The permitted boundary was purposefully selected to incorporate setbacks from nearby waters. An unnamed tributary (UT) to the Tennessee River is shown on the USGS Farley Quadrangle (2020) in the southeast portion of the permitted area. Prior to any disturbance in this area, the UT will be field-verified and a buffer of a minimum of 50-ft will be established. Davidson Spring is also shown on the Farley Quadrangle and will be field-verified so that a buffer of a minimum of 50-ft will be established. This spring is outside the permitted boundary and flows into a closed depression that does not appear to provide a surface connection to the Tennessee River. Markers for encroachment will include, but will not be limited to, flagging, spray paint, and silt fence.

XIX. PE CERTIFICATION (KAYLOR)

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

Name: Keith A. Kaylor, PE	Email: kkaylor@omi-eng.com
Address: 5151 Research Drive NW, Suite A	AL Registration Number: 23588
City, State, Zip Code: Huntsville, AL 35805	Phone Number: (256) 837-7664

Signature: Keith Kaylor Date: 01/25/2024

XIX. PE CERTIFICATION (LEE)

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

Name: Brian F. Lee, PE	Email: Brian@ACAIConstruction.com
Address: 6053 Stage Road	AL Registration Number: 35977
City, State, Zip Code: Auburn, AL 36832	Phone Number: (334) 521-5320

Signature: 

Date: 02/06/2024

APPENDIX A

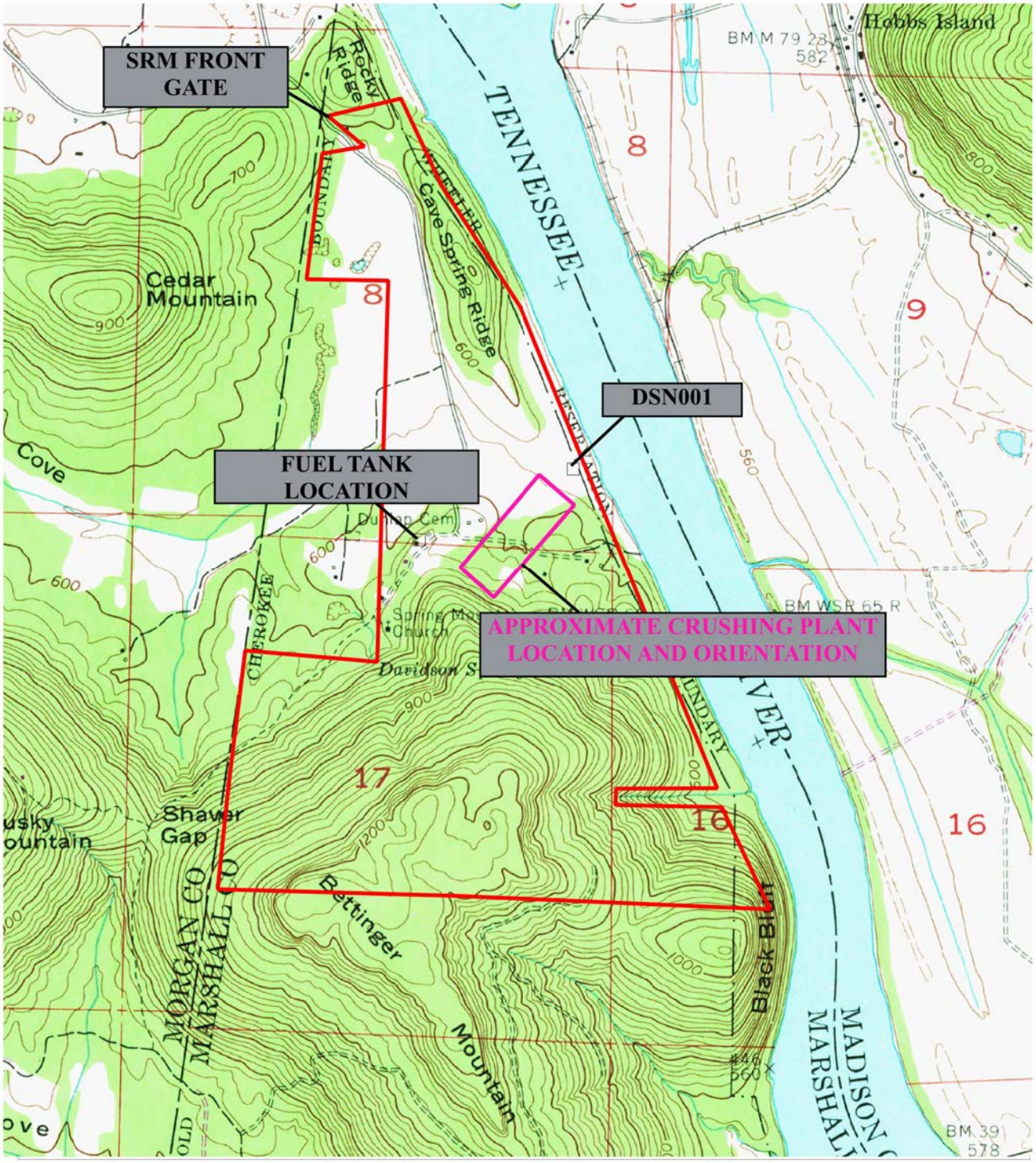
FIGURES

OMI, Inc.

5151 Research Dr. NW
Huntsville, AL 35805

PH: (256) 837 - 7664

FAX: (256) 837 - 7677



BASEMAP: USGS TOPOGRAPHIC MAP 2023

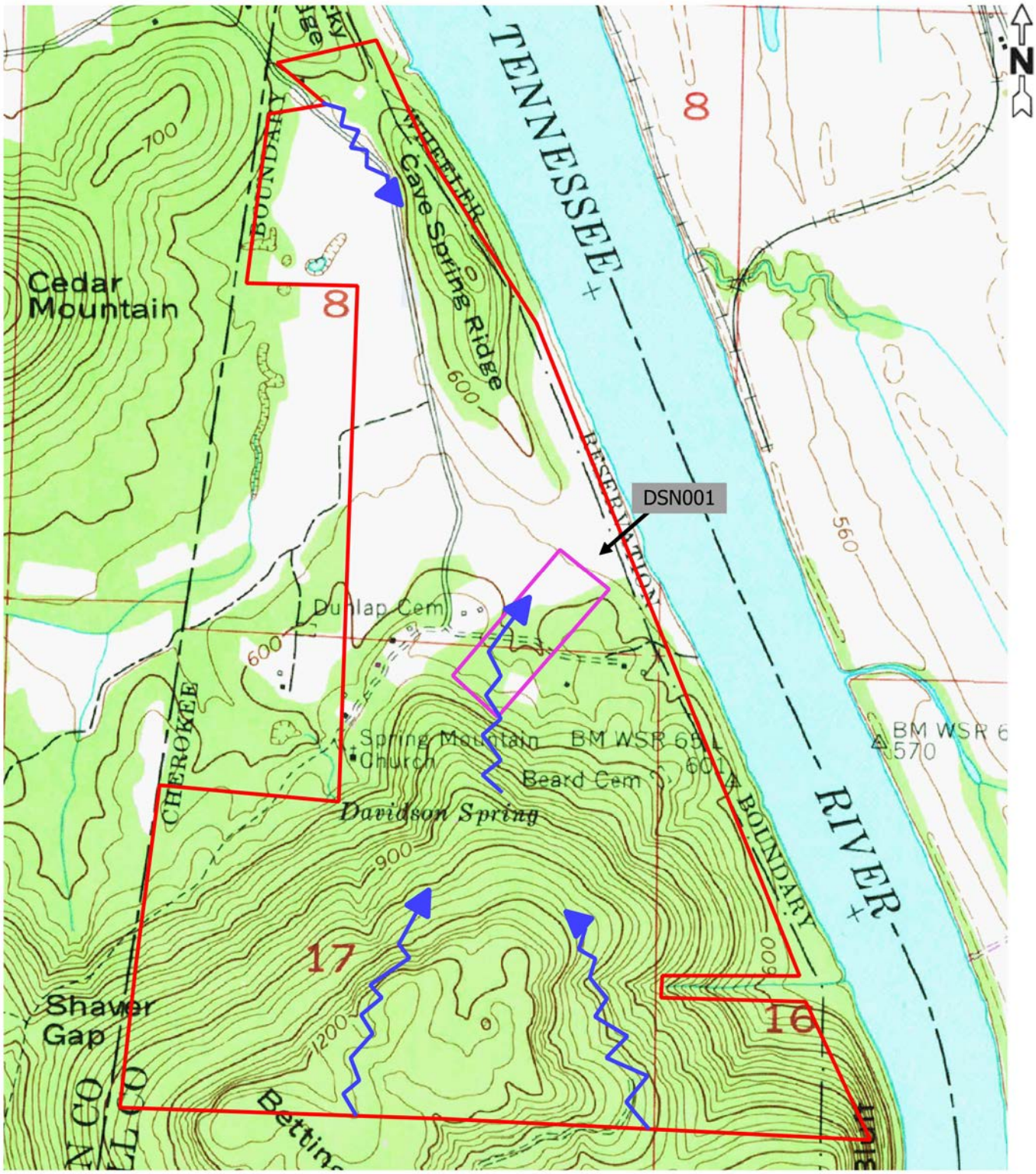
PROJECT NAME: SRM MATERIALS QUARRY LACEYS SPRING QUARRY LACEYS SPRING, ALABAMA T6S, R1E, S8,16, and 17	WATER FLOW MAP OMI DRAWING NO: 10326-1	JOB NO: 10326 DATE: 02/21/2024 SCALE: 1" = 2000' DRAWN BY: HLN

OMI, Inc.

5151 Research Dr. NW
Huntsville, AL 35805

PH: (256) 837 - 7664

FAX: (256) 837 - 7677



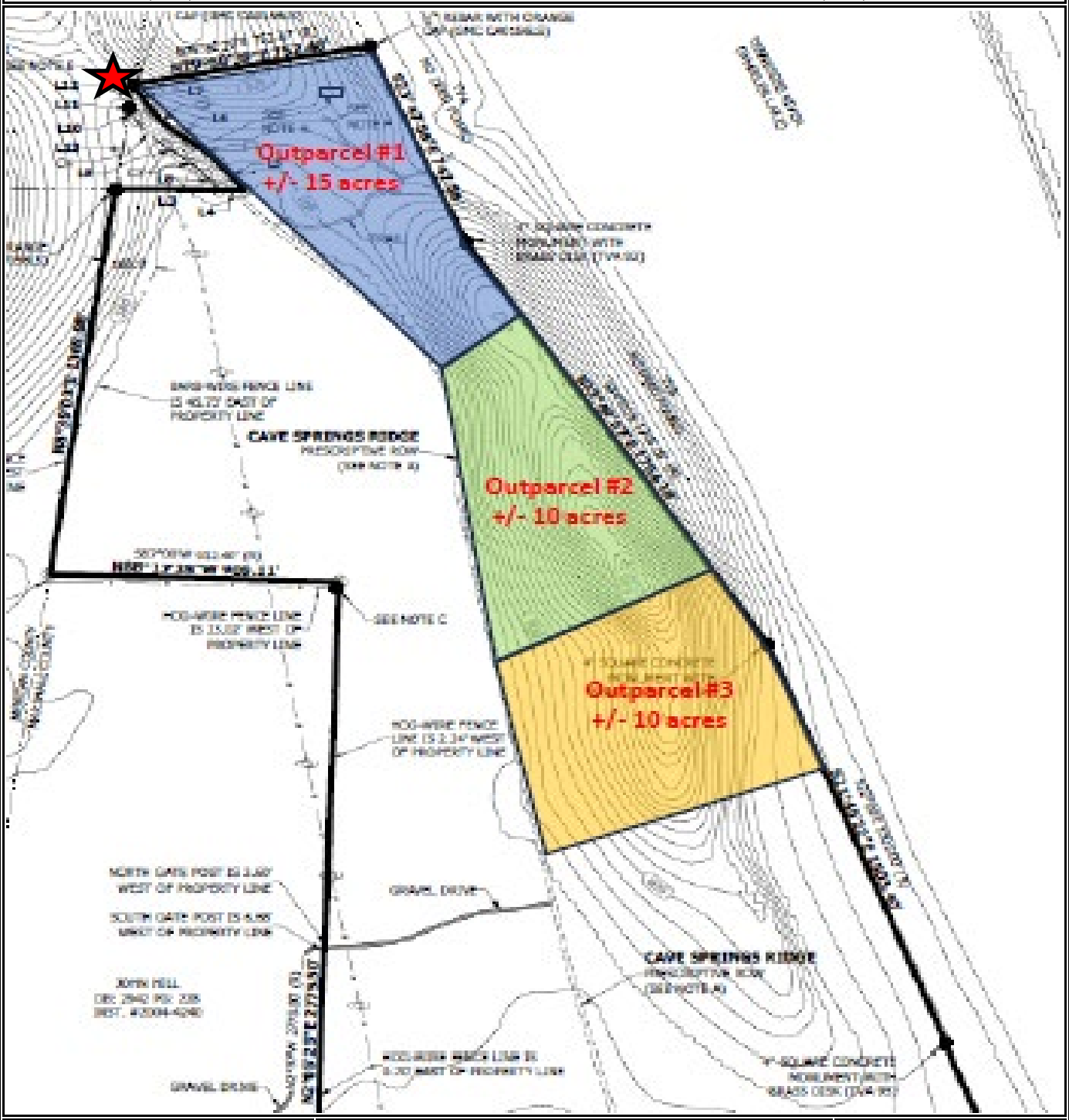
SOURCE: USGS TOPOGRAPHIC MAPS 2023

Job Name: SRM MATERIALS QUARRY LACEYS SPRING QUARRY LACEYS SPRING, ALABAMA T6S, R1E, S8,16, and, 17	WATER FLOW MAP OMI DRAWING NO. 10326-2 BLUE ARROWS INDICATE DIRECTION OF FLOW	Job No:10326 Date: 2/27/2024 Scale: 1" =1,166' Drawn By HLN

OMI, Inc.

5151 Research Drive
Huntsville, AL 35805

PH: (256) 837-7664 FAX: (256) 837-7677



JOB NAME:
SRM Materials, LLC
Laceys Spring, Alabama

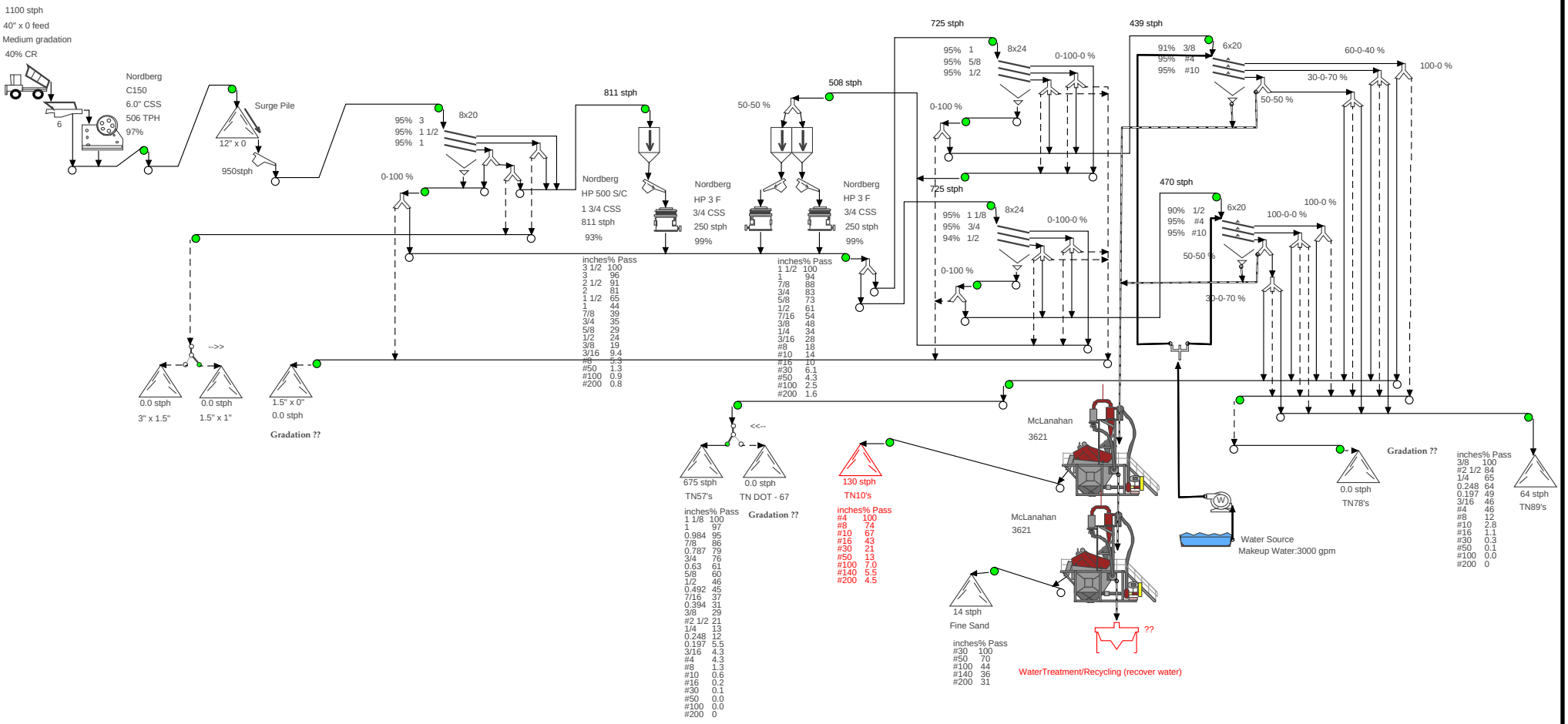
★ Front Gate

Outparcel Map

Drawing No.: 10326-3

Job No.: 10326
Date: 01/25/2024

Figure 1 - Schematic Diagram for Crushing and Screening with Wet Preparation



Mode: Mode 6-950 TPH-57's, 89's, 10's, fines

As provided by Dale Cathey with SRM.

