

EDWARD F. POOLOS
DIRECTOR

JEFFERY W. KITCHENS
DEPUTY 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

August 21, 2026

Mr. Paul Burkhalter
Member, Project Manager
Warrior Materials, LLC
11399 Dominion Drive
Duncanville, AL 35456

RE: Draft Permit
Warrior Materials Quarry
NPDES Permit Number AL0084543
Tuscaloosa County (125)

Dear Mr. Burkhalter:

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 Jasmine White at (334) 270-5622 or jasmine.white@adem.alabama.gov.

Sincerely,

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

WDM/jlw

File: DPER/63617

cc: Jasmine White, ADEM
Environmental Protection Agency Region IV
Alabama Department of Conservation and Natural Resources
U.S. Fish and Wildlife Service
Alabama Historical Commission
Advisory Council on Historic Preservation
U.S. Army Corps of Engineers Mobile District
U.S. Army Corps of Engineers Nashville District
Alabama Department of Workforce



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

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

Coastal Office
1615 South Broad Street
Mobile, AL 36605
(251) 450-3400
(251) 479-2593 (FAX)



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: Warrior Materials, LLC
P.O. Box 70
Duncanville, AL 35466

FACILITY LOCATION: Warrior Materials Quarry
Big Sandy Road
Vance, AL 35490
Tuscaloosa County
T22S, R7W, Sections 8, 17, and 18

PERMIT NUMBER: AL0084543

DSN & RECEIVING STREAM: 001-1 Long Branch
002-1 Long Branch
003-1 Long Branch
004-1 Long Branch

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
Water Division Chief

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

Crushed and Broken Limestone Quarry, Dry and Wet Preparation, Mineral Loading, Mineral Storing, Mineral Transportation, and Associated Areas

TABLE OF CONTENTS

PART I	DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS	
A.	DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS.....	4
B.	REQUIREMENTS TO ACTIVATE A PROPOSED MINING OUTFALL.....	4
C.	DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS	4
	1. Sampling Schedule and Frequency.....	4
	2. Measurement Frequency.....	5
	3. Monitoring Schedule.....	5
	4. Sampling Location.....	6
	5. Representative Sampling.....	6
	6. Test Procedures.....	6
	7. Recording of Results.....	7
	8. Routine Inspection by Permittee.....	7
	9. Records Retention and Production.....	8
	10. Monitoring Equipment and Instrumentation.....	8
D.	DISCHARGE REPORTING REQUIREMENTS.....	8
	1. Requirements for Reporting of Monitoring.....	8
	2. Noncompliance Notification.....	10
	3. Reduction, Suspension, or Termination of Monitoring and/or Reporting.....	11
E.	OTHER REPORTING AND NOTIFICATION REQUIREMENTS.....	12
	1. Anticipated Noncompliance.....	12
	2. Termination of Discharge.....	12
	3. Updating Information.....	12
	4. Duty to Provide Information.....	13
F.	SCHEDULE OF COMPLIANCE.....	13
PART II	OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES	
A.	OPERATIONAL AND MANAGEMENT REQUIREMENTS.....	14
	1. Facilities; Operation and Management.....	14
	2. Pollution Abatement and/or Prevention Plan.....	14
	3. Best Management Practices (BMPs).....	14
	4. Biocide Additives.....	16
	5. Facility Identification.....	16
	6. Removed Substances.....	16
	7. Loss or Failure of Treatment Facilities.....	16
	8. Duty to Mitigate.....	17
B.	BYPASS AND UPSET.....	17
	1. Bypass.....	17
	2. Upset.....	18
C.	PERMIT CONDITIONS AND RESTRICTIONS.....	19
	1. Prohibition against Discharge from Facilities Not Certified.....	19
	2. Permit Modification, Suspension, Termination, and Revocation.....	19
	3. Requirements for Metals, Cyanide, and Phenols Monitoring and Reporting.....	20
	4. Automatic Expiration of Permits for New or Increased Discharges.....	20

5. Transfer of Permit.....	21
6. Groundwater	21
7. Property and Other Rights.....	21
D. RESPONSIBILITIES	22
1. Duty to Comply	22
2. Change in Discharge	22
3. Compliance with Toxic or Other Pollutant Effluent Standard or Prohibition	23
4. Compliance with Water Quality Standards and Other Provisions.....	23
5. Compliance with Statutes and Rules	23
6. Right of Entry and Inspection.....	24
7. Duty to Reapply or Notify of Intent to Cease Discharge.....	24
PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS	
A. CIVIL AND CRIMINAL LIABILITY.....	25
1. Tampering.....	25
2. False Statements.....	25
3. Permit Enforcement.....	25
4. Relief From Liability.....	25
B. OIL AND HAZARDOUS SUBSTANCE LIABILITY.....	25
C. AVAILABILITY OF REPORTS.....	25
D. DEFINITIONS	25
E. SEVERABILITY.....	30
F. PROHIBITIONS AND ACTIVIES NOT AUTHORIZED.....	30
G. DISCHARGES TO IMPAIRED WATERS.....	30

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 (Outfall 002-1 and 004-1) 00400	6.0 s.u.	-----	8.5 s.u.	Grab	2/Month
pH (Outfalls 001-1 and 003-1) 00400	6.0 s.u.	-----	9.0 s.u.	Grab	2/Month
Solids, Total Suspended 00530	-----	25.0 mg/L	45.0 mg/L	Grab	2/Month
Flow, In Conduit or Thru Treatment Plant ² 50050	-----	Report MGD	Report MGD	Instantaneous	2/Month

B. REQUIREMENTS TO ACTIVATE A PROPOSED MINING OUTFALL

1. Discharge from any point source identified on Page 1 of this Permit which is a proposed outfall is not authorized by this Permit until the outfall has been constructed and certification received by the Department from a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed according to good engineering practices and in accordance with the Pollution Abatement and/or Prevention (PAP) Plan.
2. Certification required by Part I.B.1. shall be submitted on a completed ADEM Form 432. The certification shall include the latitude and longitude of the constructed and certified outfall.
3. Discharge monitoring and Discharge Monitoring Report (DMR) reporting requirements described in Part I.C. of this Permit do not apply to point sources that have not been constructed and certified.
4. Upon submittal of the certification required by Part I.B.1. to the Department, all monitoring and DMR submittal requirements shall apply to the constructed and certified outfall.

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

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

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

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. An electronic Noncompliance Notification Form in a Department-approved format must be submitted to the Director in accordance with Parts I.D.2.a. and b. The completed form must document the following information:
 - (1) A description of the discharge and cause of noncompliance;
 - (2) The period of noncompliance, including exact dates 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. Requirements for Metals, Cyanide, and Phenols Monitoring and Reporting

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

4. Automatic Expiration of Permits for New or Increased Discharges

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

- b. Except as provided by ADEM Admin. Code r. 335-6-6-.02(h) and 335-6-6-.05, if any portion of this Permit was issued or modified to authorize the discharge of increased quantities of pollutants to accommodate the modification of an existing facility, that portion of this Permit shall expire eighteen months after this Permit's issuance if construction of the modification has not begun within eighteen month period.
- c. Construction has begun when the owner or operator has:
 - (1) Begun, or caused to begin as part of a continuous on-site construction program:
 - (i) Any placement, assembly, or installation of facilities or equipment; or
 - (ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - (2) Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.
- d. The automatic expiration of this Permit for new or increased discharges if construction has not begun within the eighteen month period after the issuance of this Permit may be tolled by administrative or judicial stay.

5. Transfer of Permit

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

6. Groundwater

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

7. Property and Other Rights

This Permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, trespass, or any infringement of Federal, State, or local laws or regulations, nor does it authorize or

approve the construction of any physical structures or facilities or the undertaking of any work in any waters of the State or of the United States.

D. RESPONSIBILITIES

1. Duty to Comply

- a. The Permittee must comply with all terms and conditions of this Permit. Any permit noncompliance constitutes a violation of the AWPCA, AEMA, and the FWPCA and is grounds for enforcement action, for permit termination, revocation and reissuance, suspension, modification, or denial of a permit renewal application.
- b. The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the FWPCA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the effluent standard, prohibition or requirement.
- c. For any violation(s) of this Permit, the Permittee is subject to a civil penalty as authorized by the AWPCA, the AEMA, the FWPCA, and 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 ACTIVITIES 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: Warrior Materials, LLC

Facility Name: Warrior Materials Quarry

County: Tuscaloosa

Permit Number: AL0084543

Prepared by: Jasmine White

Date: August 19, 2026

Receiving Waters: Long Branch

Permit Coverage: Crushed and Broken Limestone Quarry, Dry and Wet Preparations, Mineral Loading, Mineral Storing, Mineral Transportation, and Associated Areas

SIC Code: 1422

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

This proposed permit covers a crushed and broken limestone quarry, dry and wet preparations, mineral loading, mineral storing, mineral transportation, and associated areas which discharge to surface waters of the state.

The proposed permit authorizes treated discharges into Long Branch classified as 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 F&W classification.

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

Technology Based Effluent Limits (TBELs) for crushed stone mining facilities can be found in 40 CFR 436.22(a)(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.

The instream WQS for pH, for streams classified as F&W, are 6.0 - 8.5 s.u per ADEM Admin Code r. 335-6-10-.09; however, because discharges from Outfalls 001 and 003 are expected only in response to rain events, it is the opinion of the Department that discharges with an allowable pH daily maximum of 9.0 will not adversely affect the instream pH based on the low discharge/stream flow ratio. The discharge limitations for pH of 6.0 – 9.0 s.u. for Outfalls 001 and 003 are identical to the existing point source TBELs

found in 40 CFR 436 Subpart B. Information provided in the Permittee's application indicated that Outfall 002 and 004 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 Outfalls 002 and 004 per ADEM Admin Code r. 335-6-10-.09. Regardless, the discharges shall not cause the in-stream pH to deviate more than 1.0 s.u. from the normal or natural pH, nor be less than 6.0 s.u. nor greater than 8.5 s.u.

1CSThe 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 Point 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.

Part II.C.3. of the proposed permit requires the submittal of metals, arsenic, cyanide, and phenols data within six months of the effective date of the Permit or within six months of the first discharge from each outfall. The Permit shall be reopened, if required, to address any new information resulting from the submittal of the new effluent data

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

The applicant is not proposing new discharges of pollutant(s) to an ADEM identified Tier I water. The proposed permit action authorizes new discharges of pollutants to receiving waters determined by the Department to be waters where the quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (Tier II). Pursuant to ADEM Admin. Code r. 335-6-10 (Antidegradation Policy and Implementation of the Antidegradation Policy), the applicant has submitted and the Department has reviewed and considered information regarding (1) demonstration of necessity/importance, (2) alternatives analysis, and (3) calculations of total annualized costs for technically feasible treatment alternatives regarding the proposed new discharges to Tier II waters. The Department has determined, based on the applicant's demonstration, that the proposed new discharges to the Tier II waters are necessary for important economic or social development in the area in which the waters are located.

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION**

ANTIDEGRADATION RATIONALE

Company Name: Warrior Materials, LLC

Facility Name: Warrior Materials Quarry

County: Tuscaloosa

Permit Number: AL0084543

Prepared by: Jasmine White

Date: August 20, 2026

Receiving Waters: Long Branch

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

Discharge Description: This proposed permit covers a crushed and broken limestone quarry, dry and wet preparations, mineral loading, mineral storing, mineral transportation, and associated areas which discharge to surface waters.

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

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

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

1. The applicant submits that the discharger will increase employment with 6 employees.
2. The applicant submits that the discharger will pay approximately \$250,000 in additional state and local taxes.
3. The applicant submits that the discharger will provide public service by providing public service infrastructure and community development.
4. The applicant submits that the discharger will provide economic benefit to the community by adding local employment opportunities.

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

Reviewed By: William McClimans

Date: 8/21/2026

NPDES Individual Application - Mining (Form 315)

version 3.4

(Submission #: HQK-T4XV-8VWDT, version 1)

Digitally signed by:
AEPACS
Date: 2026.05.07 16:40:04 -05:00
Reason: Submission Data
Location: State of Alabama

Details

Submission ID HQK-T4XV-8VWDT

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

Warrior Materials, LLC

Mailing Address

P.O. Box 70

Duncanville, AL 35466

Responsible Official**Prefix**

Mr.

First Name Last Name

Paul Burkhalter

Title

Member, Project Manager

Organization Name

Warrior Materials, LLC

Phone Type Number Extension

Mobile 205-342-2030

Email

burkhalterp@bellsouth.net

Mailing Address

11399 Dominion Drive

Duncanville, AL 35456

Facility/Operations Information**Facility/Operations Name**

Warrior Materials Quarry

Permittee Organization Type

LLC

Parent Corporation and Subsidiary Corporations of Applicant, if any:

NONE PROVIDED

Landowner(s) Name, Address and Phone Number:

The Westervelt Company

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

NONE PROVIDED

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

Big Sandy Road

Vance, AL 35490

Facility/Operations County (Front Gate)

Tuscaloosa

Do the operations span multiple counties?

No

Detailed Directions to the Facility/Operations

Traveling east on I-20/59, take Exit 79 toward Coaling and turn left (southeast) onto US-11/University Boulevard East. Continue traveling southeast/east for approximately 4.40 miles and turn right (south) onto Hagler Coaling Road. Travel south on Hagler Coaling Road for approximately 1.10 miles and turn left (east) onto Wire Road. Travel east on Wire Road for approximately 2.30-mile and turn right (south) onto Big Sandy Road. The facility is located approximately 0.47-mile south of the intersection of Big Sandy Road and Wire Road to the left (east).

Please refer to the link below for Lat/Long map instruction help:[Map Instruction Help](#)**Facility/Operations Front Gate Latitude and Longitude**

33.14314,-87.298692

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)

T22S, R7W, S08; T22S, R7W, S17; T22S, R7W, S18

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

Paul Burkhalter

Title

Member, Project Manager

Organization Name

Warrior Materials, LLC

Phone Type Number Extension

Mobile 205-342-2030

Email

Burkhalterp@bellsouth.net

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
John Michael Free	Manager	11546 Indian Creek Rd., Duncanville, AL 35456
Paul Burkhalter	Member, Project Manager	14291 Watercolor Dr., Northport, AL 35475

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
NA	NA	NA

Additional Contacts (1 of 1)

ADDITIONAL CONTACTS:

Contact Type

NONE PROVIDED

Contact

First Name

NONE PROVIDED

Last Name

NONE PROVIDED

Title

NONE PROVIDED

Organization Name

NONE PROVIDED

Phone Type

Number

Extension

NONE PROVIDED

Email

NONE PROVIDED

Address

[NO STREET ADDRESS SPECIFIED]

[NO CITY SPECIFIED], AL [NO ZIP CODE SPECIFIED]

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:

Air Permit (pending)

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:

NA

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)?

Approximately 6 employees

How much reduction in employment will the discharger be avoiding?

None

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

Approximately \$200,000 State, and \$50,000 Local

What public service to the community will the discharger be providing?

Added economic benefit, public service infrastructure, and community development.

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

Added industrial infrastructure, local employment opportunities, additional local and state tax revenue.

Attach Form 311 (Alternative Analysis)

[Warrior Materials Form311 - signed - print.pdf - 04/22/2026 10:13 AM](#)

Comment

NONE PROVIDED

Please attach Form 312 (Public Sector Projects) or Form 313 (Private Sector Projects).