Calculation results may differ due to variations in operating conditions and application of crushing and screening equipment. This information does not constitute an express or implied warranty, but shows results of calculations based on information provided by customers or equipment manufacturers. Use this information for estimating purposes only.

All calculations performed by AggFlow. http://www.AggFlow.com

Process Machinery, Inc.

SRM-Alabama River Plant

David H. Miles

Plant Stage #1: Page #1

Date: August/25/2023

APPENDIX B

BMP TYPICALS

Buffer Zone (BZ)

Practice Description

A buffer zone is a strip of plants adjacent to land-disturbing sites or bordering streams, lakes, and wetlands which provides streambank stability, reduces scour erosion, reduces storm runoff velocities and filters sediment in stormwater. This practice applies on construction sites and other disturbed areas that can support vegetation and can be particularly effective on floodplains, next to wetlands, along stream banks and on steep, unstable slopes.

Typical Components of the Practice

- Preservation and Protection of Existing Vegetation
- Site Preparation
- Soil Amendments (lime and fertilizer)
- Planting Desired Vegetation
- Mulching
- Maintenance

Installation (Preservation)

Prior to start of construction, buffer zones should be designed by a qualified design professional. Plans and specifications should be referred to by field personnel throughout the installation process.

Preserve vegetation on designated areas shown in plan. In the absence of a plan, maintain a buffer of existing vegetation with a minimum width for shoreline or stream bank protection of at least 35 feet. Local ordinances may require a wider buffer. Narrower buffer zones may be sufficient on steep slopes that are narrower than 35 feet.

Installation (Plantings)

Prior to start of construction, buffer zones should be designed by a qualified design professional. Plans and specifications should be referred to by field personnel throughout the installation process.

Site Preparation

Install planned measures such as silt fences and diversions before grading and seedbed preparation. In the absence of a plan and before grading and seedbed preparation, install other necessary measures which may include silt fences and diversions. Clear area of clods, rocks, etc. that would interfere with seedbed preparation; smooth the area before the soil amendments are applied and firm the soil after the soil amendments are applied.

Soil Amendments (lime and fertilizer)

Apply lime and fertilizer according to the plan or by soil test recommendations. In the absence of a plan or soil test recommendations, apply agricultural limestone at the rate of 2 tons per acre (90 lbs per 1000 ft^2.) and 10-10-10 fertilizer at the rate of 1000 lbs per acre (25 lbs per 1000 ft^2.). Apply ground agricultural limestone unless a soil test shows pH of 6.0 or greater. Incorporate amendments to a depth of 4” to 6” with a disk or chisel plow.

Planting Desired Vegetation

Plant desired vegetation according to the design plan. In the absence of a plan use installation guidelines for Permanent Seeding, Tree Planting on Disturbed Areas, or Shrub, Vine and Groundcover Planting.

Mulching

Spread mulch according to guidelines in the Mulching practice.

Common Problems

Consult with qualified design professional if any of the following occur:

- Soil compaction can prevent adequate plant growth. Compaction should be addressed during site preparation.

- Design specifications for plants (variety, seeding/planting dates) and mulch cannot be met; substitutions may be required. Unapproved substitutions could lead to failure.

Problems that require remedial actions:

- Erosion, washout and poor plant establishment – repair eroded surface, reseed, reapply mulch and anchor.

- Mulch is lost to wind or stormwater runoff – reapply mulch and anchor.

Maintenance

Replant trees, grass, shrubs or vines where needed to maintain adequate cover for erosion control. Maintain grass plantings with periodic applications of fertilizer and mowing.

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Check Dam (CD)

Practice Description

A check dam (also referred to as a "ditch check") is a barrier constructed across a conveyance to impound water for the purpose of velocity reduction by flattening the flow gradient and reducing shear stress within the channel. This practice applies in small open channels and drainageways, including temporary and permanent swales.

Check dams are not to be used in a live stream. Situations of use include areas in need of protection during establishment of grass and areas that cannot receive a temporary or permanent non-erodible lining for an extended period.

Typical Components of the Practice

- Site Preparation
- Materials Installation
- Erosion and Sediment Control
- Construction Verification
- Maintenance

Construction

Prior to start of construction a qualified design professional should determine the location, elevation, and size of the structure to optimize flattening of channel grade. Usually, check dam dimensions are taken from a standard drawing. Check dams are typically constructed using materials specified in a contract which

could be rock, wattles, sand bags, or other suitable material, including manufactured products. Most check dams are constructed of rock.

Site Preparation

Determine location of any underground utilities.

Locate and mark the site for each check dam in strategic locations (to avoid utilities and optimize effectiveness of each structure in flattening channel grade).

Remove debris and other unsuitable material which would interfere with proper placement of the check dam materials.

In highly erosive soil conditions it may be specified to excavate a shallow keyway (12"-24" deep and at least 12" wide) across the channel and into each abutment for each check dam. For other soils, geotextile alone without a keyway is often used on the soil.

Materials Installation

For all check dams on compacted soil, install a non-woven geotextile fabric underlayment that extends at least 3 feet up and downstream of the check dam. Bury the upstream edge of the geotextile underlayment, staple it to the trench bottom, and place compacted backfill in the trench. Ensure the geotextile is secured by stapling along its edges.

Always ensure that water flows over and not around the check dam.

Rock Check Dam. Construct the dam of the class riprap specified with a minimum 2:1 side slopes. Position rock to form a parabolic top, perpendicular to channel flow, with the center portion at the elevation shown in the design so that the flow goes over the structure and not around the structure. Small graded aggregate and/or geotextile may be specified on the upstream face of the rock check dam to increase the sediment trapping efficiency.

Wattle Check Dam. Place the specified wattle in a parabolic shape to ensure water flows over and not around the wattle. Staple the wattle in place with sod staples on approximate 6-inch centers on each side of the wattle to prevent flotation, and place wooden stakes over the top in a non-destructive tee-pee fashion.

Silt Fence Check Dam. Construct the silt fence check dam in an upstream "V" configuration and notch the silt fence as shown on the plans.

Sand Bag Check Dam. Ensure the sand bags are properly oriented in each layer as shown on the plans.

Erosion and Sediment Control

Install vegetation (temporary or permanent seeding) or mulching to stabilize other areas disturbed during the construction activities.

Construction Verification

Check finished size, grade and shape for compliance with standard drawings and materials list (check for compliance with specifications if included in contract specifications).

Common Problems

Consult with a qualified design professional if any of the following occur:

- Variations in topography on site indicate check dam will not function as intended. Change in plan will be needed.
- Materials specified in the plan are not available.

Maintenance

Inspect the check dam for material displacement and abutments for erosion around the ends of the dam after each significant rainfall event. Repair as needed.

Inspect the channel after each significant rainfall event. If channel erosion exceeds expectations, consult with the design professional and consider adding another check dam to reduce channel flow grade.

Sediment should be removed if it reaches a depth of ½ the original dam height. If the area behind the dam fills with sediment, there is a greater likelihood that water will flow around the end of the check dam and cause the practice to fail.

Check dams should be removed when their useful life has been completed. The area where check dams are removed should be stabilized immediately. In rare instances check dams should be left as a permanent measure to support channel stability.

Construction Exit Pad (CEP)

Practice Description

A construction exit pad is a stone base pad or manufactured product designed to provide a buffer area where mud and caked soil can be removed from the tires of construction vehicles to avoid transporting it onto public roads. This practice applies anywhere traffic will be leaving a construction site and move directly onto a public road or street.

Typical Components of the Practice

- Site Preparation
- Grading
- Stabilization with Geotextile Fabric (where needed to provide stability)
- Aggregate Placement
- Construction Verification
- Maintenance

Construction

Prior to start of construction, temporary gravel construction entrance/exit pads should be designed by a qualified design professional and plans and specifications should be available to field personnel.

Site Preparation

Remove all vegetation and other unsuitable material from the foundation area.

Grading

Grade and crown the area for positive drainage.

Utilize a diversion to direct any surface flow away from the construction exit pad.

Install pipe under the pad if needed to maintain drainage ditches along public roads.

Divert all construction exit pad runoff and drainage to a sediment trap or basin.

Stabilization

If project specified, or if wet conditions or soft soils are anticipated, place non-woven geotextile fabric on the graded foundation prior to placing the aggregate to improve stability.

Aggregate Placement

Place specified stone size to lines and grade shown on plans. Leave surface smooth and sloped for drainage.

Construction Verification

Check all components during construction and installation to ensure that specifications are being met for the components.

Common Problems

Consult with a qualified design professional if any of the following occur:

- Inadequate runoff control and sediment washes onto public road: install diversions or other runoff control measures.
- Ruts and muddy conditions develop as stone are pressed into soil; increase stone size or pad thickness, or add geotextile fabric.
- Pad too short for heavy construction traffic: consult design professional about extending pad to the necessary length.

Maintenance

Remove large chunks of mud or caked soil from construction exit pad daily to minimize sediment buildup.

Inspect stone pad and sediment disposal area weekly and after storm events or heavy use.

Reshape pad as needed for drainage and runoff control.

Top-dress with clean specified stone as needed to maintain effectiveness of the practice.

Immediately remove mud or sediment tracked or washed onto public road. Repair any broken road pavement immediately.

Remove unneeded exit pad materials from areas where permanent vegetation will be established.

Diversion (DV)

Practice Description

A diversion is a watercourse constructed on a designed grade, across a slope, and consisting of an excavated channel, a compacted ridge, or a combination of both.

This practice applies to sites where stormwater runoff can be redirected to permanently protect structures or areas downslope from erosion, sediment, and excessive wetness or localized flooding. Diversions may be used to temporarily divert stormwater runoff to protect disturbed areas and slopes or to retain sediment on-site during construction.

Typical Components of the Practice

- Site Preparation
- Grading
- Erosion and Sediment Control
- Construction Verification
- Maintenance

Construction

Prior to start of construction, diversions should be designed by a qualified design professional. Plans and specifications should be referred to by field personnel throughout the construction process. A diversion should be built according to

planned alignment, grade, and cross section. Typically, a diversion is constructed with the following activities.

Site Preparation

Determine exact location of any underground utilities.

Locate and mark the alignment of the diversion as shown on the plans. Minor adjustments to the grade and alignment may be required to meet site conditions. The alignment should maintain a positive grade towards the outlet and end in a stable outlet or an area that can be stabilized.

Clear the construction area of trees, stumps, brush, sod and other unsuitable material which would interfere with compaction of the ridge.

Disk or scarify the area where the ridge is to be installed before placing the fill.

Clean out and refill with compacted earth fill all ditches, swales or gullies to be crossed.

Apply gravel or hard surface protection at vehicle crossings to prevent rutting.

Install stable outlets prior to construction. Adequate vegetation should be established in the outlet channel. If vegetation cannot be established use Lined Swale, Rip-rap Lined Swale, Drop Structure, Sediment Basin or Stormwater Detention Basin .

Grading

Excavate, fill and shape the diversion to planned alignment, grade and cross section. The channel should have a positive grade toward the outlet to avoid ponding. Where possible, blend diversion into the surrounding landscape.

Overfill and compact the ridge, allowing for 10% settlement. Fill should be placed in lifts of no more than 6” to 8” in depth. Compaction may be achieved by driving wheeled equipment along the ridge as lifts are added. The settled ridge top must be at or above design elevation at all points.

All soil removed and not needed for the practice should be spread or disposed of so that it will not interfere with the functioning of the diversion.

Erosion and Sediment Control

Control sediment along grading limits with sediment control measures.

Leave sufficient area adjacent to the diversion to permit clean out and regrading.

Immediately after installation install vegetation treatment or other means to stabilize the diversion in accordance with plans.

Install gravel or hard surface protection at vehicle crossings.

Stabilize diversion outlets in accordance with plans.

Construction Verification

Check finished grades and cross section of diversions to eliminate constrictions to flow. Check all ridges for low spots and stability.

Common Problems

Consult with a qualified design professional if any of the following occur:

- Variations in topography on site indicate diversion will not function as intended. Changes in plans will be needed.
- Design specifications for seed variety or seeding cannot be met. Substitutions not approved by the design professional could result in erosion and lead to diversion failure.
- Seepage is encountered during construction. It may be necessary to install drains.

Maintenance

Inspect weekly and following each storm event for erosion until the diversion is vegetated.

Remove debris and sediment from the channel, and rebuild the ridge to design elevation where needed.

Check diversion outlet for erosion and repair if area becomes unstable. Maintain vegetation with periodic fertilization and mowing to keep vegetation in a vigorous, healthy condition. Mow for weed and brush control during the first year and as needed to prevent brush and trees seedlings from becoming established after the first year of installation.

When the work area has been stabilized, remove temporary diversions, sediment barriers and traps and repair bare or damaged areas in the vegetation by planting and mulching or sodding.

Stabilize all eroded, rutted or disturbed areas as soon as possible with vegetation or synthetic erosion control measures as specified in the design.

Mulching (MU)

Practice Description

Mulching is the application of plant residues such as straw or other suitable materials to the soil surface to minimize erosion. Mulching is used to support permanent and temporary seeding and, also, to provide short-term cover without seeding.

Typical Components of the Practice

- Site Preparation
- Application of Material
- Installation Verification
- Maintenance

Installation

Mulching should be designed by a qualified design professional and plans and specifications should be made available to field personnel prior to start of construction.

Site Preparation

Divert runoff water from areas above the site that will be mulched.

Remove stumps, roots and other debris from the construction area.

Grade area as needed to permit the use of equipment for seeding, mulching and maintenance. Shape area so that it is relatively smooth.

If the area will be seeded, follow seeding specifications in the design plan and apply mulch immediately after seeding.

Application of Material

Spread straw mulch, preferably cereal grain, uniformly over the area with a power blower, hydroseeder or by hand. Mulch should be uniformly spread and not clumped in piles. In a seeded area, about 25% of the ground surface should be visible after mulching. It is important when mulching a seeded area that an excessive quantity of straw is not applied – too much mulch will retard or reduce the future stand. When mulch is used for erosion control without seeding, 100% of the soil surface should be covered.

Hydraulic Erosion Control Products (HECPs) as defined by the Erosion Control Technology Council (ECTC) are also used for mulch and should be applied with the appropriate equipment and at the recommended or specified rates.

Apply mulches at the rates shown in the plan or in Table MU-1 if there is not a plan.

Anchor straw or wood cellulose mulch by one of the following methods:

- Crimp with a mulch anchoring tool, as near on the contour as practical, to punch the straw into the soil.
- Tack with a liquid tackifier designed to hold mulch in place. Use suitable spray equipment and follow manufacturer's recommendations.
- In more erosive areas, cover with netting, using a degradable natural or synthetic mesh. The netting should be anchored according to manufacturer's specifications (see Erosion Control Blanket practice).
- On steep slopes and other areas needing a higher degree of protection, use heavy natural nets without additional mulch, synthetic netting with additional mulch or erosion control mats/blankets. These areas include grassed waterways, swales and diversion channels.
- Install netting and mats/blankets according to manufacturer's specifications making sure materials are properly anchored (see Erosion Control Blanket). Verify wildlife friendly netting when specified.

Table MU-1 Mulching Materials and Application Rates

Material	Rate Per Acre and (Per 1000 ft.^{2})	Notes
Straw (with Seed)	1 ½ - 2 tons (70 lbs - 90 lbs)	Spread by hand or machine; anchor when subject to blowing.
Straw Alone (no seed)	2 ½ - 3 tons (115 lbs - 160 lbs)	Spread by hand or machine; anchor when subject to blowing.
Wood Chips	5-6 tons (225 lbs - 270 lbs)	Treat with 12 lbs. nitrogen/ton.
Bark	35 cubic yards (0.8 cubic yard)	Can apply with mulch blower.
Pine Straw	1-2 tons (45 lbs - 90 lbs)	Spread by hand or machine; will not blow like straw.
Peanut Hulls	10-20 tons (450 lbs - 900 lbs)	Will wash off slopes. Treat with 12 lbs. nitrogen/ton.
HECPs	0.75 – 2.25 tons (35 lbs – 103 lbs)	Refer to ECTC or Manufacturer's Specifications.