[Warrior Materials Form312 - print.pdf - 04/22/2026 10:13 AM](#)

Comment

NONE PROVIDED

Activity Description & Information

Narrative description of activity(s):

Limestone quarry - activities will include open pit mining, blasting, loading, hauling, crushing, conveying, sorting, stockpiling, and transporting.

Total Facility/Operations Area (acres)

382.00

Total Disturbed Area (acres)

350.00

Anticipated Commencement Date

12/01/2026

Anticipated Completion Date

12/31/2076

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?	No
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

Activity/Condition	Appy?
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?	No
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	100
	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)	No
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	Yes
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

Activity	Apply?
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 PROVIDED

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
2,000.0	Diesel

SPCC Plan

[25-01-01858.00 - Warrior Materials Quarry SPCC Plan_FINAL.pdf - 05/07/2026 04:10 PM](#)

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

[Figure 1 - Topo.pdf - 04/22/2026 10:14 AM](#)

Comment

NONE PROVIDED

Detailed Facility Map Submittal

Detailed Facility Map

Figure 2 - Aerial .pdf - 04/22/2026 10:14 AM

Comment

NONE PROVIDED

Outfalls (1 of 4)

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

Long Branch

Check below if the discharge enters the receiving water via an unnamed tributary.

NONE PROVIDED

Location of Outfall

33.13677,-87.294462

303(d) Segment?

No

TMDL Segment?

No

Outfalls (2 of 4)

Outfall Identifier: 002

Feature Type

Outfall (External)

Outfall Identifier

002

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

Long Branch

Check below if the discharge enters the receiving water via an unnamed tributary.

NONE PROVIDED

Location of Outfall

33.136041,-87.294172

303(d) Segment?

No

TMDL Segment?

No

Outfalls (3 of 4)

Outfall Identifier: 003

Feature Type

Outfall (External)

Outfall Identifier

003

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

Long Branch

Check below if the discharge enters the receiving water via an unnamed tributary.

NONE PROVIDED

Location of Outfall

33.135739,-87.29644

303(d) Segment?

No

TMDL Segment?

No

Outfalls (4 of 4)

Outfall Identifier: 004

Feature Type

Outfall (External)

Outfall Identifier

004

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

Long Branch

Check below if the discharge enters the receiving water via an unnamed tributary.

NONE PROVIDED

Location of Outfall

33.134457,-87.295865

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 Characteristics of Discharge.xlsx - 04/22/2026 10:14 AM](#)**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:**[Warrior Materials Form315TableC.xlsx - 04/22/2026 10:16 AM](#)**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 - 04/22/2026 10:17 AM

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)**Outfall(s):**

001P, 002P, 003P, 004P

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	Yes
Side slopes of cutoff trench no less than 1:1	Yes
Cutoff trench located along the centerline of the dam	Yes
Cutoff trench extends at least 2' into bedrock or impervious soil	Yes
Cutoff trench filled with impervious material	Yes
Embankments and cutoff trench 95% compaction standard proctor ASTM	Yes
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	Yes
Spillpipe will not chemically react with effluent	Yes
Subsurface withdrawal	Yes
Anti-seep collars extend radially at least 2' from each joint in spillpipe	Yes
Splashpad at the end of the spillpipe	Yes
Emergency Spillway sized for peak flow from 25-yr 24-hr event if discharge not into PWS classified stream	Yes
Emergency spillway sized for peak flow from 50-yr 24-hr event if discharge is into PWS classified stream	N/A
Emergency overflow at least 20' long	Yes
Side slopes of emergency spillway no steeper than 2:1	Yes
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	N/A
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

Outfall Questions:	Please select one:
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):

No discharge to PWS

No ponds in series

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) N (o) of this Application	Yes
1 N 500 N 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
Collection System	Yes
Disposal System	Yes

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

Description of Waste Treatment Facility:	Please select one:
Pre-Treatment Measures	Yes
Recovery System	Yes
Expected Life of Treatment Basin	Yes

Description of Waste Treatment Facility:	Please select one:
---	---------------------------

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):

No chemical treatment proposed at this time.

No alternate standards, designs or plans proposed.

Pollution Abatement & Prevention (PAP) Plan

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)

[PAP Warrior Materials Quarry 4-22-26.pdf - 05/07/2026 04:10 PM](#)

Comment

NONE PROVIDED

Professional Engineer (PE)

Registration License Number

20128

Professional Engineer

Prefix

Ms.

First Name Last Name

Sheryle Reeves

Title

Principal Engineer

Organization Name

TTL, Inc.

Phone Type Number Extension

Business 3342440766

Email

sreeves@ttlusa.com

Address

2743B Gunter Park Drive West

Montgomery, AL 36109

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

Sheryle

Last Name

Reeves

Title

NONE PROVIDED

Organization Name

TTL, Inc.

Phone Type

Business

Number

3342440766

Extension

Email

sreeves@ttlusa.com

Address

2743B Gunter Park Drive West

Montgomery, AL 36109

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

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 Sheryle Reeves on 05/07/2026 at 4:23 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 Paul Burkhalter on 05/07/2026 at 4:34 PM

Attachment 1 to Supplementary Form ADEM Form 311

Alternatives Analysis

Applicant/Project: Warrior Materials 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	Primarily stormwater, water quantity too great
2 Pretreatment/Discharge to POTW		X	No pipeline to POTW available
3 Relocation of Discharge		X	Terrain of quarry does not all relocation
4 Reuse/Recycle	X		Process wastewater is proposed to be recycled to the extent possible
5 Process/Treatment Alternatives		X	No other treatment methods identified
6 On-site/Sub-surface Disposal		X	Primarily stormwater, water quantity too great
<i>(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)</i>			
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: Sheryle Reeves
(Professional Engineer)
Date: 4/10/26

Digitally signed by Sheryle Reeves
 DN: CN=Sheryle Reeves, O="FTL, Inc.", E=sheryles@ftl.com, C=US
 Reason: I am the author of this document
 Location:
 Date: 2026.04.10 12:49:23-0500
 Fork PDF Editor Version: 2024.3.0

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

Calculation of Total Annualized Project Costs for Public-Sector Projects

A. Capital Costs

Capital Cost of Project	\$ 6,000,000	
Other One-Time Costs of Project (Please List, if any)		
	\$	
	\$	
	\$	
Total Capital Costs (Sum column)	\$ 150,000	(1)
Portion of Capital Costs to be Paid for with Grant Monies	\$0	(2)
Capital Costs to be Financed [Calculate: (1) – (2)]	\$ 150,000	(3)
Type of Financing (e.g., G.O. bond, revenue bond, bank loan)	Loan	
Interest Rate for Financing (expressed as decimal)	0.075	(i)
Time Period of Financing (in years)	10	(n)
Annualization Factor = $\frac{i}{(1+i)^n - 1} + i$	0.146	(4)
Annualized Capital Cost [Calculate: (3) x (4)]	\$21,900	(5)

B. Operating and Maintenance Costs

Annual Costs of Operation and Maintenance (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.) (Please list below.)

Monitoring and Inspection	\$50,000	
Misc. Maintenance and Repair (Est)	\$50,000	
	\$	
	\$	
Total Annual O & M Costs (Sum column)	\$ 100,000	(6)

C. Total Annual Cost of Pollution Control Project

Total Annual Cost of Pollution Control Project [(5) + (6)]

\$ 121,900	(7)
------------	-----

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	Pipe	7, 10 (stormwater, process wastewater from limestone processing plant)	X		X		
002P	Pipe	7, 10 (stormwater)	X			X	
003P	Pipe	7, 10 (stormwater)	X				
004"	Pipe	7, 10 (stormwater)	X			X	

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	1, BPJ	1.4	1960000	varies	varies	18/6	7	<326	<65	7	<0.4	NA
002P	1, BPJ	0.2	144800	varies	varies	18/6	7	<24	<5	0.5	<0.03	NA
003P	1, BPJ	0.4	230900	varies	varies	18/6	7	<38	<8	0.9	<0.05	NA
004P	1, BPJ	0.5	309100	varies	varies	18/6	7	<52	<10	1.1	<0.06	NA

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:

[illegible]

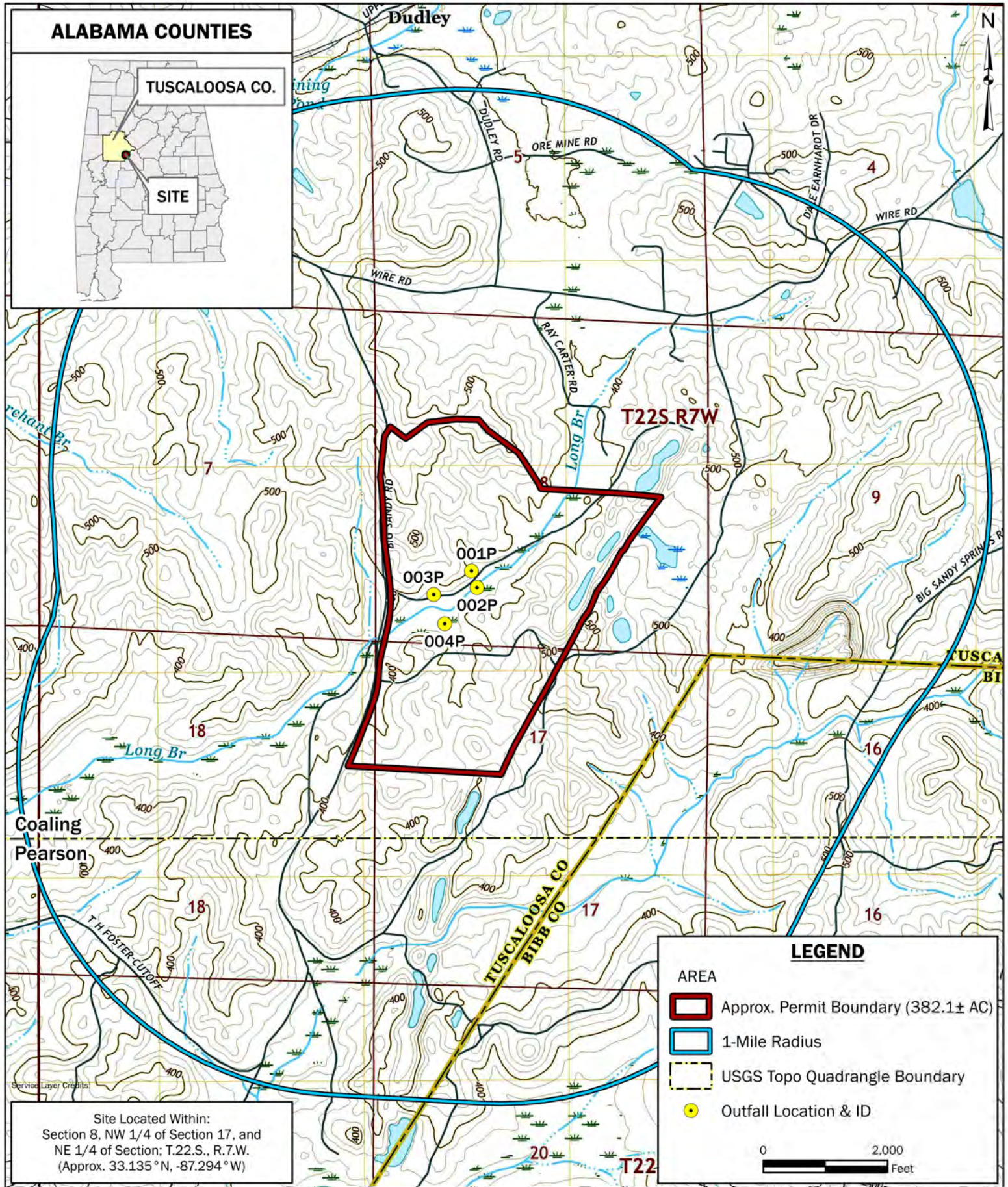
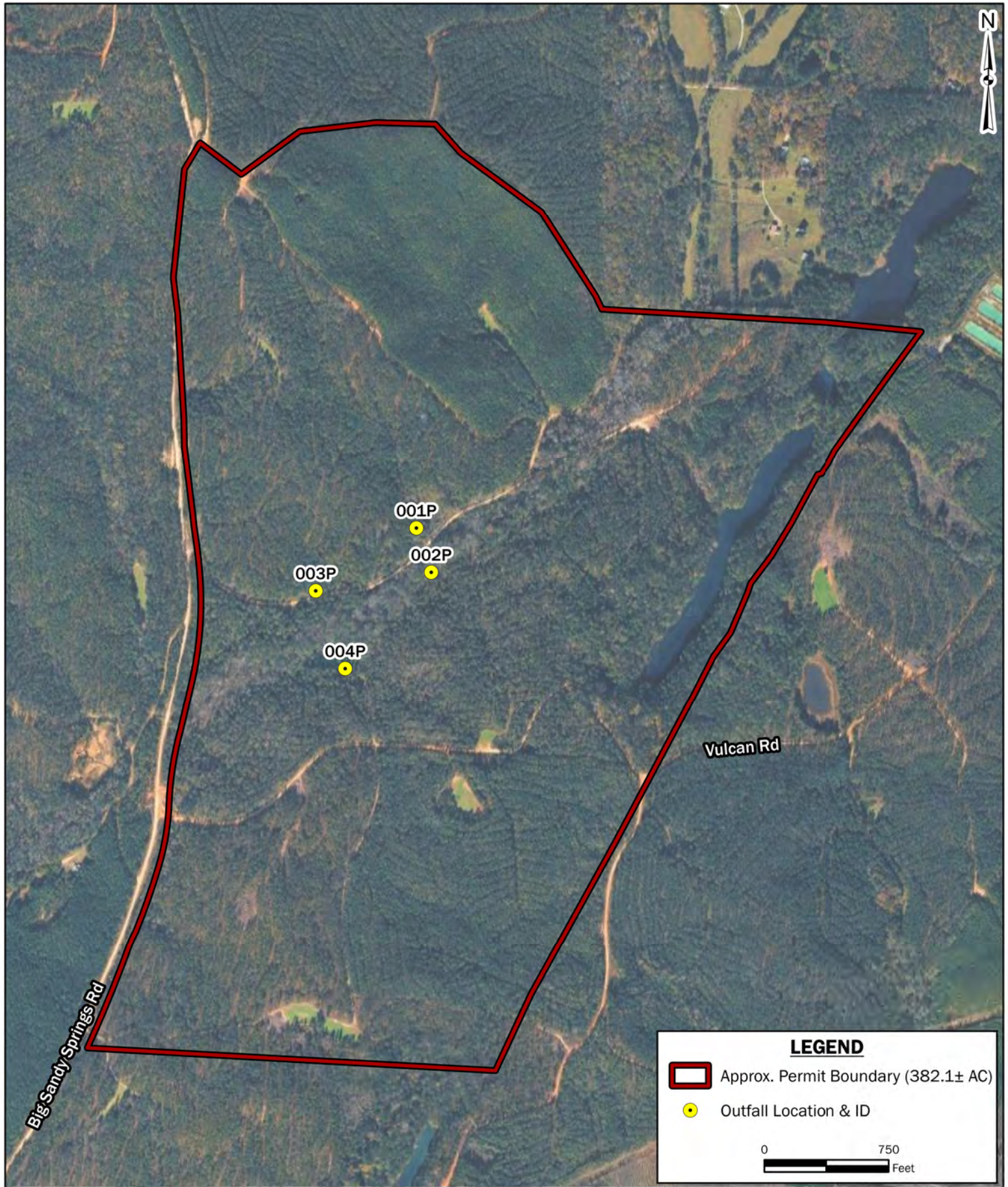


FIGURE 1: SITE LOCATION & TOPOGRAPHIC MAP
WARRIOR MATERIALS, LLC - WARRIOR MATERIALS QUARRY
POLLUTION ABATEMENT PLAN
VANCE, TUSCALOOSA COUNTY, ALABAMA

BASEMAP: Coaling, Alabama USGS 7.5 Minute Quadrangle Map, 2024 (20-ft Contour Interval).