Installation Verification

Check materials and installation for compliance with specifications.

Common Problems

Consult with qualified design professional if either of the following occurs:

- Variations in topography on site indicate the mulching materials will not function as intended; changes in plan may be needed.
- Design specifications for mulching materials or seeding requirements cannot be met; substitution may be required. Unapproved substitutions could result in erosion or seeding failure.

Problems that require remedial actions:

- Erosion, washout, and poor plant establishment; repair eroded surface, reseed, re-mulch and anchor mulch.
- Mulch is lost to wind or stormwater runoff; reapply mulch and anchor appropriately by crimping, netting, or tacking.

Maintenance

Inspect all mulched areas periodically and after rainstorms for erosion and damage to the mulch. Repair promptly and restore to original condition. Continue inspections until vegetation is well established. Keep mower height high if netting is used to prevent netting from wrapping around mower blades or shaft.

Permanent Seeding (PS)

Practice Description

Permanent seeding is the establishment of perennial vegetation from seed. This practice is used when vegetation is desired and appropriate to permanently stabilize the soil.

Typical Components of the Practice

- Scheduling
- Seedbed Preparation
- Applying Soil Amendments (lime and fertilizer)
- Planting
- Mulching or Installation of Erosion Control Blanket
- Installation Verification
- Maintenance

Installation

Prior to start of construction, plant materials, seeding rates and planting dates should be specified by a qualified design professional. Plans and specifications should be referred to by field personnel throughout the installation process.

Permanent seeding should be made during the specified planting period whenever possible. When sites are only available for planting outside of the recommended planting period, either an out-of-season permanent seeding, a temporary seeding, mulching or chemical stabilization should be applied. If lime and fertilizer application rates are not specified, take soil samples during final grading from the top 6" in each area to be seeded. Submit samples to a soil testing laboratory for lime and fertilizer recommendations.

Scheduling

The schedule for work at the site should consider the recommended planting period and whenever practical the site work should accommodate seeding during the recommended planting period.

Seedbed Preparation

Grade and loosen the soil to a smooth firm surface to enhance rooting of seedlings and reduce rill erosion. Break up large clods and loosen compacted, hard or crusted soil surfaces with a disk, ripper, chisel, harrow or other tillage equipment. Avoid preparing the seedbed under excessively wet conditions to minimize compaction. Operate the equipment on the contour.

For either broadcast seeding or drill seeding, the tillage, as a minimum, should adequately loosen the soil to a depth of at least 6", alleviate compaction, and smooth and firm the soil for the proper placement of seed.

For no-till drilling, the soil surface should not be loosened unless the site has surface compaction and if compaction exists, special care with soil loosening will be needed to retain the desired residue on the soil surface.

Incorporate lime and fertilizer to a depth of at least 6" with a disk or rotary tiller on slopes of up to 3:1. On steeper slopes, lime and fertilizer may be applied to the surface without incorporation. Lime and fertilizer may be applied through hydroseeding equipment; however, fertilizer should not be added to the seed mixture during hydroseeding. Liming materials such as liquid lime may be added with the seed mixture.

Liming

Follow the design plan or soil test recommendation. If a plan or soil test is not available, use 2 tons/acre of ground agricultural lime on clayey soils (approximately 90 lbs/acre) and 1 ton/acre on sandy soils (approximately 45 lbs/acre). Exception to situation without a design or a soil test: If the cover is tall fescue and clover, use 2 tons of agricultural lime (approximately 135 lbs/1000 ft^2) on both clayey and sandy soils.

Spread the specified amount of lime and incorporate into the top 6" of soil after applying fertilizer.

Fertilizing

Apply a complete fertilizer at rates specified in the design plan or as recommended by soil tests. In the absence of soil tests, use the following as a guide:

Grass Alone

Use 8-24-24 or equivalent – apply 400 lbs/acre (approximately 9 lbs/1000 ft^2) starting. When vegetation has emerged to a stand and is growing, 30 lbs/acre (approximately 0.8 lbs/10000 ft^2) of additional nitrogen fertilizer should be applied.

Grass-Legume Mixture

Use 5-10-10 or equivalent – apply 800 - 1200 lbs/acre (approximately 18 – 27 lbs/1000 ft^2).

Legume Alone

Use 0-20-20 or equivalent – apply 400 - 600 lbs/acre (approximately 9 – 14 lbs/1000 ft^2) at planting.

Note: Fertilizer can be blended to meet exact fertilizer recommendations. Take soil test recommendations to local fertilizer dealer for bulk fertilizer blends. This may be more economical than bagged fertilizer.

Planting

Plant the species specified in the plan at the rate and depth specified. In the absence of plans and specifications, plant species and seeding rates may be selected by qualified persons using Figure PS-1 and Table PS-1.

Apply seed uniformly using a cyclone seeder, drop-type spreader, drill, cultipacker seeder or hydroseeder.

When using a drill seeder, plant grasses and legumes ¼" to ½" deep. Calibrate equipment in the field.

When planting by methods other than a drill seeder, cover seed by raking, or dragging a chain, brush, or mat. Then firm the soil lightly with a roller. Seed can also be covered with hydro-mulched wood fiber and tackifier. Legumes require inoculation with nitrogen-fixing bacteria to ensure good growth. Purchase inoculum specific for the seed and mix with seed prior to planting.

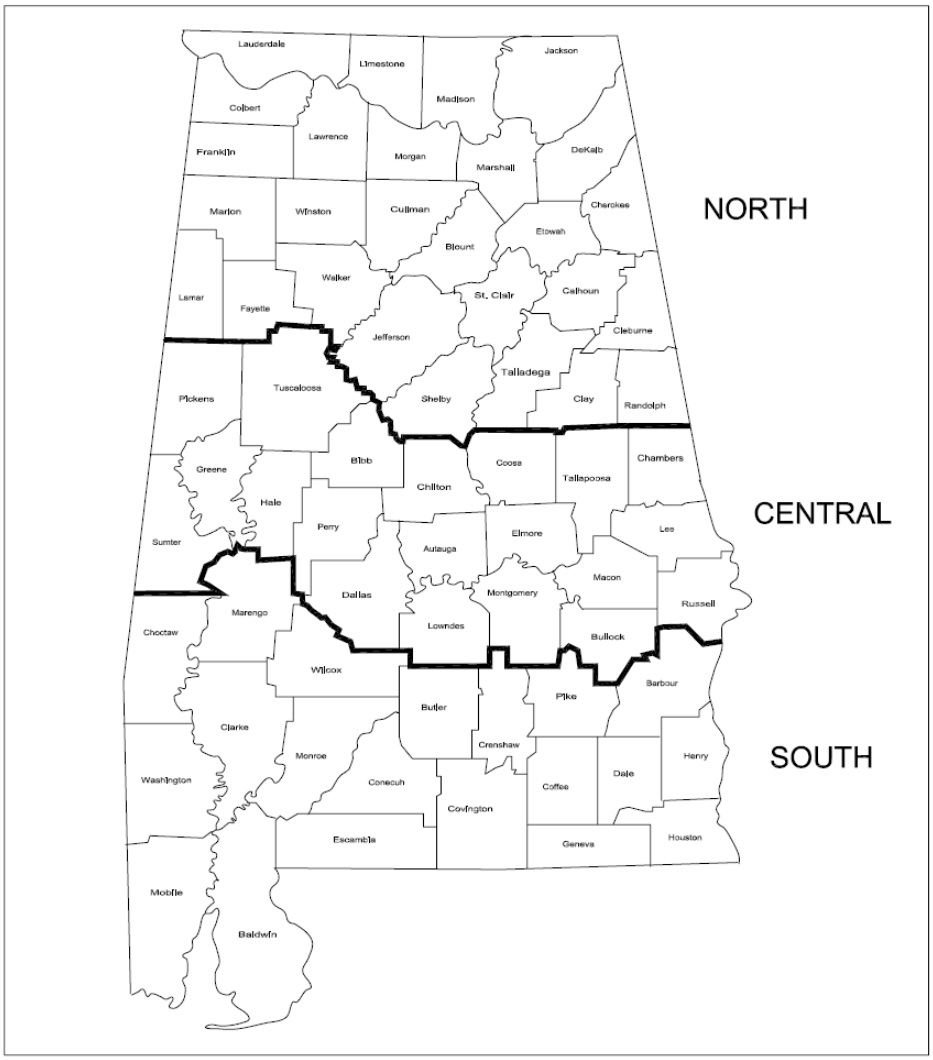


Figure PS-1 Geographical Areas for Species Adaptation

Note: Site conditions related to soils and aspect in counties adjacent to or close to county boundaries may justify adjustments in adaptable areas by qualified design professionals.

Mulching

Mulching is extremely important for successful seeding. Whether the mulching material is straw or a hydraulic erosion control product (HECP, also referred to as hydromulch), the material needs to be applied properly. Uniformly spread organic mulches by hand or with a mulch blower at a rate which provides about 75% ground cover. Spread HECPs utilizing appropriate equipment and at rates as specified in the plan or by the manufacturer. Caution, an over-application of wheat straw will reduce stand success – do not over-apply wheat straw when mulching a seeding! (See Mulching practice for more details).

Table PS-1 Commonly used Plants for Permanent Cover with Seeding Rates and Dates[1]

Species	Seeding Rates/Ac PLS[2]	North	Central	South
		Seeding Dates		
Bahiagrass, Pensacola	40 lbs	--	Mar 1-Jul y 1	Feb 1-Nov 1
Bermudagrass, Common	10 lbs	Apr 1-July 1	Mar 15-July 15	Mar 1-July 15
Bahiagrass, Pensacola Bermudagrass, Common	30 lbs 5 lbs	--	Mar 1-July 1	Mar 1-July 15
Bermudagrass, Hybrid (Lawn Types)	Solid Sod	Anytime	Anytime	Anytime
Bermudagrass, Hybrid (Lawn Types)	Sprigs 1/sq ft	Mar 1-Aug 1	Mar 1-Aug 1	Feb 15 - Sep 1
Fescue, Tall	40-50 lbs	Sep 1-Nov 1	Sep 1-Nov 1	--
Sericea	40-60 lbs	Mar 15-July 15	Mar 1-July 15	Feb 15 -July 15
Sericea & Common Bermudagrass	40 lbs 10 lbs	Mar 15 -July 15	Mar 1-July 15	Feb 15-July 15
Switchgrass, Alamo	4 lbs	Apr 1-Jun 15	Mar 15-Jun 15	Mar 15-June 15

1 DO NOT USE Seeding Rates as part of a mixture unless shown as a mixture in this table.

2 PLS means Pure Live Seed and is used to adjust seeding rates. For example, to plant 10 lbs PLS of a species with germination of 80% and purity of 90%, PLS= 0.8 X 0.9 = 72%. 10lbs PLS = 10/0.72 = 13.9 lbs of the species to be planted.

Hydroseeding

Surface roughening is particularly important when hydroseeding, as roughened slope will provide some natural coverage for lime, fertilizer, and seed. The surface should not be compacted or smooth. Smooth seedbed preparation is not necessary for hydroseeding operations; large clods, stones, and irregularities provide cavities in which seeds can lodge.

Mix seed, inoculant if required, and a seed carrier with water and apply as a slurry uniformly over the area to be treated. The seed carrier should be a cellulose fiber, natural wood fiber or cane fiber mulch material which is dyed an appropriate color to facilitate uniform application of seed. If adding a legume, and it does not have an inoculant included in the coating, include the correct legume inoculant at 4 times the recommended rate when adding seed to the hydroseeder slurry. The mixture should be applied within one hour after mixing to reduce damage to seed.

Fertilizer should not be mixed with the seed-inoculant mixture because fertilizer salts may damage seed and reduce germination and seedling vigor.

Fertilizer may be applied with a hydroseeder as a separate operation after seedlings are established.

Agricultural lime is usually applied as a separate operation and spread in dry form. It is not normally applied with a hydraulic seeder because it is abrasive and, also, may clog the system. On the other hand, liquid lime is applied with a hydraulic seeder but because of cost is used primarily to provide quick action for benefit of plants during their seedling stage with the bulk of liming needs to be provided by agricultural lime. Dry lime may be applied with the fertilizer mixture.

Installation Verification

Check materials and installation for compliance with specifications during installation of products.

Common Problems

Consult with a qualified design professional if the following occurs:

- Design specifications for seed variety, seeding dates or mulching cannot be met; substitutions may be required. Unapproved substitutions could lead to failure.
- Seeding at the wrong time of the year results in an inadequate stand. Reseed according to specifications of a qualified design professional (see recommendations under Maintenance)
- Inadequate mulching results in an inadequate stand, bare spots, or eroded areas - prepare seedbed, reseed, cover seed evenly and tack or tie down mulch, especially on slopes, ridges and in channels (see recommendations under Maintenance).

Maintenance

Generally, a stand of vegetation cannot be determined to be fully established until vegetative cover has been maintained for 1 year from planting.

Reseeding

Inspect seedings monthly for stand survival and vigor. Also, inspect the site for erosion.

If stand is inadequate identify the cause of failure (choice of plant materials, lime and fertilizer quantities, poor seedbed preparation or weather) and take corrective action. If vegetation fails to grow, have the soil tested to determine whether pH is in the correct range or nutrient deficiency is a problem.

Stand conditions, particularly the coverage, will determine the extent of remedial actions such as seedbed preparation and reseeding. A qualified design professional should be consulted to advise on remedial actions. Consider drill seeding where possible.

Eroded areas should be addressed appropriately by filling and/or smoothing, and reapplication of lime, fertilizer, seed, and mulch.

Fertilizing

Satisfactory establishment may require fertilizing the stand in the second growing season. Follow soil test recommendations or the specifications provided to establish and maintain the planting. After the second year, fertilizing is often needed annually or periodically to maintain a healthy stand and cover sufficient for erosion control.

Mowing

Mow vegetation on structural practices such as embankments and grass-lined channels to prevent woody plants from invading.

Other areas should be mowed to compliment the use of the site.

Certain species can be weakened by mowing regimes that significantly reduce their food reserves stored for the next growing season: fescue should not be mowed close during the summer; sericea should not be mowed close in late summer.

Bermudagrass and bahiagrass are tolerant of most mowing regimes and can be mowed often and close, if so desired, during their growing season.

Preservation of Vegetation (PV)

Practice Description

Preservation of vegetation is the avoidance of an area during land disturbing and construction activity to prevent mechanical and other injury to desirable plants in the planned landscape. The practice provides erosion and sediment control and is applicable where vegetative cover is desired and the existing plant community is compatible with the planned landscape.

Typical Components of the Practice

- Mark Plant Area for Retention
- Plant Protection
- Treating Damaged Plants
- Practice Verification
- Maintenance

Installation

Preservation requirements should be designed by a qualified design professional and plans should be made available to field personnel prior to start of construction

Mark Plant Area for Retention

Clearly indicate the areas to be avoided by marking with tape (flagging), barricade netting or other appropriate means.

Plant Protection

Protect plants that are identified for preservation from compaction by equipment, cutting and filling operations, trenching, and tunneling.

Treating Damaged Plants

Treat damaged trees and shrubs as soon after damage as practical. Treatment may include shaping a wound for proper healing, pruning of jagged roots, pruning of damaged limbs and fertilization to enhance growth.

Practice Verification

Check to determine that specifications are met as the areas are identified for retention, as the plants are protected during construction and that damaged plants are treated or replaced.

Common Problems

Consult with a qualified design professional if any of the following occur:

- Soil compaction appears to be retarding plant growth or affecting plant health.
- Damage to plants appears to be severe and life threatening.
- Plants appear of poor quality and are undesirable for retention.

Problems during construction that require remedial actions:

- Erosion – eroded areas should be vegetated to grass or a suitable ground cover.
- Severely damaged trees, shrubs or vines should be replaced.

Maintenance

Enhance and maintain plant growth and health according to the maintenance plan. This may involve applying fertilizer, spreading mulch and pruning trees and shrubs.

Replace dead plants as needed to maintain desired landscape cover. Additional information about plantings is found in the following practices: Permanent Seeding: Shrub, Vine and Groundcover Planting: and Tree Planting on Disturbed Areas.

Sediment Barrier (SB)

Practice Description

A sediment barrier is a temporary sediment control practice installed downstream of a disturbed area intended to remove large-sized suspended sediment from sheet flow runoff by facilitating settling and to a lesser extent filtration. The most commonly used sediment barrier is a silt fence made up of a geotextile fabric that is anchored into the ground and attached to supporting posts and possibly reinforced with a wire fence or polypropylene netting. Other barrier materials could include sand bags, wattles, and various man-made materials and devices that can be used in a similar manner as a silt fence.

This practice applies downstream of small disturbed areas that yield runoff volumes less than the design storage volume. Barriers intercept runoff from upslope to form impoundments that temporarily detain runoff and allow sediment to settle out of the water and remain on the construction site.

Typical Components of the Practice

- Site Preparation
- Installation
- Erosion Control
- Construction Verification
- Maintenance

Construction

Prior to start of construction, sediment barriers should be designed by a qualified professional. Plans and specifications should be referred to by field personnel throughout the construction process.