DRAWN BY: SG
CHECKED BY: SGR
DRAWING DATE: 04/14/2026
REVISION DATE: N/A
TTL JOB NO.: 25-01-01858.00
APPROX. SCALE: 1 in = 2,000 ft





LEGEND

Approx. Permit Boundary (382.1± AC)

Outfall Location & ID

0 750 Feet



FIGURE 2: SITE LOCATION & AERIAL PHOTOGRAPH
WARRIOR MATERIALS, LLC - WARRIOR MATERIALS QUARRY
POLLUTION ABATEMENT PLAN
VANCE, TUSCALOOSA COUNTY, ALABAMA
BASEMAP: Google Earth Satellite Imagery, 11/22/2024.

DRAWN BY: SG
CHECKED BY: SGR
DRAWING DATE: 04/14/2026
REVISION DATE: N/A
TTL JOB NO.: 25-01-01858.00
APPROX. SCALE: 1 in = 750 ft

POLLUTION ABATEMENT AND PREVENTION PLAN

WARRIOR MATERIALS QUARRY VANCE, TUSCALOOSA COUNTY, ALABAMA

Owner:

Warrior Materials, LLC
P.O. Box 70
Duncanville, Alabama 35466
Business Phone Number: (205) 342-2030

Prepared by:

TTL, Inc.
3200 Rice Mine Road
Tuscaloosa, Alabama 35406

Project No. 250101858.00

April 22, 2026



Table of Contents

Figures	ii
1.0 INTRODUCTION.....	1
1.1 Facility Description	1
1.2 History of Significant Spills and Leaks	2
2.0 DESCRIPTION OF DISCHARGES.....	2
2.1 Petroleum Storage Systems	2
2.1.1 Potential for Hazardous Material Exposure.....	2
2.1.2 Pollution Prevention System.....	2
2.2 Process Wastewater.....	2
2.3 Stormwater Runoff and Ground Water Control	3
2.3.1 Pollution Prevention System.....	3
3.0 POLLUTION PREVENTION - STRUCTURAL CONTROLS.....	3
3.1 Introduction.....	3
3.2 Stormwater Diversion Methods.....	4
3.3 Sediment and Erosion Controls	7
3.4 Overburden Piles	8
3.5 Haul Road	8
3.6 Stream Crossings	8
3.7 Buffer Zones	8
3.8 Spill Prevention, Control, & Countermeasures	9
3.9 Vehicle Tracking.....	9
4.0 NON-STRUCTURAL CONTROLS.....	9
4.1 Introduction.....	9
4.2 Preventive Maintenance	9
4.3 Non-Storm Water Discharges	9
4.4 AST Dispensing Procedures.....	9
4.5 Material Handling Procedures	10
4.6 Training Program	10
4.7 Inspections.....	10
4.8 Records	10
5.0 SPILL CONTROL PROCEDURES	11
6.0 MONITORING REQUIREMENTS.....	11
6.1 Introduction.....	11
6.2 Standard Monitoring Requirements.....	12
6.3 Routine Inspection	12
6.4 Monitoring in the Presence of Exposed Materials After a Release	12
6.5 Monitoring Records	12
6.6 Operation Records.....	13
6.6.1 System Design and Procedure Changes.....	13
6.6.2 Corrective Actions For Release Incidents	13
6.6.3 Record-Keeping and Internal Reporting	13
7.0 RECLAMATION PROCEDURES.....	14
CERTIFICATION	15
MANAGEMENT CERTIFICATION	15

Figures

Site Location and Topographic Map	Figure 1
Site Location and Aerial Photograph	Figure 2
Site Conceptual Plan	Figure 3
Standard Details	Figure 4

Appendices

Tuscaloosa County GIS online Property Record Cards	Appendix A
Schematic Diagram	Appendix B
Erosion Control Details	Appendix C
Design Details	Appendix D
Preventive Maintenance, Training Checklists, and Rainfall Inspection Log.....	Appendix E
Spill Prevention Control and Countermeasure Plan	Appendix F

1.0 INTRODUCTION

This Pollution Abatement and Prevention (PAP) Plan is required as part of an application for a National Pollutant Discharge Elimination System (NPDES) Permit. This PAP was developed for Warrior Materials, LLC, hereinafter referred to as WM. WM plans to operate a limestone quarry (Warrior Materials Quarry) near Vance, Tuscaloosa County, Alabama, with the intent of either grading and stabilizing the Site with vegetation or converting the excavated areas into ponds upon completion of excavation activities.

The objective of this Plan is to develop a means to manage operations at the WM Warrior Materials Quarry in an environmentally prudent manner. This Plan identifies potential sources of pollutants and prescribes a series of Best Management Practices (BMPs) or control measures to minimize or eliminate the discharge of pollutants in stormwater runoff. The program outlined in this Plan emphasizes pollution prevention and, particularly, implementation of BMPs. BMPs, as suggested by the United States Environmental Protection Agency (USEPA), include: preventative maintenance, spill prevention, good housekeeping, training, material management, segregation of areas of concern, recycling, and treatment/disposal of waste.

Topics covered in this Plan include procedures and systems to protect stormwater run-off from exposure to potential contaminants. The Plan also includes response procedures for a number of possible events such as oil spills, chemical spills or releases of hazardous material or hazardous waste. If a spill occurs on site, the objective of this Plan is to provide the tools for success in responding immediately. It is essential that manpower, equipment, and materials are allocated and available to both control and contain contaminants to insure effective environmental management and compliance.

This PAP is presented in seven sections. Section 1.0 – Introduction provides an overview of the objectives and basis of the Plan and a summary of the Plan contents. Section 2.0 – Description of Discharges, identifies the pollutants and their routes of exposure that could adversely impact surface-water quality. Section 3.0 - Structural Controls addresses the physical attributes of the facility that have been constructed and/or maintained to minimize pollution. Design drawings and calculations are referenced in Section 3.0, as well. Section 4.0 – Non-Structural Controls, describes administrative and operational procedures such as preventative maintenance and training, which will help assure compliance with this Plan. Section 5.0 – Spill Control Procedures, describes response procedures and available emergency equipment. Section 6.0 – Monitoring Requirements, addresses inspection and recordkeeping requirements. Section 7.0 – Reclamation Procedures, provides guidance on facility maintenance once excavating is complete in an area. The narrative descriptions included herein are intended to address the format as outlined by the ADEM Admin. Code R. 335-6-9, as well as present the basis for the designs as further detailed in the PAP. Drawings as presented in the PAP were derived from rules and regulations of the ADEM Admin. Code R. 335-6-9.