Note: Silt fence is the only barrier installation being covered in this handbook.

Site Preparation

Determine exact location of underground utilities so that locations for digging or placement of stakes can be selected where utilities will not be damaged.

Smooth the construction zone to provide a broad, nearly level area for the fence. The area should be wide enough throughout the length of the fence to provide storage of runoff and sediment behind the fence.

Silt Fence Installation

Fence should be installed generally on the contour with each end turned upslope, in "C" configurations, or "J" hooks, so that runoff can be intercepted as sheet flow. Ends should be flared uphill to provide temporary storage of water. Fence should be placed so that runoff from disturbed areas must pass through the fence. Fence should not be placed across concentrated flow areas such as channels or waterways unless specifically designed as a temporary check dam. When placed near the toe of a slope, the fence should be installed far enough from the slope toe to provide a broad flat area for adequate storage capacity for sediment. An off-set installation with a trench or slice is now the preferred method of installation. Dig a trench or make a slice at least 6" deep along the fence alignment as shown in Figures SB-1 and SB-3 for Types A & B fences.

Drive posts to the depth specified 6 inches downslope of the trench. Space posts a maximum of 10 feet for Type A fencing, or 6 feet for Type B fencing. In areas where water is ponded, the fence posts may be specified at half the spacing.

For Type A fence, fasten support wire fence to upslope side of posts, extending to the ground surface as shown in the Figure SB-1.

Attach continuous length of fabric to upslope side of fence posts and through the trench. Minimize the number of joints. Type A fence joints should be installed according to Figure SB-2. Type B fence should be joined by rolling the ends together using the "roll joint" method illustrated in Figure SB-4 or as detailed in the specifications. Avoid joints at low points in the fence line. When specified, install the overflow/dewatering device and splash pad at the low point in the fence.

Install tie backs as specified on the ends of the silt fence.

Backfill the trench with compacted earth as shown in Figures SB-1 and 3.

Provide good access in areas of heavy sedimentation for clean out and maintenance.

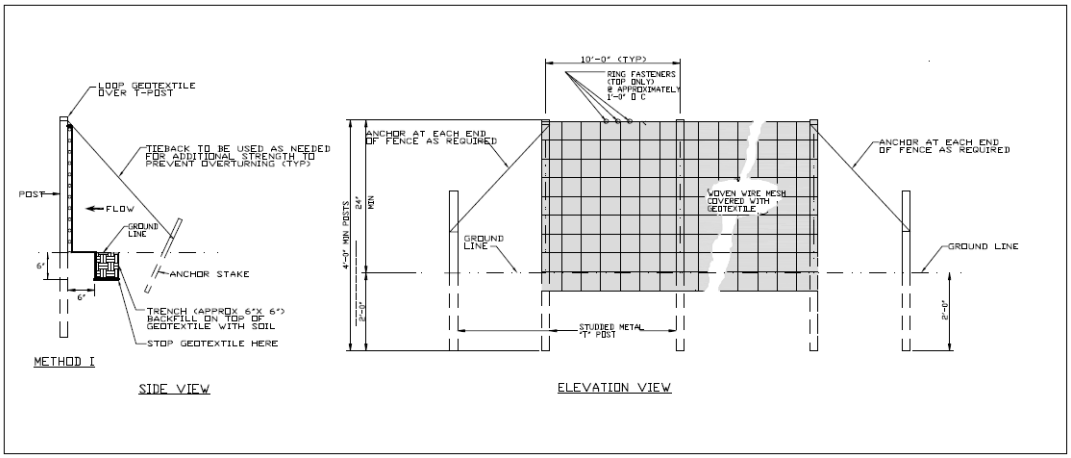


Figure SB-1 Silt Fence - Type A

(For post material requirements see Tables SB-2 and SB-3 (Volume I of Handbook))

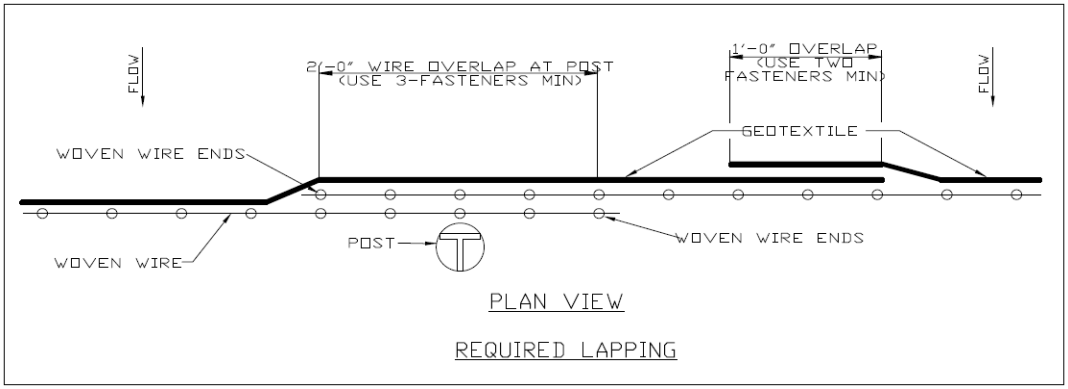


Figure SB-2 Type A Silt Fence Overlap

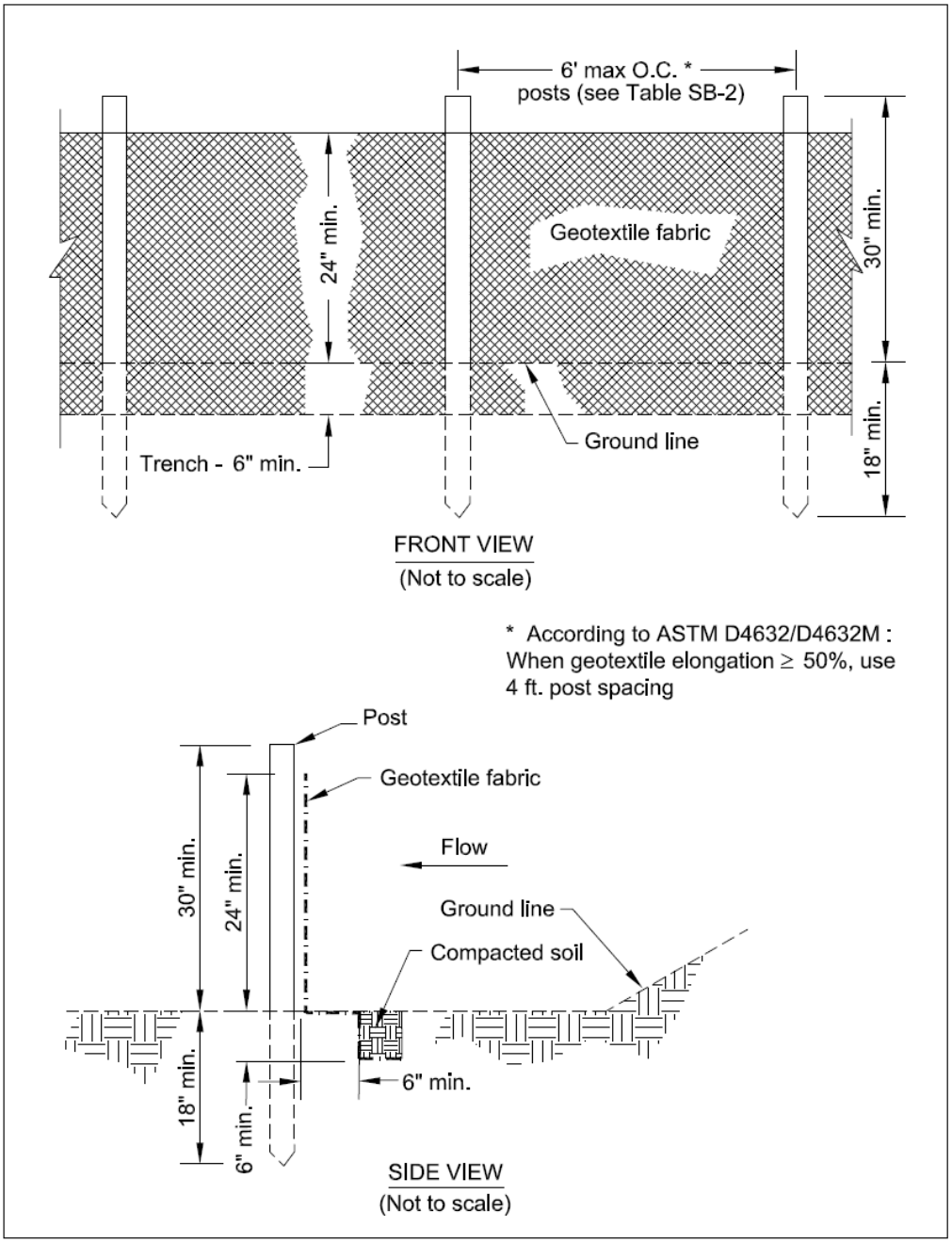


Figure SB-3 Silt Fence - Type B

(For post material requirements see Tables SB-2 and SB-3 (Volume I of Handbook))

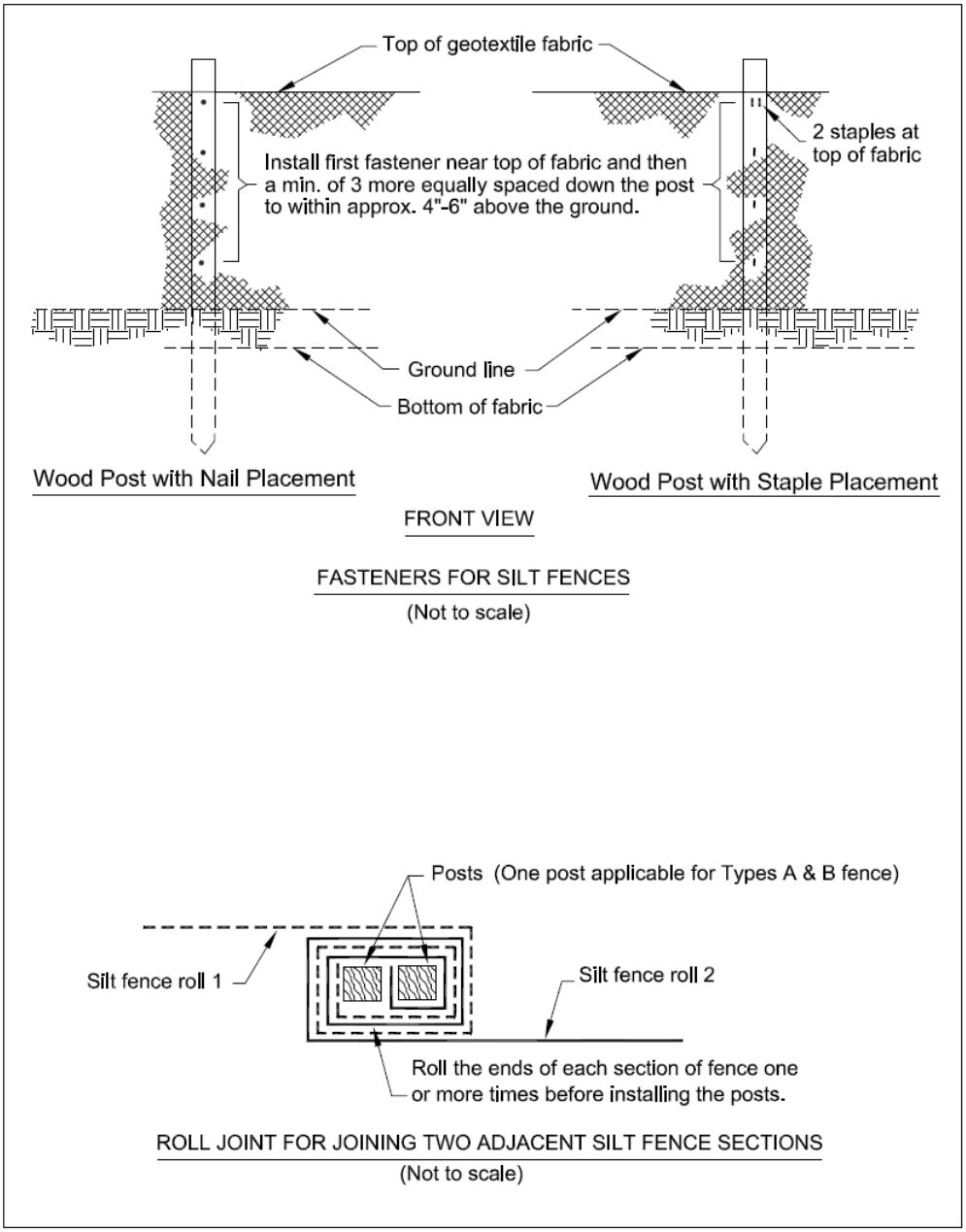


Figure SB-4 Type B Silt Fence Installation Details

Erosion Control

Stabilize disturbed areas in accordance with vegetation plan. If no vegetation plan exists, consider planting and mulching as a part of barrier installation and select planting information from appropriate planting practice, Permanent Seeding or Temporary Seeding. Select mulching information from the Mulching practice.

Construction Verification

Check finished grades and dimensions of the sediment fence. Check materials for compliance with specifications.

Common Problems

Consult with a qualified design professional if any of the following occur:

- Variations in topography onsite indicate sediment fence will not function as intended or alignment is not on contour or fence crosses concentrated flow areas; changes in plan may be needed.
- Design specifications for filter fabric, support posts, support fence, gravel or riprap cannot be met; substitutions may be required. Unapproved substitutions could lead to failure.
- Drainage area appears to exceed ¼ acre for 100 feet of non-reinforced silt fence and ½ acre for reinforced fence.
- The runoff exceeds the storage volume of the silt fence.

Maintenance

Inspect silt fences at least once a week and after each significant rain event.

Make required repairs immediately.

Should the fabric of silt fence collapse, tear, decompose or become ineffective, replace it promptly.

Remove sediment deposits when they reach a depth of ½ the height of the fence as installed to provide adequate storage volume for the next rain and to reduce pressure on the fence.

After the contributing drainage area has been properly stabilized, remove all barrier materials and unstable sediment deposits, bring the area to grade and stabilize it with vegetation.

Sediment Basin (SBN)

Practice Description

A temporary impoundment designed and constructed to capture stormwater runoff and soil particles. This practice applies to sites where more storage is needed than provided by other sediment control practices and where turbidity must be reduced.

Typical Components of the Practice

- Site Preparation
- Keyway Trench
- Skimmer or Surface Dewatering Device
- Embankment
- Emergency Spillway
- Basin and Baffles
- Erosion Control
- Flocculant
- Safety
- Construction Verification
- Maintenance

Construction

Prior to the start of construction, sediment basins should be designed by a qualified design professional.

Plans and specifications should be referred to by field personnel throughout the construction process. The sediment basin should be built according to planned grades and dimensions. Follow all federal, state and local requirements on impoundments.

Consider the following guidance as construction proceeds.

Site Preparation

Locate all utilities at the site to ensure avoidance.

Clear, grub and strip the dam foundation and emergency spillway area, removing all woody vegetation, rocks and other objectionable material. Dispose of trees, limbs, logs and other debris in designated disposal areas.

Stockpile surface soil for use later during topsoiling.

Delay clearing the pool area until the dam is complete and then remove brush, trees, and other objectionable materials to facilitate sediment cleanout.

Specified sumps or fore bays used to capture coarse grain sediment should be installed immediately upstream of the sediment basin and completed the same time as the sediment basin.

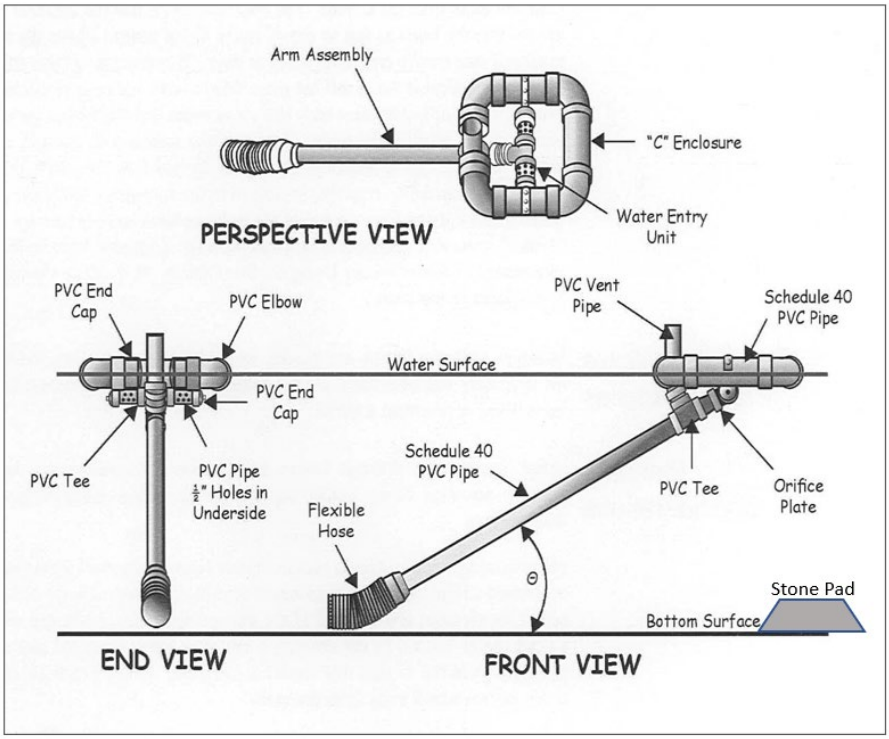
Keyway Trench

When specified, excavate the keyway trench along the centerline of the planned embankment to a depth determined by the qualified design professional (at least 2 feet).The trench bottom elevation should extend up both abutments to the riser crest elevation and have a bottom width of at least 8 feet and have side slopes no steeper than 1.5:1. Compaction requirements will be the same as those for the embankment.

Skimmer

Following are installation guidelines for a skimmer only:

Prevent the skimming device from settling into the mud by excavating a shallow pit under the skimmer or providing a low support under the skimmer of stone or timber (Figure SBN-1).



FigureSBN-1 Schematic of a skimmer.
(Modified from Pennsylvania Erosion and Sediment Pollution Control Manual, March 2000)

Place the barrel pipe (typically the same size as the skimmer arm) that goes through the embankment at the standing pool elevation on a firm, smooth foundation of impervious soil. Do not use pervious material such as sand, gravel, or crushed stone as backfill around the pipe. Place the fill material around the pipe in 4-inch layers and manually compact it under and around the pipe to at least the same density as the adjacent embankment. Care must be taken not to raise the pipe from the firm contact with its foundation when compacting under the pipe haunches.

Construct the anti-seep collar(s) if shown on the plans.

Place a minimum depth of 2 feet of compacted backfill over the pipe before crossing it with construction equipment. In no case should the pipe conduit be installed by cutting a trench through the dam after the embankment is complete.

Assemble the skimmer following the manufacturer's instructions, or as designed.

Lay the assembled skimmer on the bottom of the basin with the flexible joint at the inlet of the barrel pipe. Ensure the schedule 40 connecting pipe is at least 1.5 times the depth the skimmer should operate. Attach the flexible joint to the barrel pipe and position the skimmer over the excavated pit or support. Be sure to attach a rope to the skimmer and anchor it to the side of the basin. This will be used to pull the skimmer to the side for maintenance.

Install outlet protection as specified.

Embankment

Scarify the foundation of the dam before placing fill.

Use fill from predetermined borrow areas. It should be clean, stable soil free of roots, woody vegetation, rocks and other debris; and must be wet enough to form a ball without crumbling, yet not so wet that water can be squeezed out.

Place the most permeable soil in the downstream toe and the least permeable in the center portion of the dam.

Place the fill material in 6” to 9” continuous uncompacted layers over the length of the dam. Fill should then be compacted to a 4” to 6” thick continuous layer (One way is by routing construction equipment over the dam so that each layer is traversed by at least 4 passes of the equipment).

Protect the barrel pipe through the embankment with 2 feet of fill that has been compacted with hand tampers before traversing over the pipe with equipment.

Construct and compact the dam to an elevation 10% above the design height to allow for settling. The embankment generally has a minimum 8 ft. top width and 2.5:1 side slopes, but the design may specify a different top width and gentler side slopes.

Place a reference stake at the sediment clean out elevation shown on the plans (50% of design storage volume).

Emergency Spillway

Construct the spillway at the site located by a qualified design professional according to the plan design (in undisturbed soil around one end of the embankment, and so that any flow will return to the receiving channel without damaging the embankment).

Basin and Baffles

Ensure the basin has a length to width ratio of at least 2:1 or more as specified. Grade the basin so that the bottom is level front to back and side to side. Discharge water into the basin in a manner to prevent erosion. The inlet into the basin should be on one end with the surface dewatering device on the opposite end of the basin. Use diversions with outlet protection to divert sediment-laden water to the upper end of the pool area to improve basin trap efficiency.

Install porous coir baffles as specified to ensure water does not flow under or around the baffles (Figure SBN-2). Baffles should be placed perpendicular to the flow and create near equal volumes within the basin.

Figure SBN-2 Example of porous baffle made of 700 g/m^2 coir erosion blanket as viewed from the inlet.
(from North Carolina Erosion and Sediment Control Planning and Design Manual.)

Install posts or saw horses across the width of the sediment trap.

Steel posts should be driven to a depth of 24 inches, spaced a maximum of 4 feet apart, and installed up the sides of the basin as well. The top of the fabric should be at least the height of the required storage volume elevation.

Install at least three rows of baffles between the inlet and outlet discharge point and at the locations specified in the plans. The three rows should create four near equal volumes in the basin.

When using posts, add a support wire or rope across the top to prevent sagging.

Wrap porous coir material (700 - 900 g/m^2) over a sawhorse or the top wire. Hammer rebar into the sawhorse legs for anchoring. Attach fabric to a rope and a support structure with zip ties, wire, or staples. Each baffle should consists of 2 layers of coir fabric.

The bottom and sides of the fabric should be anchored in a trench or pinned with 8-inch erosion control matting staples.

Do not splice the fabric but use a continuous piece across the basin.

Erosion Control

Minimize the size of all disturbed areas.

Divert runoff from undisturbed areas away from the basin.

Use temporary diversions to prevent surface water from running onto disturbed areas.

Divert sediment-laden water to the upper end of the sediment pool to improve trap effectiveness.

Vegetate and stabilize the embankment, the emergency spillway and all disturbed areas including the basin bottom and side slopes. If the basin slopes and bottom are not vegetated, cover the surface with non-woven geotextile.

Flocculant

Place the specified flocculant in a turbulent flow location upstream of the basin to ensure proper mixing.

Safety

Because sediment basins that impound water are hazardous, the following precautions should be taken:

- Fence area and post warning signs if trespassing is likely.
- Ensure that the basin does not exceed design heights.

Construction Verification

Check the finished grades and configurations for all earthworks. Check elevations and dimensions of all pipes and structures.

Common Problems

Consult with registered design professional if any of the following occurs:

- Variations in topography on-site indicate sediment basin will not function as intended.
- Seepage is encountered during construction; it may be necessary to install drains.
- Design specifications for fill, pipe, seed variety or seeding dates cannot be met; substitutions may be required. Unapproved substitutions could lead to failure.

Maintenance

Inspect the sediment basin at least weekly and after each significant storm event (½ inch or greater).

If water remains turbid in the basin, reapply flocculant as specified.

Remove and properly dispose of sediment when it accumulates to ½ the design volume.

Remove trash and other debris from the skimmer, emergency spillway and pool area.

Periodically check the embankment, emergency spillway and outlet for erosion damage, piping, settling, seepage or slumping along the toe or around the barrel and repair immediately.

Remove the basin after the drainage area has been permanently stabilized, inspected, and approved. Do so by draining any water, removing the sediment to a designated disposal area, smoothing the site to blend with the surrounding area; then stabilize.

Temporary Seeding (TS)

Practice Description

Temporary seeding is the establishment of fast-growing annual vegetation from seed. Temporary vegetation provides economical erosion control for up to a year and reduces the amount of sediment moving off the site.

This practice applies where short-lived vegetation can be established before final grading or in a season not suitable for planting the desired permanent species. It helps prevent costly maintenance operations on other practices such as sediment basins and sediment barriers. In addition, it reduces problems of mud and dust production from bare soil surfaces during construction. Temporary or permanent seeding is necessary to protect earthen structures such as dikes, diversions, grass-lined channels and the banks and dams of sediment basins.

Typical Components of the Practice

- Scheduling
- Seedbed Preparation
- Applying Soil Amendments (lime and fertilizer)
- Planting
- Mulching or Installation of Erosion Control Blanket
- Installation Verification
- Maintenance

Installation

Prior to start of installation, plant materials, seeding rates and planting dates should be specified by a qualified design professional. Plans and specifications should be referred to by field personnel throughout the installation process.

Plantings should be made during the specified planting period if possible. When sites become available to plant outside of the recommended planting period, either a temporary seeding, mulching or chemical stabilization should be applied. If lime and fertilizer application rates are not specified, take soil samples during final grading from the top 6" in each area to be seeded. Submit samples to a soil testing laboratory for lime and fertilizer recommendations.

Seedbed Preparation

Grade and loosen soil to a smooth firm surface to enhance rooting of seedlings and reduce rill erosion. If compaction exists, loosen the surface to 6" to 8". Break up large clods and loosen compacted, hard or crusted soil surfaces with a disk, ripper, chisel, harrow or other tillage equipment. Avoid preparing the seedbed under excessively wet conditions to minimize soil compaction. Operate the equipment on the contour.

For either broadcast seeding or drill seeding, loosen the soil to a depth of at least 6".

For no-till drilling, the soil surface does not need to be loosened unless the site has surface compaction. If shallow compaction exists, the area should be chiseled across the slope at least 6". If compaction exists between 6" and 12" the area should be chiseled or subsoiled at least 12".

Lime and fertilizer should be incorporated during seedbed preparation.

Applying Soil Amendments

Liming

Follow the design plan or soil test recommendation. If a plan or soil test is not available, use 2 tons/acre of ground agricultural lime on clayey soils (approximately 90 lbs/1,000 ft^2.) and 1 ton/acre on sandy soils (approximately 45 lbs/ft^2).

Spread the specified amount of lime and incorporate into the upper 6" of soil following seedbed preparation and applying fertilizer.

Agricultural lime is usually applied as a separate operation and spread in dry form. It is not normally applied with a hydraulic seeder because it is abrasive and, also, may clog the system. On the other hand, liquid lime is applied with a hydraulic seeder but because of cost, liquid lime is used primarily to provide quick action for benefit of plants during their seedling stage with the bulk of

liming needs to be provided by agricultural lime. Dry lime may be applied with the fertilizer mixture.

Fertilizing

Apply a complete fertilizer at rates specified in the design plan or as recommended by soil tests. In the absence of soil tests, use the following as a guide:

8-24-24 or equivalent – apply 400 lbs/acre (approximately 9 lbs/1000 ft^2) at planting.

When vegetation has emerged to a stand and is growing, 30 to 40 lbs/acre (approximately 0.8 lbs/1000 ft^2) of additional nitrogen fertilizer should be applied.

Note: Fertilizer can be blended to meet exact fertilizer recommendations. Take soil test recommendations to local fertilizer dealer for bulk fertilizer blends. This may be more economical than bagged fertilizer.

Incorporate lime and fertilizer to a depth of at least 6" with a disk or rotary tiller on slopes of up to 3:1.

On steeper slopes, lime and fertilizer may be applied to the surface without incorporation. Lime and fertilizer may be applied together; however, fertilizer should not be added to the seed mixture during hydroseeding. Lime may be added with the seed mixture.

Planting

Plant the species specified in the plan at the rate and depth specified. In the absence of plans and specifications, plant species and seeding rates may be selected by qualified persons from Table TS-1.

Apply seed uniformly using a cyclone seeder, drop-type spreader, drill, drill seeder, cultipacker seeder, by hand, or with a hydroseeder on a fresh, firm friable seedbed.

When using a drill seeder, plant seed ¼" to ½" deep. Calibrate equipment in the field.

When planting by methods other than a drill seeder or hydroseeder, cover seed by raking, or dragging a chain, brush, or mat. Then firm the soil lightly with a roller. Seed can also be covered with a hydromulch product.

Cover broadcast seed by raking or chain dragging; then firm the surface with a roller or cultipacker to provide good seed contact. Small grains should be planted no more than 1" deep and grasses and legume seed no more than ½" deep.

Table TS-1 Commonly Used Plants for Temporary Cover[1]

Species	Seeding Rate/Ac PLS[2]	North	Central	South
		Seeding Dates		
Millet, Browntop or German	40 lbs	May 1-Aug 1	Apr 1-Aug 15	Apr l-Aug 15
Rye	3 bu	Sept 1-Nov 15	Sept 15-Nov 15	Sept 15-Nov 15
Ryegrass	30 lbs	Aug l-Sept 15	Sept l-Oct 15	Sept 1 -Nov 15
Sorghum-Sudan Hybrids	40 lbs	May l-Aug 1	Apr 15-Aug 1	Apr l-Aug 15
Sudangrass	40 lbs	May l-Aug I	Apr 15-Aug 1	Apr l-Aug 15
Wheat Common	3 bu	Sept 1-Nov 1	Sept 15-Nov 15	Sept 15-Nov 15
Common Bermudagrass	10 lbs	Apr 1-July 1	Mar 15-July 15	Mar 1-July 15
Crimson Clover	10 lbs	Sept 1-Nov 1	Sept 1-Nov 1	Sept 1-Nov 1

1 DO NOT USE Seeding Rates as part of a mixture unless shown as a mixture in this table.
2 PLS means Pure Live Seed and is used to adjust seeding rates. For example, to plant 10 lbs PLS of a species with germination of 80% and purity of 90%, PLS= 0.8 X 0.9 = 72%. 10lbs PLS = 10/0.72 = 13.9 lbs of the species to be planted.

Hydroseeding

Surface roughening is particularly important when hydroseeding, as roughened slope will provide some natural coverage for lime, fertilizer, and seed. The surface should not be compacted or smooth. Fine seedbed preparation is not necessary for hydroseeding operations; large clods, stones, and irregularities provide cavities in which seeds can lodge.

Mix seed, inoculant if required, and a seed carrier with water and apply as a slurry uniformly over the area to be treated. The seed carrier should be a cellulose fiber, natural wood fiber or cane fiber mulch material which is dyed an appropriate color to facilitate uniform application of seed. Use the correct legume inoculant at 4 times the recommended rate when adding inoculant to a hydroseeder slurry. The mixture should be applied within one hour after mixing to reduce damage to seed.

Fertilizer should not be mixed with the seed-inoculant mixture because fertilizer salts may damage seed and reduce germination and seedling vigor. Fertilizer may be applied with a hydroseeder as a separate operation after seedlings are established.

Whenever possible, it is often best to incorporate lime and fertilizer with a disk.

Mulching

Mulching is extremely important for successful seeding. Whether the mulching material is straw or a hydraulic erosion control product (HECP, also referred to as hydromulch), the material needs to be applied properly. Uniformly spread organic mulches by hand or with a mulch blower at a rate which provides about 75% ground cover. Spread HECPs utilizing appropriate equipment and at rates as specified in the plan or by the manufacturer. Caution, an over-application of straw mulch (wheat, oat, or rye) will reduce stand success – do not over-apply straw mulch when mulching a seeding! *(See Mulching practice for more details).* In lieu of mulch, erosion control blanket may be used (see Erosion Control Blanket practice for more details).

Installation Verification

Check materials and installation for compliance with specifications during installation of products.

Common Problems

Consult with a qualified design professional if the following occurs:

- Design specifications for seed variety, seeding dates or mulching cannot be met; substitutions may be required. Unapproved substitutions could lead to failure.

- Seeding outside of the recommended results in an inadequate stand. Reseed according to specifications of a qualified design professional (see recommendations under Maintenance).

Maintenance

Reseeding

Inspect seedings weekly until a stand is established and thereafter at least monthly for stand survival and vigor. Also, inspect the site for erosion.

Eroded areas should be addressed appropriately by filling and/or smoothing, and reapplication of lime, fertilizer, seed, and mulch.

A stand should be uniform and dense for best results. Stand conditions, particularly the coverage, will determine the extent of remedial actions such as seedbed preparation and reseeding. A qualified design professional should be consulted to advise on remedial actions. Consider drill seeding when doing a remedial planting.

Fertilizing

If vegetation fails to grow, have the soil tested to determine whether pH is in the correct range or nutrient deficiency is a problem.

Satisfactory establishment may require re-fertilizing the stand, especially if the planting is made early in the planting season. Follow soil test recommendations or the specifications provided to establish the planting.

Mowing

Temporary plantings may be mowed and baled or simply mowed to compliment the use of the site.

Millet, sorghum-sudan hybrids, sudangrass, rye and wheat may be mowed, but no lower than 6” (closer moving may damage the stand).

Ryegrass is tolerant of most mowing regimes and may be mowed often and as close as 4” to 6” if this regime is started before it attains tall growth (over 8”).

Bermudagrass is tolerant of most mowing regimes and can be mowed often and close, if so desired, during its growing season.