1.1 Facility Description

The WM Warrior Materials Quarry is located in Sections 8, 17, and 18, Township 22 South, Range 7 West as shown on the 2026 Coaling and Pearson, Alabama, U. S. G. S., 7.5 minute topographic maps (see Figure 1). The quarry site encompasses approximately 382 acres within three larger parcels owned by Westervelt Company. Descriptions of the larger properties as listed by the Tuscaloosa County GIS online Property Record Cards is provided in Appendix A. An aerial photograph of the site is presented in Figure 2. The permit/property boundary will be marked at the corners using PVC posts. The address of the responsible official is listed below:

Operator Address: Paul Burkhalter, PE/PLS
Member, Project Manager
Warrior Materials, LLC
11399 Dominion Drive
Duncanville, Alabama 35456

The WM Warrior Materials Quarry will employ approximately 6 persons. The facility will operate five days per week (Monday through Friday), from 6:00 a.m. until 4:00 p.m. The facility will obtain potable water from the Coaling Water Authority for potable water. Domestic waste will be disposed of via on-site sewer disposal area.

WM will excavate limestone from the site. The material will be processed/crushed and sorted on-site. When activities at the Site are complete, the pit(s) will either be allowed to fill with water creating ponds, or the Site will be graded and stabilized with vegetation.

1.2 History of Significant Spills and Leaks

There are no known spills or leaks to report. In the event significant spills occur while this Plan is in effect, a review of the plan will be conducted to determine if the procedures outlined in the plan were followed and were applicable.

2.0 DESCRIPTION OF DISCHARGES

2.1 Petroleum Storage Systems

Potential pollution exposure at the site may be associated with equipment spills and leaks. Excavators and dump trucks will be the primary equipment used on the site. Bulk storage of fuel and lubricants will occur on this facility. Spill prevention for this facility is discussed in Section 5.0.

2.1.1 Potential for Hazardous Material Exposure

Potential hazardous material exposure may result if spills associated with vehicles and/or equipment occur. These hazardous materials include diesel fuel and lubricants and are considered hazardous due to their flammability.

2.1.2 Pollution Prevention System

In the event product is spilled, immediate containment will be administered by using drip pans or absorbent materials. Generated waste materials will be appropriately containerized, labeled, stored and disposed and/or recycled consistent with applicable federal, state and local regulations governing such waste material.

2.2 Process Wastewater

The limestone crushing and sorting operations will generate process wastewater. The wastewater will be directed to a tailings pond in the processing area. Wastewater will be recirculated to the extent practical, but may be discharged through outfall 001P. Groundwater may be pumped from the operational area of the pit and discharged through a sediment basin.

2.3 Stormwater Runoff and Ground Water Control

Runoff from the disturbed areas of the site will be directed toward the mining pit(s) or a sediment basin. Figure 3 shows the anticipated flow directions across the Site and the placement of structural BMPs.

2.3.1 Pollution Prevention System

The active mining pits are not expected to discharge due to storm events. However, groundwater may be pumped from the pit into a sediment basin, which will also receive runoff from adjacent disturbed areas and haul roads. Pond 1 will discharge through Outfall 001P into Long Branch. Refer to the Schematic Diagram in Appendix B. Approximately 67 drainage acres will flow toward outfall 001P, of which approximately 34 acres will be disturbed land at any given time.

Pond 2 will discharge through Outfall 002P into Long Branch. Refer to the Schematic Diagram in Appendix B. Approximately 37 drainage acres will flow toward outfall 002P, of which approximately 19 acres will be disturbed land at any given time.

Pond 3 will discharge through Outfall 003P into Long Branch. Refer to the Schematic Diagram in Appendix B. Approximately 59 drainage acres will flow toward outfall 003P, of which approximately 30 acres will be disturbed land at any given time.

Pond 4 will discharge through Outfall 004P into Long Branch. Refer to the Schematic Diagram in Appendix B. Approximately 79 drainage acres will flow toward outfall 004P, of which approximately 40 acres will be disturbed land at any given time.

Existing vegetation located downgradient of the excavation area(s) will be preserved.

3.0 POLLUTION PREVENTION - STRUCTURAL CONTROLS

3.1 Introduction

The facility has proposed basic BMPs to assist in pollution prevention management. Disturbance of areas downgradient of the excavation areas will be limited to avoid damaging existing established vegetation. Detail drawings for structural controls and specifications for installation and maintenance are provided for the following:

Figure 4: Standard Details

Appendix C:

- Brush/Fabric Barrier
- Buffer Zone
- Check Dam
- Construction Exit Pad
- Dust Control
- Diversion
- Outlet Protection
- Permanent Seeding

Sediment Barrier
Sediment Trap
Temporary Seeding

3.2 Stormwater Diversion Methods

Stormwater runoff generally follows site topography. Long Branch generally bisects the site, flowing from the northeast to the southwest. The mining pit(s) will be located on the southeastern side of Long Branch. The processing plant area and overburden stockpiles will be located on the northwest side of Long Branch. The Site Location and Topographic map (Figure 1) shows the topography of the site and the Site Conceptual Plan (Figure 3) show the locations of existing/anticipated excavation areas, drainage patterns across the site, and location of BMP installations.

As mining begins in an area on the site, berms will be constructed to protect any adjacent wetlands and streams, and to direct stormwater into the excavation pit or sediment basin. Four outfalls are proposed for the site to capture stormwater that may not be directed into a pit, or to receive process wastewater or groundwater pumped from a pit. Descriptions of each proposed outfall are provided in the following sections. Accumulated sediments in the detention/settling ponds will be removed when the ponds have lost 60% of their liquid storage capacity due to sedimentation. A summary of design information is provided in Appendix D.

3.2.1 Outfall 001P

Outfall 001P will receive stormwater from the northern portion of the site. The processing plant and overburden stockpiles will be located in this area. The drainage area is approximately 67 acres. Outfall 001P will discharge into Long Branch. Disturbed areas were estimated based on the anticipated land that would be disturbed at any given time during the life of the project. Overburden stockpiles will be stabilized with vegetation to reduce the amount of disturbed area. There will be no active excavation pit in this area. A maximum of 34 acres of the drainage area was estimated to be disturbed at any given time.

Runoff calculations were performed using Soil Conservation Service (SCS) TR-55, Urban Hydrology for Small Watersheds. These calculations were performed as part of this plan to determine flow and to size the discharge structures. The settling pond at a minimum will provide 0.25 acre-feet of storage for every acre of disturbed land draining to the pond.

The 36-inch diameter spill-pipe is sized to carry discharge from a one-year, 24-hour storm event, and will be constructed of material that will not chemically react with the effluent. The discharge pipe will utilize subsurface withdrawal. Anti-seep collars will extend radially at least two feet from the edge of the pipe at each pipe joint. A splash pad constructed of riprap will be installed at the end of the discharge pipe to prevent erosion from the discharge. The splashpad will be a minimum of 20 feet in length. All trees, brush, and boulders will be removed from the pond areas prior to construction. The minimum width at the top of each dam will be at least 12 feet. The side slopes of the dams will be no steeper than 3:1. At least 80% coverage of annual and perennial grasses will be established on the embankments of the dams. The embankments will be constructed in lifts less than 12 inches from materials on-site, and will also be compacted to 95% compaction standard proctor ASTM. The embankments will be free of roots, tree debris, and stones greater than 6 inches in diameter.

The dam will be equipped with an emergency spillway sized for the peak pre-development flow from a 25-year, 24-hour storm event. Sufficient storage was allocated in the pond to detain the expected higher flows for post-development conditions. The emergency overflow will be at least 18 feet long, lined with riprap, and the side slopes will be no steeper than 2:1. There will be approximately 3 feet of freeboard between the normal overflow and the emergency overflow, and there will be

approximately 3 feet of freeboard between the bottom of the emergency spillway and the top of the dam. Additionally, there will be a minimum of 1.5 feet of freeboard between the top of the dam and the design flow elevation over the emergency spillway.