APPENDIX C

SEDIMENT BASIN DESIGN

SEDIMENT BASIN

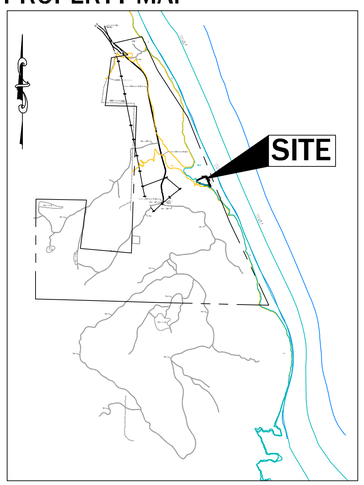
SRM MATERIALS, LLC
LACEYS SPRING QUARRY

TOWNSHIP 6S, RANGE 1E, SECTION 8

VAUGHN ROAD
LACEYS SPRING, AL 35754

VICINITY MAP

PROPERTY MAP



OWNER

SRM MATERIALS, LLC
1000 HOLLINGSHEAD CIRCLE
MURFEESBORO, TN 37129

CONTACT

DALE CATHEY
615-490-4661

PREPARED BY:

CIVIL DESIGN - CONSTRUCTION
BRIAN LEE, PE
6053 STAGE ROAD
AUBURN, ALABAMA 36832

ALABAMA LICENSED No. 35977 PROFESSIONAL ENGINEER BRIAN F. LEE

ACAI

DRAWING LIST	
SHEET	DESCRIPTION
C0.1	GENERAL NOTES
C1.0	OVERALL SITE PLAN
C2.0	GRADING PLAN
C2.1	DETAILS
C3.0	INITIAL EROSION CONTROL PLAN
C3.1	INTERMEDIATE EROSION CONTROL PLAN
C3.2	FINAL EROSION CONTROL PLAN
C3.3	EROSION CONTROL DETAILS

ALABAMA Know what's below. 811 Call before you dig.

GENERAL NOTES:

1. ADAMS CONSTRUCTION & ASSOCIATES, INC. IS NOT RESPONSIBLE FOR SITE SAFETY PROCEDURES OR METHODS OF CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION OF AND PRESENCE OF EXISTING UTILITIES PRIOR TO BEGINNING WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS DUE TO CONSTRUCTION ACTIVITIES. ANY DAMAGE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS REQUIRED TO CONSTRUCT THIS PROJECT AND PAY ALL PERMIT FEES. ALL PERMITS MUST BE IN-HAND PRIOR TO CONSTRUCTION.
5. ALL MATERIALS AND METHODS OF PLACEMENT SHALL COMPLY WITH ALDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

SITE DEMOLITION NOTES:

1. REFER TO LAYOUT PLANS FOR ADDITIONAL INFORMATION RELATING TO PAVING, CURB, SIDEWALKS, HARDSCAPES, ETC. REMOVE EXISTING CURBS AS NEEDED TO INSTALL PROPOSED IMPROVEMENTS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, RELOCATION OR PROTECTION OF ALL ABOVE AND BELOW GROUND EXISTING IMPROVEMENTS THAT ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS, UNLESS NOTED OTHERWISE.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DISPOSE OF ALL REMOVED MATERIAL AND STRUCTURES IN A LEGAL AND APPROVED MANNER. DEMOLISHED MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.
4. ALL EXISTING PAVING, CURBS, HARDSCAPE, ETC. SHALL BE SAW CUT AT THE LIMITS OF REMOVAL IN ORDER TO PROVIDE A CLEAN EDGE.

GRADING NOTES

1. THE SERVICES OF A LICENSED GEOTECHNICAL ENGINEER SHALL BE RETAINED TO PROVIDE CONSTRUCTION TESTING AND RESULTS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER OF RECORD.
2. ALL TOPSOIL SHALL BE STRIPPED WITHIN THE PROPOSED LIMITS OF GRADING AND SHALL BE STOCKPILED ON-SITE IN A APPROVED MANNER AND IN AN APPROVED LOCATION FOR LATER USE WITH ANY EXCESS TO BE DISPOSED OF OFF-SITE ONCE ALL LANDSCAPED AREAS HAVE BEEN BROUGHT TO FINISH GRADE UNLESS OTHERWISE NOTED ON THE PLANS.
3. SUBGRADE SHALL BE PROOF ROLLED WITH APPROVED EQUIPMENT AND BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL. ANY AREAS SHOWING SIGNS OF PUMPING, RUTTING, OR ANY UNSUITABLE (ORGANIC, SOFT, WET, LOOSE) MATERIAL FOUND IN PLACE SHALL BE UNDERCUT AND REPLACED, OR MOISTURE CONDITIONED AND COMPACTED TO THE OPTIMUM DENSITY AND MOISTURE CONTENT.
4. ALL EXPOSED SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12" AND RECOMPACTED TO THE SPECIFIED DENSITY AND MOISTURE CONTENT LISTED BELOW.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE SUBGRADE AFTER IT HAS BEEN INITIALLY PREPPED DUE TO INCLEMENT WEATHER AND CONSTRUCTION TRAFFIC.
6. FILL MATERIAL SHALL HAVE THE FOLLOWING PROPERTIES: VIRTUALLY FREE OF ORGANICS, NO ROCK FRAGMENTS GREATER THAN 4" WITHIN 4' OF FINISH GRADE, LIQUID LIMIT NOT EXCEEDING 50, PLASTICITY INDEX NOT EXCEEDING 30, MINIMUM STANDARD PROCTOR (ASTM D-698) OF 100 PCF, COMPACTED 98% IN PAVED AND STRUCTURAL AREAS, 95% NON-STRUCTURAL AND LANDSCAPED AREAS, PLACED IN 8" LOOSE LIFTS, AND WITHIN ±2.0% OF OPTIMUM MOISTURE CONTENT. STRUCTURAL AREAS INCLUDE ZONES OF INFLUENCE AROUND THE BUILDING, PAVEMENT AREAS, FILL SLOPES, ETC.
7. COMPACTION TESTS SHALL BE TAKEN AT THE RECOMMENDATION OF THE ON-SITE GEOTECHNICAL ENGINEER, BUT AT A MINIMUM EVERY 2,500 SQUARE FEET OF AREA PER 8" LIFT.
8. COMPACTION WITHIN LIMITED SPACES (I.E. MANHOLES, INLETS, UTILITY TRENCHES) SHOULD BE BACKFILLED AND COMPACTED SYSTEMATICALLY, AT THE DIRECTION OF THE ON-SITE GEOTECHNICAL ENGINEER. STONE BACKFILL SHALL BE INSTALLED IN 12" LOOSE LIFTS AND COMPACTED WITH 6-8 PASSES OF A VIBRATORY COMPACTOR.
9. CLEARING LIMITS SHALL BE 5' OUTSIDE OF ALL PROPOSED GRADED AREAS OR NOT BEYOND THE PROPERTY LINES WHICHEVER IS LESS.
10. NO GRADING OFF-SITE OR IN ANY ROAD RIGHT-OF-WAY WITHOUT PROPERTY APPROVAL AND PRIOR NOTIFICATION.
11. COORDINATE THE SEQUENCING OF ALL GRADING OPERATIONS WITH THE EROSION CONTROL PLAN.
12. PROPOSED GRADES INDICATED ON THIS PLAN ARE TO FINISH GRADE. THE CONTRACTOR SHALL MAKE SUBGRADE ADJUSTMENTS FOR TOPSOIL, PAVING, BUILDING PAD, ETC.
13. FILL SLOPES SHOULD BE BENCHED INTO THE EXISTING SLOPES AND SHOULD BE COORDINATED WITH THE ON-SITE GEOTECHNICAL ENGINEER FOR BENCH DETAILS (HEIGHT AND DEPTH OF BENCH INTO THE SLOPE).
14. UNSUITABLE MATERIAL REFERS TO MATERIAL THAT IS NOT SUITABLE FOR BUILDING OR PAVEMENT SUPPORT FOR REASONS ASSOCIATED WITH MATERIAL PROPERTIES, SUCH AS HIGHLY PLASTIC SOILS, "FAT" CLAYS, ORGANICS, AND OLD FILL. MATERIAL WHICH IS OTHERWISE SUITABLE, BUT ABOVE THE OPTIMUM MOISTURE AND REQUIRES MOISTURE CONDITIONING PRIOR TO USE AS ENGINEERED FILL, SHALL NOT BE CONSIDERED AS "UNSUITABLE".
15. DEWATERING SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION. REROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATED AREAS. DO NO ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NO USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUND WATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED. IF GROUND WATER DEWATERING IS REQUIRED, CONTRACTOR IS TO OBTAIN ANY PERMITS AS MAY BE REQUIRED PRIOR TO DISCHARGE OF EFFLUENT FROM DEWATERING.
16. WHERE ROCK IS ENCOUNTERED WITHIN 18" OF THE PAVING SUBGRADE AND 36" OF THE BUILDING SUBGRADE, SUITABLE MATERIAL SHALL BE REPLACED TO THE PROPOSED SUBGRADE ELEVATION.
17. GRADING ADJACENT TO THE BUILDING SHALL BE COORDINATED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR FOUNDATION WALLS, STEM WALLS, DRAINS, AND OTHER CONDITIONS. THE CONTRACTOR SHALL NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES.

EROSION CONTROL NOTES:

1. SITE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND REGULATIONS.
2. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING AND MAINTAINING A NPDES CONSTRUCTION STORMWATER PERMIT FROM ADEM. THE OWNER SHALL BE RESPONSIBLE FOR ALL MONITORING, INSPECTIONS, ETC. TO ENSURE THAT THE SITE IS AT ALL TIMES IN ACCORDANCE WITH ADEM RULES AND REGULATIONS. DOCUMENTATION OF INSPECTIONS BY A Q.C.I. OR Q.C.P. SHALL BE MAINTAINED BY THE OWNER. ANY AND ALL FEES, FINES, ETC., SHALL BE THE RESPONSIBILITY OF THE OWNER.
3. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY INSTALLED AND MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION PROCESS AND UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED AND THE PERMIT HAS BEEN TERMINATED. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO BE AT NO ADDITIONAL COST TO THE OWNER.
4. EROSION CONTROL DEVICES SHOWN ON THESE PLANS ARE A MINIMUM. ADDITIONAL DEVICES SHALL BE INSTALLED AS REQUIRED TO PREVENT SILTATION, EROSION AND OTHER DEGRADATION OR POLLUTION TO THE SITE OR ADJACENT PROPERTIES, STREAMS, DITCHES, AND PUBLIC ROADWAYS.
5. EROSION CONTROL DEVICES SHALL INCLUDE, BUT NOT LIMITED, TO THE FOLLOWING DEVICES: SILT FENCING, BRUSH BERMS, SEDIMENT BASINS, SEDIMENT BASINS, STRAW WATTLES, CHECK DAMS, FILTER BERMS, JUTE MATTING, VEGETATIVE FILTER STRIPS, TURF REINFORCEMENT MAT, DIVERSION BERMS, ETC.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES IN GOOD OPERATION CONDITION DURING THE LIFE OF THE NPDES PERMIT. THIS RESPONSIBILITY SHALL INCLUDE THE CLEANUP AND/OR REPAIRS TO THE DEVICES AT NO ADDITIONAL COST TO THE OWNER.
7. EROSION CONTROL DEVICES SHALL BE MONITORED AND MAINTAINED UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED AND AFTER EACH RAINFALL GREATER THAN 0.75 INCHES IN A 24 HOUR PERIOD, ANY WIND GUSTS GREATER THAN 25 MPH, AND ANY SUSTAINED WINDS GREATER THAN 20 MPH IN A 24 HOUR PERIOD.
8. AFTER ALL LAND DISTURBANCE ACTIVITIES HAVE CEASED AND AFTER ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED, THE EROSION CONTROL DEVICES SHALL BE REMOVED BY THE CONTRACTOR AND THE AREA CLEANED AND DRESSED.
9. DEWATERING OPERATIONS SHOULD BE PERFORMED FROM THE TOP OF THE WATER COLUMN AND MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE OR POLLUTION TO ADJACENT PROPERTIES, STREAMS, DITCHES, OR PUBLIC ROADWAYS.
10. A CONSTRUCTION EXIT PAD SHALL BE CONSTRUCTED PER ADEM SPECS AT ALL SITE EXITS TO PREVENT TRACKING OF DIRT AND SEDIMENT ONTO PUBLIC OR PRIVATE ROADWAYS. IF SEDIMENT REACHES THE ROADWAY, THEN IT MUST BE CLEANED AT THE END OF EACH WORK DAY.
11. ALL LAND DISTURBANCE ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE EXPOSURE OF BARE AREAS AT ANY ONE TIME.
12. ALL DISTURBED AREAS LEFT INACTIVE FOR MORE THAN 13 DAYS SHALL BE SEEDED AND MULCHED WITHIN 5 DAYS OF BEING DISTURBED.
13. ALL AREAS TO HOST PERMANENT VEGETATION SHALL RECEIVE 4 INCHES OF TOPSOIL AND PERMANENT GRASSING UNLESS OTHERWISE INDICATED ON A LANDSCAPE PLAN.
14. PRIOR TO SITE CLEARING, ALL PERIMETER SILT FENCING, BRUSH BERMS, ETC. AND CONSTRUCTION EXIT PADS SHALL BE INSTALLED.
15. ALL EXISTING STREAMS, DITCHES, ETC. SHALL BE PROTECTED FROM SEDIMENTATION BY SILT FENCING, WATTLES, BRUSH BERMS, ETC.
16. FILTER INLET PROTECTION SHALL BE INSTALLED AT ALL INLETS UPON THE COMPLETION OF EACH INLET AS INSTALLED.
17. RIP RAP SHALL BE PLACED AT EACH HEADWALL IMMEDIATELY FOLLOWING CONSTRUCTION OF EACH HEADWALL.
18. EROSION CONTROL BLANKET SHALL BE PLACED ON ALL SLOPES 3:1 AND STEEPER AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

LEGEND:

	PROPERTY LINE
OHP OHP	EXISTING OVERHEAD ELECTRICAL
595	EXISTING GRADE
575	FINAL GRADE
Sb	CLASS A SILT FENCE
Ps	PERMANENT SEED
Ts	TEMPORARY SEED
Mu	MULCH
Ecb	EROSION CONTROL BLANKET
Op	OUTLET PROTECTION
Cep	CONSTRUCTION EXIT PAD
Dv	DIVERSION

REFERENCES:

TOPOGRAPHICAL SURVEY CONDUCTED BY ADAMS CONSTRUCTION & ASSOCIATES, INC.
6053 STAGE ROAD AUBURN, AL 36832 334-521-5320 DECEMBER 11, 2023.

BOUNDARY SURVEY BY ALLEN LAND SURVEYING, LLC
201 COUNTY ROAD 1859 ARAB, AL 35016 256-640-3516 NOVEMBER 17, 2022

ALABAMA Know what's below. 811 Call before you dig.

ADAMS CONSTRUCTION & ASSOCIATES, INC.
6053 Stage Road Auburn, Alabama 36832, 334-521-5320

ALABAMA LICENSED No. 35977 PROFESSIONAL ENGINEER BRIAN F. LEE

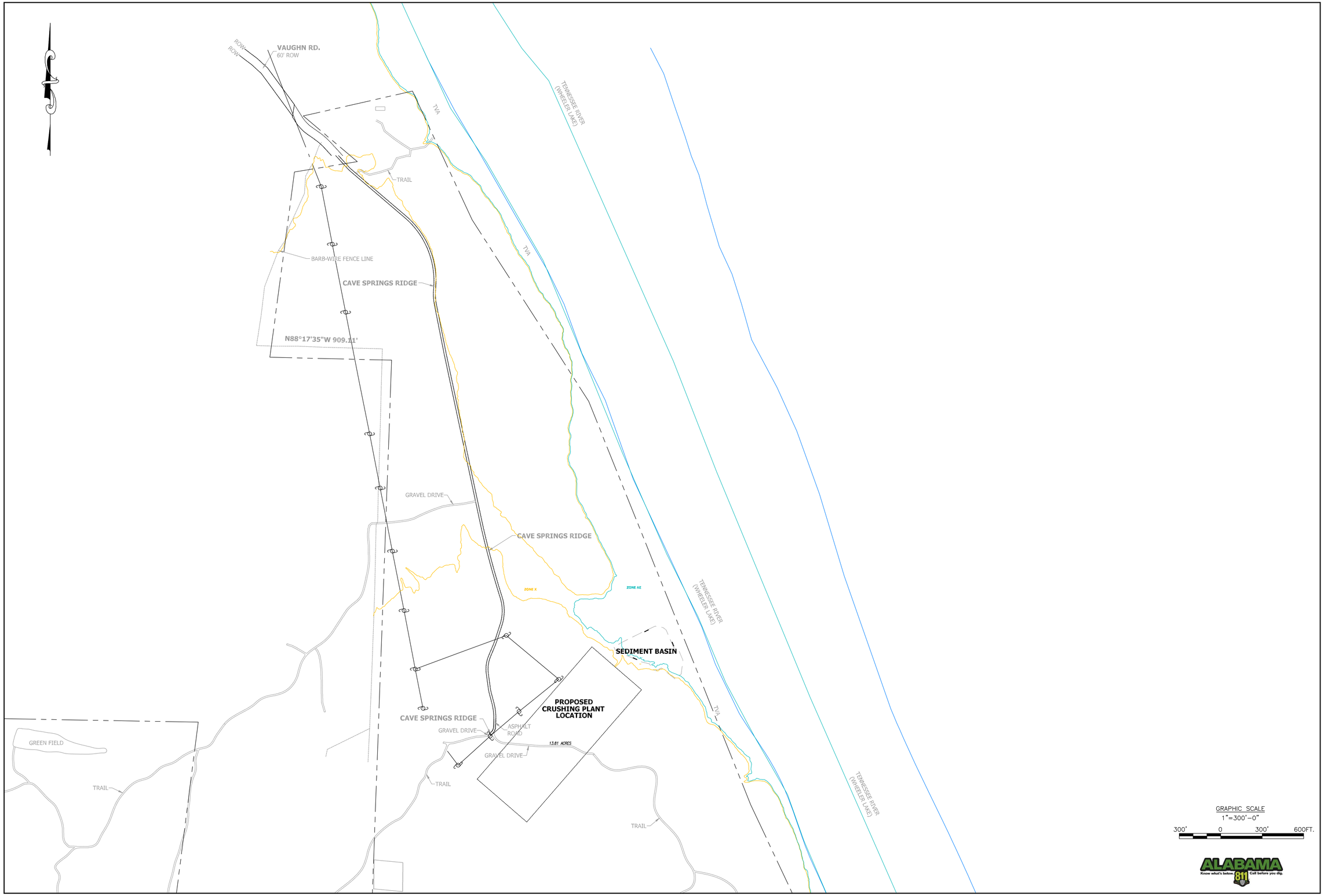
SEDIMENT BASIN
SRM MATERIALS, LLC
LACEYS SPRINGS, ALABAMA

ISSUED:

JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: NONE

GENERAL NOTES

C0.1



GRAPHIC SCALE
1"=300'-0"
300' 0 300' 600FT.

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6053 Stage Road Auburn, Alabama 36832, 334.521.5320

ALABAMA LICENSED No. 35977 PROFESSIONAL ENGINEER BRIAN F. LEE

SEDIMENT BASIN
SRM MATERIALS, LLC
LACEYS SPRINGS, ALABAMA

ISSUED:

JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: 1" = 300'-0"

OVERALL SITE PLAN

C1.0

NOTE:

SEDIMENT BASIN IS LOCATED IN FLOOD ZONE AE. CUT AND SHIFT IN FLOOD ZONE AE MUST BE NET ZERO.

SEDIMENT BASIN

TOP OF DAM ELEVATION 576.40
BOTTOM OF POND ELEVATION 571.07
STORAGE REQUIRED = 126,936 CUBIC FEET
STORAGE PROVIDED = 149,095 CUBIC FEET
STORAGE ELEVATION = 574.40

SEDIMENT BASIN

•BOTTOM OF POND 571.07

•TOP OF DAM 576.40

•TOP OF DAM 576.40

574.40

DISTURBED LIMITS

DISTURBED LIMITS

DISTURBED LIMITS

EMERGENCY SPILLWAY, SEE DETAIL SHEET C2.1

S21°40'59"E 1502.96'

TVA PROPERTY

TENNESSEE RIVER (WHEELER LAKE)

ZONE AE

ZONE X

CRUSHING PLANT
APPROXIMATE LOCATION
~13.8 ACRES

GRAPHIC SCALE
1"=30'-0"
30' 0 30' 60FT.

ALABAMA 811 Know what's below. Call before you dig.

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6053 Stage Road Auburn, Alabama 36832, 334.521.5320

ALABAMA LICENSED No. 35977 PROFESSIONAL ENGINEER BRIAN F. LEE

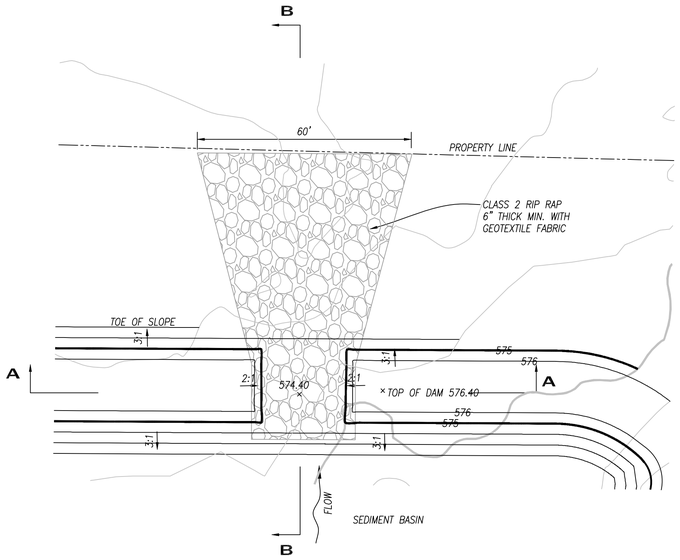
SEDIMENT BASIN
SRM MATERIALS, LLC
LACEYS SPRINGS, ALABAMA

ISSUED:

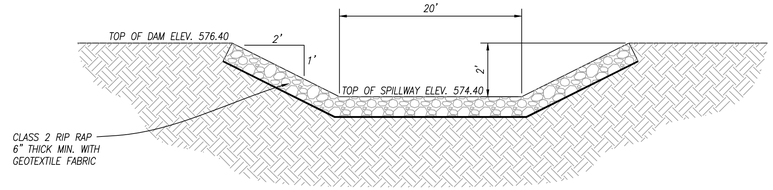
JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: 1" = 30'-0"

GRADING PLAN

C2.0



EMERGENCY SPILLWAY DETAIL
N.T.S.



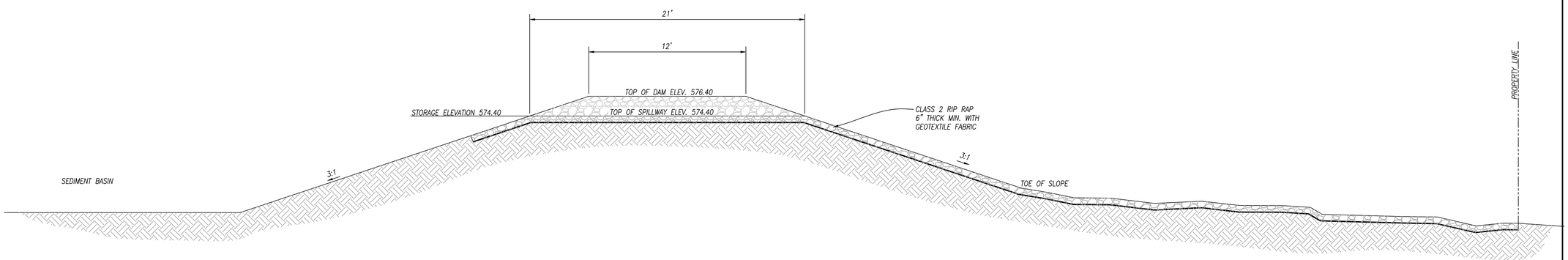
SECTION A-A
N.T.S.

SEDIMENT BASIN VOLUME REPORT *Wed Jan 17 09:41:21 2024*

Lower Left Grid Corner : 441542.07,1464556.24
Upper right Grid Corner: 441920.41,1464842.96
X grid resolution: 50, Y grid resolution: 50
X grid cell size : 7.57, Y grid cell size: 5.73
Elevation Range: 571.07 to 574.40

Storage Volumes

Elevation	Storage(AcreFt)	(C.Y.)	(C.F.)	(Gallons)	Area(Acre)
571.07	0.00236	3.8	103.0	770.1	0.798
571.57	0.43317	698.8	18868.9	141149.5	0.905
572.07	0.89633	1446.1	39044.0	292069.3	0.958
572.57	1.38363	2232.2	60270.7	450856.4	1.009
573.07	1.89427	3056.1	82514.3	617250.1	1.062
573.57	2.42452	3911.6	105612.2	790034.0	1.101
574.07	2.96680	4786.4	129234.0	966737.5	1.119
574.40	3.33094	5373.9	145095.9	1085392.7	1.123



SECTION B-B
N.T.S.

ALABAMA Know what's below. 811 Call before you dig.

ADAMS CONSTRUCTION & ASSOCIATES, INC.
6053 Stage Road Auburn, Alabama 36832, 334.521.5320

ALABAMA LICENSED No. 35977 PROFESSIONAL ENGINEER BRIAN F. LEE

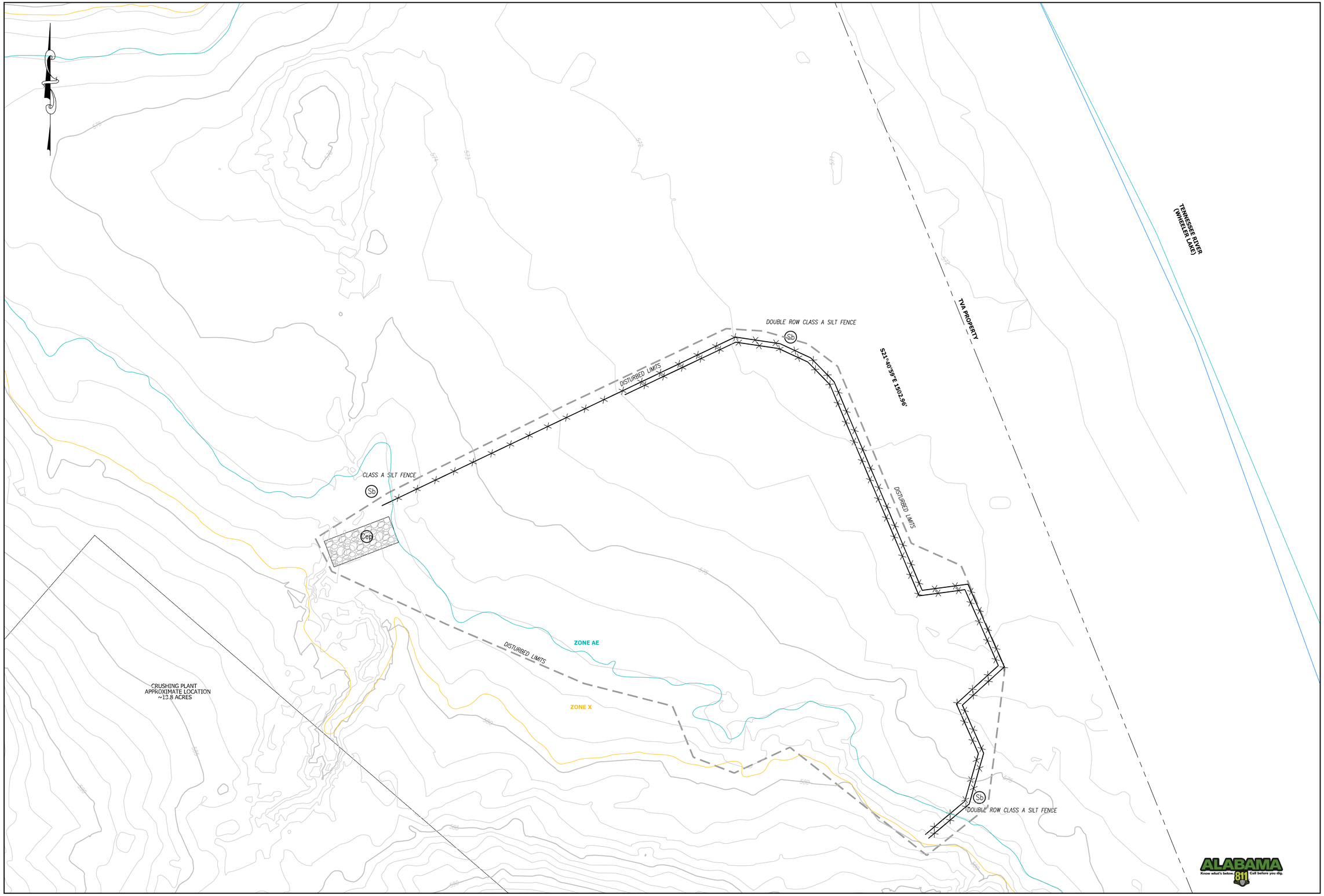
SEDIMENT BASIN
SRM MATERIALS, LLC
LACEYS SPRINGS, ALABAMA

ISSUED:

JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: NONE

DETAILS

C2.1



ADAMS CONSTRUCTION & ASSOCIATES, INC.
6053 Stage Road Auburn, Alabama 36832, 334.521.5320

ALABAMA LICENSED
No. 35977
PROFESSIONAL
ENGINEER
BRIAN F. LEE

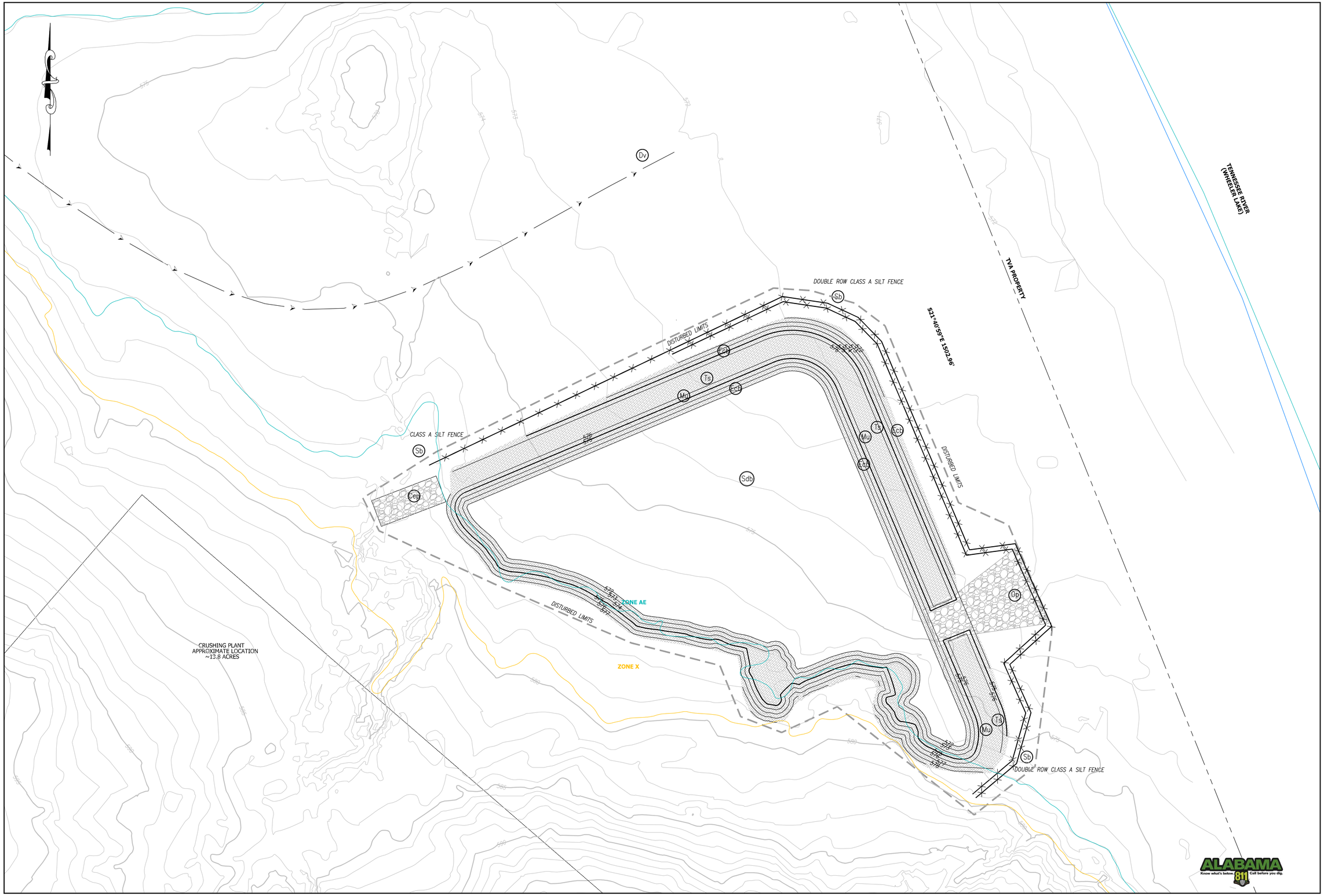
SEDIMENT BASIN
SRM MATERIALS
LACEYS SPRINGS, ALABAMA

ISSUED:

JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: NONE

INITIAL EROSION CONTROL PLAN

C3.0



ADAMS CONSTRUCTION & ASSOCIATES, INC.
6053 Stage Road Auburn, Alabama 36832, 334.521.5320