3.2.2 Outfall 002P

Outfall 002P will receive stormwater from an eastern portion of the site. The initial excavation pit will be located in this area. The drainage area is approximately 37 acres. Outfall 002P will discharge into Long Branch. Disturbed areas were estimated based on the anticipated land that would be disturbed at any given time during the life of the project. The active excavation pit was not considered to be a disturbed area for the purposes of sizing the detention/settling pond. A maximum of 19 acres of the drainage area was estimated to be disturbed at any given time.

Runoff calculations were performed using Soil Conservation Service (SCS) TR-55, Urban Hydrology for Small Watersheds. These calculations were performed as part of this plan to determine flow and to size the discharge structures. The settling pond at a minimum will provide 0.25 acre-feet of storage for every acre of disturbed land draining to the pond.

The 24-inch diameter spill-pipe is sized to carry peak pre-development flow from a two-year, 24-hour storm event, and will be constructed of material that will not chemically react with the effluent. The discharge pipe will utilize subsurface withdrawal. Anti-seep collars will extend radially at least two feet from the edge of the pipe at each pipe joint. A splash pad constructed of riprap will be installed at the end of the discharge pipe to prevent erosion from the discharge. The splashpad will be a minimum of 20 feet in length. All trees, brush, and boulders will be removed from the pond areas prior to construction. The minimum width at the top of each dam will be at least 12 feet. The side slopes of the dams will be no steeper than 3:1. At least 80% coverage of annual and perennial grasses will be established on the embankments of the dams. A cutoff trench will be constructed along the center of each of the dams and will extend at least 2 feet into sufficiently impermeable material. The cutoff trench will be at least 8 feet wide, the side slopes will be no less than 1:1, and it will be filled with impervious material compacted to a minimum of 95% compaction standard proctor ASTM. The material to be placed in the keyway will have a hydraulic permeability of approximately 5×10^{-7} centimeters per second. The material for the core of the dam will have a hydraulic permeability of approximately 1×10^{-6} . The material for the keyway may be brought in from off-site. The embankments will be constructed in lifts less than 12 inches from materials on-site, and will also be compacted to 95% compaction standard proctor ASTM. The embankments will be free of roots, tree debris, and stones greater than 6 inches in diameter.

The dam will be equipped with an emergency spillway sized for the peak pre-development flow from a 25-year, 24-hour storm event. Sufficient storage was allocated in the pond to detain the expected higher flows for post-development conditions. The emergency overflow will be at least 14 feet long, lined with riprap, and the side slopes will be no steeper than 2:1. There will be approximately 3 feet of freeboard between the normal overflow and the emergency overflow, and there will be approximately 3.0 feet of freeboard between the bottom of the emergency spillway and the top of the dam. Additional freeboard could not be achieved due to site constraints.

3.2.3 Outfall 003P

Outfall 003P will receive stormwater from the northwestern portion of the site. Overburden stockpiles will be located in this area. The drainage area is approximately 59 acres. Outfall 003P will discharge into Long Branch. Disturbed areas were estimated based on the anticipated land that would be disturbed at any given time during the life of the project. Overburden stockpiles will be stabilized with vegetation to reduce the amount of disturbed area. A maximum of 30 acres of the drainage area was estimated to be disturbed at any given time.

Runoff calculations were performed using Soil Conservation Service (SCS) TR-55, Urban Hydrology for Small Watersheds. These calculations were performed as part of this plan to determine flow and to size the discharge structures. The settling pond at a minimum will provide 0.25 acre-feet of storage for every acre of disturbed land draining to the pond.

The 30-inch diameter spill-pipe is sized to carry peak pre-development flow from a two-year, 24-hour storm event, and will be constructed of material that will not chemically react with the effluent. The discharge pipe will utilize subsurface withdrawal. Anti-seep collars will extend radially at least two feet from the edge of the pipe at each pipe joint. A splash pad constructed of riprap will be installed at the end of the discharge pipe to prevent erosion from the discharge. The splashpad will be a minimum of 20 feet in length. All trees, brush, and boulders will be removed from the pond areas prior to construction. The minimum width at the top of each dam will be at least 12 feet. The side slopes of the dams will be no steeper than 3:1. At least 80% coverage of annual and perennial grasses will be established on the embankments of the dams. A cutoff trench will be constructed along the center of each of the dams and will extend at least 2 feet into sufficiently impermeable material. The cutoff trench will be at least 8 feet wide, the side slopes will be no less than 1:1, and it will be filled with impervious material compacted to a minimum of 95% compaction standard proctor ASTM. The material to be placed in the keyway will have a hydraulic permeability of approximately 5×10^{-7} centimeters per second. The material for the core of the dam will have a hydraulic permeability of approximately 1×10^{-6} . The material for the keyway may be brought in from off-site. The embankments will be constructed in lifts less than 12 inches from materials on-site, and will also be compacted to 95% compaction standard proctor ASTM. The embankments will be free of roots, tree debris, and stones greater than 6 inches in diameter.

The dam will be equipped with an emergency spillway sized for the peak pre-development flow from a 25-year, 24-hour storm event. Sufficient storage was allocated in the pond to detain the expected higher flows for post-development conditions. The emergency overflow will be at least 16 feet long, lined with riprap, and the side slopes will be no steeper than 2:1. There will be approximately 3 feet of freeboard between the normal overflow and the emergency overflow, and there will be approximately 3.0 feet of freeboard between the bottom of the emergency spillway and the top of the dam. Additional freeboard could not be achieved due to site constraints.

3.2.4 Outfall 004P

Outfall 004P will receive stormwater from an eastern portion of the site. The excavation pit will expand to this area in the future. The drainage area is approximately 79 acres. Outfall 004P will discharge into Long Branch. Disturbed areas were estimated based on the anticipated land that would be disturbed at any given time during the life of the project. The active excavation pit was not considered to be a disturbed area for the purposes of sizing the detention/settling pond. A maximum of 40 acres of the drainage area was estimated to be disturbed at any given time.

Runoff calculations were performed using Soil Conservation Service (SCS) TR-55, Urban Hydrology for Small Watersheds. These calculations were performed as part of this plan to determine flow and to size the discharge structures. The settling pond at a minimum will provide 0.25 acre-feet of storage for every acre of disturbed land draining to the pond.

The 24-inch diameter spill-pipe is sized to carry peak pre-development flow from a two-year, 24-hour storm event, and will be constructed of material that will not chemically react with the effluent. The discharge pipe will utilize subsurface withdrawal. Anti-seep collars will extend radially at least two feet from the edge of the pipe at each pipe joint. A splash pad constructed of riprap will be installed at the end of the discharge pipe to prevent erosion from the discharge. The splashpad will be a minimum of 20 feet in length. All trees, brush, and boulders will be removed from the pond areas

prior to construction. The minimum width at the top of each dam will be at least 12 feet. The side slopes of the dams will be no steeper than 3:1. At least 80% coverage of annual and perennial grasses will be established on the embankments of the dams. A cutoff trench will be constructed along the center of each of the dams and will extend at least 2 feet into sufficiently impermeable material. The cutoff trench will be at least 8 feet wide, the side slopes will be no less than 1:1, and it will be filled with impervious material compacted to a minimum of 95% compaction standard proctor ASTM. The material to be placed in the keyway will have a hydraulic permeability of approximately 5×10^{-7} centimeters per second. The material for the core of the dam will have a hydraulic permeability of approximately 1×10^{-6} . The material for the keyway may be brought in from off-site. The embankments will be constructed in lifts less than 12 inches from materials on-site, and will also be compacted to 95% compaction standard proctor ASTM. The embankments will be free of roots, tree debris, and stones greater than 6 inches in diameter.