ALABAMA LICENSED
No. 35977
PROFESSIONAL
ENGINEER
BRIAN F. LEE

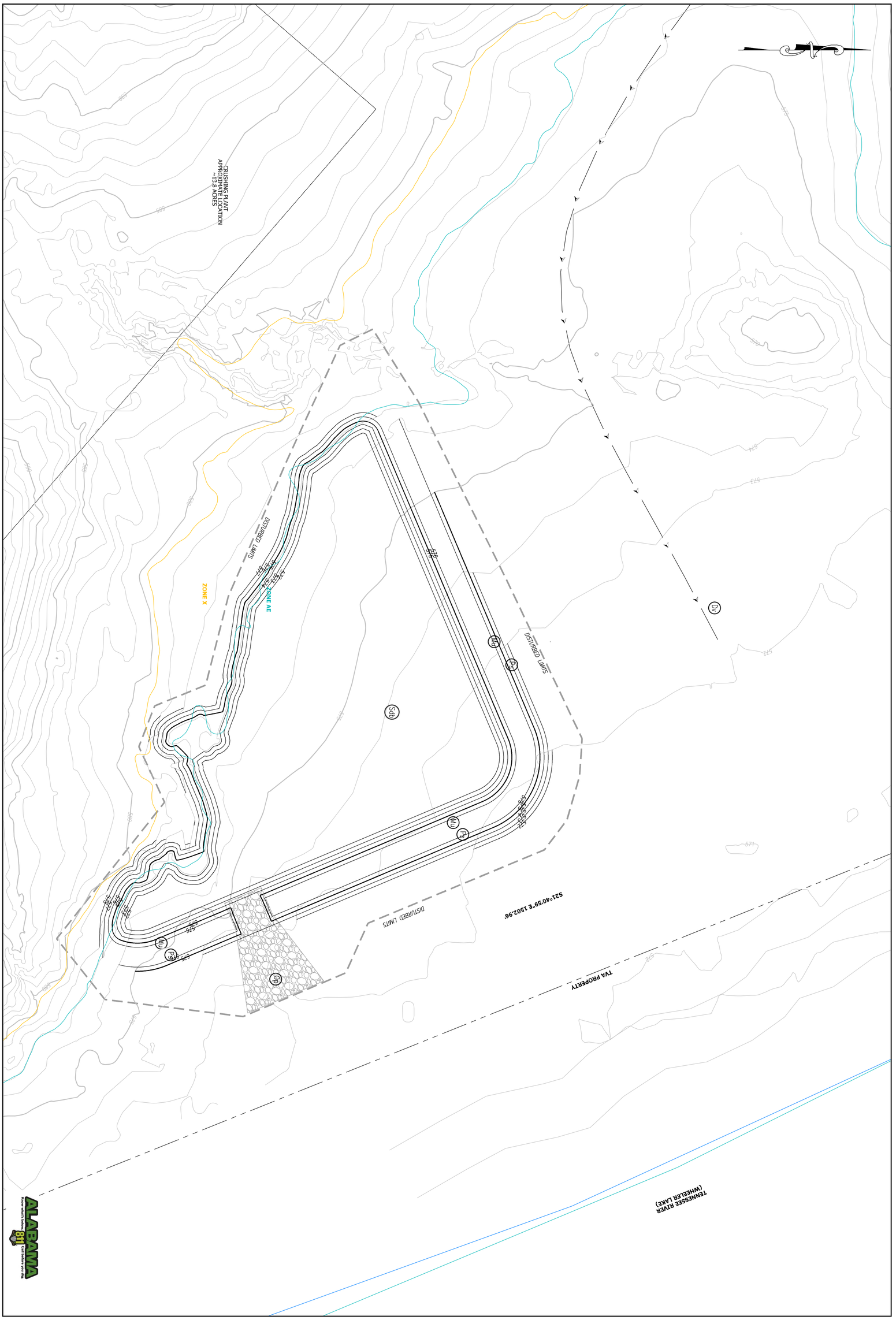
SEDIMENT BASIN
SRM MATERIALS, LLC
LACEYS SPRINGS, ALABAMA

ISSUED:

JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: NONE

INTERMEDIATE EROSION CONTROL PLAN

C3.1



C3.2

FINAL EROSION CONTROL PLAN

JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: NONE

ISSUED:

SEDIMENT BASIN
SRM MATERIALS, LLC
LACEYS SPRINGS, ALABAMA

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 35977 BRIAN FINKLEA

ADAMS CONSTRUCTION & ASSOCIATES, INC.
6053 Stage Road Auburn, Alabama 36832, 334.521.5320

PROPOSED ADEM PERMITTING:

(PERMIT APPLIED FOR BY OWNER)

PERMITTEE: SRM MATERIALS, LLC
ADDRESS: 1000 HOLLINGSHEAD CIRCLE
MURFREESBORO, TN 37129

CONTACT: DALE CATHEY
PHONE: 615-490-4661

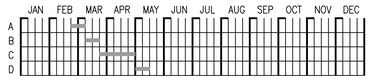
PROPOSED ADEM NPDES PERMIT ALO084486

PROPERTY 946 ACRES±

SEDIMENT BASIN DISTURBED AREA 2.27 ACRES

CONSTRUCTION SCHEDULE

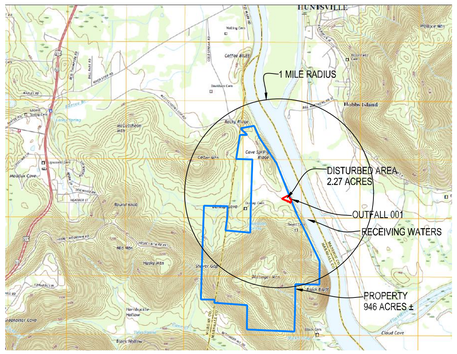
PROPOSED PROJECT START 2/22/2024
PROPOSED PROJECT END 5/15/2024



A. PLACE CONSTRUCTION EXIT PAD AND INSTALL SILT FENCE
B. BEGIN CLEARING SITE, SEED AND MULCH BARE GROUND
C. BEGIN GRADING, PLACE FILLS, SEED AND MULCH BARE AREAS
D. INSTALL PERMANENT STABILIZATION

NOTE: CONTROL OF EROSION AND SEDIMENT FROM THIS SITE WILL SOLELY BE THE RESPONSIBILITY OF THE OWNER.

CONSTRUCTION SCHEDULE START DATE MAY BE REVISED BY OWNER.



USGS TOPO MAP

N.T.S.

Table TS-1 Commonly Used Plants for Temporary Cover[1]

Species	Seeding Rate/AC PLS[2]	North	Central	South
		Seeding Dates		
Millet, Browntop or German	40 lbs	Apr1-Aug 1	Apr1- Aug 15	Apr 1-Aug 15
Rye	3 bu	Sep I-Nov 15	Sep 15-Nov 15	Sep 15-Nov 15
Ryegrass	30 lbs	Aug I-Sep 15	Sep I-Oct 15	Sep 1-Oct 15
Sorghum-Sudan Hybrids	40 lbs	May I-Aug 1	Apr 15-Aug 1	Apr I-Aug 15
Sudangrass	40 lbs	May I-Aug I	Apr 15-Aug	Apr I-Aug 15
Wheat	3 bu	Sep I-Nov 1	Sep 15-Nov 15	Sep 15-Nov 15
Common Bermudagrass	10 lbs	Apr 1-July 1	Mar 15-July 15	Mar 1-July 15
Crimson Clover	10 lbs	Sept 1-Nov 1	Sept 1-Nov 1	Sept 1-Nov 1

1 DO NOT USE Seeding Rates as part of a mixture.
2 PLS means Pure Live Seed and is used to adjust seeding rates. For example, to plant 10 lbs PLS of a species with germination of 80% and purity of 90%, PLS= 0.8 X 0.9 = 72%. 10lbs PLS = 10/0.72 = 13.9 lbs of the species to be planted.

Table PS-1 Commonly Used Plants for Permanent Cover with Seeding Rates and Dates[1]

Species	Seeding Rates/Ac PLS[2]	North	Central	South
		Seeding Dates		
Bahiagrass, Pensacola	40 lbs	--	Mar 1-July 1	Feb 1-Nov 1
Bermudagrass, Common	10 lbs	Apr 1-July 1	Mar 15-July 15	Mar 1-July 15
Bahiagrass, Pensacola Bermudagrass, Common	30 lbs 5 lbs	--	Mar 1-July 1	Mar 1-July 15
Bermudagrass, Hybrid (Lawn Types)	Solid Sod	Anytime	Anytime	Anytime
Bermudagrass, Hybrid (Lawn Types)	Sprigs 1/sq ft	Mar 1-Aug 1	Mar 1-Aug 1	Feb 15-Sep 1
Fescue, Tall	40-50 lbs	Sep 1-Nov 1	Sep 1-Nov 1	--
Sericea	40-60 lbs	Mar 15-July 15	Mar 1-July 15	Feb 15-July 15
Sericea & Common Bermudagrass	40lbs 10 lbs	Mar 15-July 15	Mar 1-July 15	Feb 15-July 15
Switchgrass, Alamo	4 lbs	Apr 1-Jun 15	Mar 15-Jun 15	Mar 15-Jun15

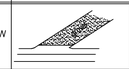
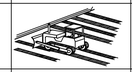
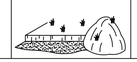
1 DO NOT USE Seeding Rates as part of a mixture unless shown as a mixture in this table.
2 PLS means Pure Live Seed and is used to adjust seeding rates. For example, to plant 10 lbs PLS of a species with germination of 80% and purity of 90%, PLS= 0.8 X 0.9 = 72%. 10lbs PLS = 10/0.72 = 13.9 lbs of the species to be planted.

Table MU-2 Mulching Materials and Application Rates

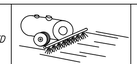
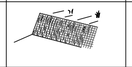
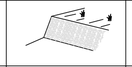
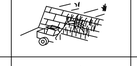
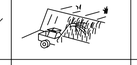
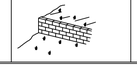
Material	Rate Per Acre and (Per 1000 ft.²)	Notes
Straw with Seed	1 ½-2 tons (70 lbs-90 lbs)	Spread by hand or machine to attain 75% groundcover; anchor when subject to blowing.
Straw Alone (no seed)	2 ½-3 tons (115 lbs-160 lbs)	Spread by hand or machine; anchor when subject to blowing.
Wood Chips	5-6 tons (225 lbs-270 lbs)	Treat with 12 lbs. nitrogen/ton.
Bark	35 cubic yards (0.8 cubic yard)	Can apply with mulch blower.
Pine Straw	1-2 tons (45 lbs-90 lbs)	Spread by hand or machine; will not blow like straw.
Peanut Hulls	10-20 tons (450 lbs-900 lbs)	Will wash off slopes. Treat with 12 lbs. nitrogen/ton.
HECPs	0.75 – 2.25 tons (35 lbs – 103 lbs)	Refer to ECTC or Manufacturer's Specifications.

STRUCTURAL PRACTICES FOR BEST MANAGEMENT PRACTICES

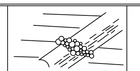
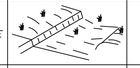
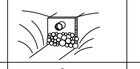
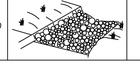
SITE PREPARATION

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cep	*CONSTRUCTION EXIT PAD*			A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets. It shall be installed at all points of ingress and egress to the site.
Lg	*LAND GRADING*		Lg	Reshaping of the ground surface
Tsg	*TOPSOILING*		Tsg	The practice of stripping off the more fertile top soil, storing it, then spreading it over the disturbed area after the completion of construction activities. Spread/re-spread minimum of 4" to all surfaces to host vegetation.

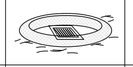
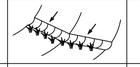
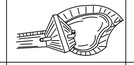
SURFACE STABILIZATION

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Dc	*DUST CONTROL ON DISTURBED AREAS*		Dc	Controlling surface and air movement of dust on construction sites, roadways and similar sites.
Ecb	*EROSION CONTROL BLANKET*		Ecb	A blanket or mat used in establishing a temporary or permanent vegetative cover to provide erosion control on slopes where erosion hazard is high. Plans to indicate class of blanket. Install per manufacturer. It shall be used in conjunction with permanent vegetation.
Mu	*MULCHING*		Mu	Establishing temporary protection for disturbed areas where seeding may not have a suitable growing season to produce an erosion retarding cover.
Ps	*PERMANENT SEEDING*		Ps	Establishing a permanent vegetative cover with perennial vegetation on disturbed areas.
Pv	*PRESERVATION OF VEGETATION*		Pv	Avoidance of an area during land disturbing and construction activity to prevent mechanical and other injury to desirable plants in the planned landscape.
Sod	*SODDING*		Sod	The use of transplanted vegetative cover to provide immediate erosion control in disturbed areas.
Ts	*TEMPORARY SEEDING*		Ts	Establishing a temporary vegetative cover with fast growing seeding on disturbed areas.
Rw	*RETAINING WALL*		Rw	A constructed wall used to eliminate steep slopes between areas of abrupt changes in grade.

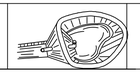
RUNOFF CONVEYANCE

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	*CHECKDAMS*			A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Dv	*DIVERSION*			An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Gs	*GRASS SWALE*			A natural or constructed channel shaped or graded for the stable conveyance of runoff
Op	*OUTLET PROTECTION*			A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
Rs	*RIPRAP-LINED SWALE*		Rs	A natural or constructed channel with an erosion resistant rock lining designed to carry concentrated runoff to a stable outlet.

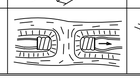
SEDIMENT CONTROL

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bfb	*BRUSH/FABRIC BARRIER*		Bfb	A dam-like structure constructed of woody residue and faced with a geotextile fabric to provide a temporary sediment basin during clearing and grubbing operations.
Fip	*FABRIC INLET PROTECTION*		Fip	A device or structure placed around a storm drain inlet to prevent sediment from entering storm drains during construction as a temporary sediment filter. May be woven geotextile barrier, "silt Saver", or "wattles". No hay bales.
Fs	*FILTER STRIP*			A wide belt of vegetation designed to provide infiltration, intercept sediment and reduce stormwater flow and velocity.
Rd	*ROCK FILTER DAM*			A permanent or temporary stone filter dam installed across small streams or drainageways.
Sb	*SEDIMENT BARRIER*			A barrier to prevent sediment from leaving the construction site. It may be sandbags, wattles, logs and poles, gravel, sediment fence, or a combination thereof. The barriers are usually temporary and inexpensive.
Sbn	*SEDIMENT BASIN*			A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out. the basin is usually temporary but may be designed as a permanent pond or stormwater retention device.
Sst	*WATTLE SEDIMENT TRAP*			A temporary catch basin consisting of a row or more of entrenched and anchored wattles

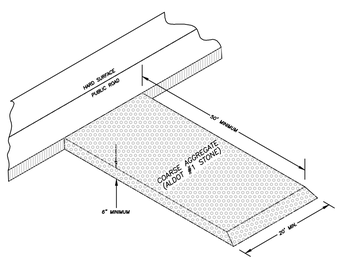
STORMWATER MANAGEMENT

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sdb	*STORMWATER DETENTION BASIN*		Sdb	A dam-basin designed to hold stormwater runoff and release the water slowly to prevent downstream flooding and stream erosion.

STREAM PROTECTION

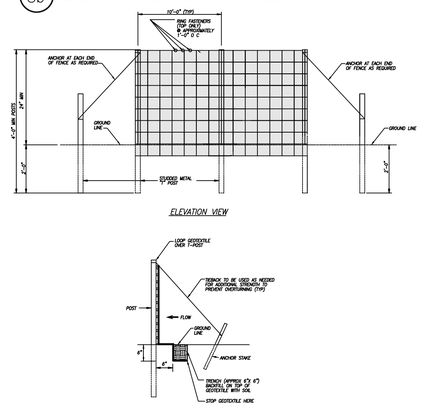
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bz	*BUFFER ZONE*		Bz	An undisturbed natural " green belt " separating the land-disturbed site from surrounding property and bordering streams. It serves to reduce water velocity and remove some sedimegt It is also at times a noise or visiion pollution barrier.
Cs	*CHANNEL STABILIZATION*		Cs	Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Tsc	*TEMPORARY STREAM CROSSING*		Tsc	A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. USACE Permit may be required

Cep CONSTRUCTION EXIT PAD



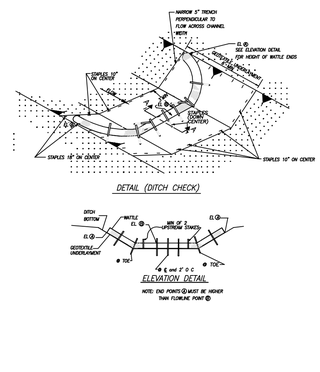
NOTE: GEOFABRIC SHALL BE INSTALLED PRIOR TO PLACEMENT OF STONE.

Sb CLASS A FILTER FABRIC SILT FENCE INSTALLATION



NOTE: REMOVE ACCUMULATED SEDIMENT WHEN DEPTH REACHES 1/4 HEIGHT OF BARRIER.

Sst WATTLE STAKE DETAIL



NOTE: ALL WATTLES SHALL BE INSTALLED PER MANUFACTURER'S DIRECTIONS AND ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORMWATER MANAGEMENT ON CUSTRUCTION SITES AND URBAN AREAS.

ADAMS CONSTRUCTION & ASSOCIATES, INC.
6053 Stage Road Auburn, Alabama 36832, 334-521-5320

ALABAMA LICENSED No. 35977 PROFESSIONAL ENGINEER BRIAN F. LEE

SEDIMENT BASIN
SRM MATERIALS, LLC
LACEYS SPRINGS, ALABAMA

ISSUED:

JOB NO: SRM SED BASIN
DRAWN BY: AMH
CHECKED BY: BFL
DATE: 17 JAN 2024
SCALE: NONE

EROSION CONTROL DETAILS

C3.3

ALABAMA 811 Know what's below. Call before you dig.

END OF DOCUMENT