The dam will be equipped with an emergency spillway sized for the peak pre-development flow from a 25-year, 24-hour storm event. Sufficient storage was allocated in the pond to detain the expected higher flows for post-development conditions. The emergency overflow will be at least 22 feet long, lined with riprap, and the side slopes will be no steeper than 2:1. There will be approximately 3 feet of freeboard between the normal overflow and the emergency overflow, and there will be approximately 3.0 feet of freeboard between the bottom of the emergency spillway and the top of the dam. Additional freeboard could not be achieved due to site constraints.

3.3 Sediment and Erosion Controls

The potential for contributing sediments to stormwater at the facility is minimized by implementing the following Best Management Practices:

- a) Construct berms between mining areas and wetlands/streams, as shown on Figure 3. Berm will be constructed using overburden from the site.
- b) Until perimeter berms and sediment basins are constructed, stabilize the perimeters of the active areas with brush barriers and by surface roughening, seeding, mulching, or placing sod. These practices can significantly slow the rate of stormwater runoff and decrease the sediment load in runoff waters.
 - The brush barriers (with and/or without filter fabric) will be placed along a slope contour or at the toe of the slope. Brush barriers reduce runoff velocity and increases infiltration, which reduces erosion and provides for sediment trapping.
 - Surface roughening will be applied to slopes that are greater than 3:1 to aid in the establishment of vegetative cover. Roughening reduces runoff velocity and increases infiltration, which reduces erosion and provides for sediment trapping.
 - Establishment of a vegetative cover will be in accordance with guidelines set forth in the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management, Chapter 4, Vegetation for Erosion and Sediment Control.
 - Mulching is the placement of a protective layer of straw or other suitable material to the soil surface. The mulch is used in conjunction with seeding for

the establishment of permanent vegetative cover. Mulching can also be used to protect bare or disturbed soil areas that have not yet been seeded. On steep slopes, or where the mulch may be susceptible to movement, the material will be hydraulically applied or will be appropriately anchored.

- c) Where appropriate, temporary diversion devices will be installed to control stormwater runoff until vegetation has been established. These diversion devices include earthen berms, excavated sumps, and rock check dams. Typical designs for these devices and specification for installation and maintenance are included in this plan.
 - Rock check dams and brush check dams intercept channelized flow to reduce the velocity. Reducing the velocity of the runoff will aid in minimizing erosion within a drainage way, and will promote sediment to drop out of the water. Rock check dams may be placed in drainage structures if excessive erosion is noted, especially in areas where the flow changes direction.
- d) Vehicle operators will be advised to maintain slow speeds and use caution when maneuvering equipment and vehicles near perimeter earthen berms.

3.4 Overburden Piles

Overburden will be used to the extent possible to construct perimeter berms and sediment basin dams. Excess overburden will be stockpiled, until placed back in the excavation pit during reclamation. Runoff from the overburden piles will be directed into an excavation pit or sediment basin.

3.5 Haul Road

Topography at the site is relatively flat. Haul roads outside the mining pit will not exceed a grade of 0.5%. Due to the estimated depth of materials to be mined, haul roads/ramps within the mining pit may be steeper. Such ramps will have a sustained grade of no greater than 10%, with a maximum grade no greater than 15% for 300 feet. For an estimated depth of 60 feet below land surface, a ramp must be approximately 600 feet in length to maintain no more than a 10% slope.

The outer slopes of the haul roads will be no steeper than 2:1 and will maintain 80% coverage of annual and perennial grasses. Where this is not possible, basins, hay filters, or diversion ditches should be cut, built, or placed strategically to intercept stormwater runoff and reduce erosion.

Effective BMPs will be installed and maintained at all times. In addition, the haul roads will be located such that the majority of the drainage goes to the pit.

3.6 Stream Crossings

There will be two stream crossings at this facility, as shown on Figure 3. Design characteristics are shown on Figure 4. Warrior Materials intends to install a rail car bridge to span over the creek at the two locations, thus avoiding the requirement for U.S. Army Corps of Engineers (USACE) permitting.

3.7 Buffer Zones

The topographic map (Figure 1) submitted as part of this plan shows all water bodies. The excavation operation provides a minimum 50-foot buffer zone around the neighboring property boundaries, Long

Branch, unnamed tributaries, and adjacent jurisdictional wetlands. WM will use PVC boundary markers to serve as a visual aid to operators to avoid the buffer zones.

3.8 Spill Prevention, Control, & Countermeasures

The total volume of petroleum product to be stored onsite will exceed the limit of 1,320-gallons; therefore, a Spill Prevention, Control, and Countermeasures (SPCC) plan is required per 40 CFR Part 112. Section 5.0 of this PAP discusses the spill prevention, control, and countermeasures procedures to be implemented at the facility.

3.9 Vehicle Tracking

Mining vehicles (excavators, dump trucks) will not typically leave property controlled by WM. At the entrance/exit to WM-controlled property, a gravel exit pad will be constructed. Additionally, when vehicles are required to depart the property, they are inspected to determine if further removal of sediment is required. Sediment tracked onto a public roadway will be swept daily, and returned to the mining area.

4.0 NON-STRUCTURAL CONTROLS

4.1 Introduction

The facility has established a number of non-structural controls to assist in pollution prevention management. These controls include employee training and records retention, written material handling practices, a definitive program for routine preventative maintenance and spill control procedures.

4.2 Preventive Maintenance

Facility management recognizes the importance of properly maintaining facility equipment and systems. As such, management supports completion of necessary and appropriate maintenance activities recommended by equipment manufacturers. BMPs are to be inspected following qualifying rainfall events (3/4-inch or greater accumulation within a 24-hour period) to ensure the BMPs are still in place and no off-site sedimentation is occurring. Also, trucks are to be inspected prior to departing the site to ensure tires are not muddy. Personnel are to inspect all roads in the vicinity of the site, and remove mud/soil clods that may be present.

4.3 Non-Storm Water Discharges

Wastewater generated in the processing plant will be recirculated to the extent practical. Excess wastewater will be directed to a sediment basin (outfall 001P) prior to discharge. Groundwater pumped from the excavation will be discharged through an on-site sediment pond.

4.4 AST Dispensing Procedures

Bulk loading of the systems will be executed as follows:

- verify the amount of product remaining within the tank
- connect the transfer hose from the tanker truck to the fill pipe

- observe the sight gauge on the drop spout when product is transferred
- discharge a metered volume of product into the tank
- visually monitor the transfer of product into the tank and
- verify the volume of product in the tank at the end of the filling process

Please note that it is the responsibility of the vendor to visually monitor the transfer of product into the tank.

4.5 *Material Handling Procedures*

Other than the products described in Section 2.1, there will be no chemicals handled on the site. Excavated limestone will be hauled off-site in trucks.

4.6 *Training Program*

Personnel responsible for implementing and maintaining the Plan must receive proper training, understand their duties and function, and fulfill their duties in a safe and timely manner. Training will be conducted on an annual basis. New employees will be trained at the time of hiring.

Appropriate personnel at all levels of responsibility at the facility are trained to understand the goals of this Plan. This training is essential for each employee. Personal and corporate responsibilities, use of pollution prevention systems, proper storage, use and labeling of potentially hazardous materials (including the need to update the PAP to include petroleum and/or chemical storage should they be used or stored onsite), soil erosion control, requirements for routine preventive maintenance, proper waste disposal, and notification requirements and spill response measures are all vital elements of the training.

4.7 *Inspections*

Inspections of structural and non-structural controls will be conducted as specified in Section 6.0 – Monitoring Requirements.

4.8 *Records*

Records required by this Plan will be maintained on file for a period of at least five years. The following is a list of records to be maintained on file:

Preventive Maintenance and Training Checklists

Appendix E contains the following forms that are maintained and utilized for preventative maintenance and training:

- Routine Site Inspection Report
- Employee Training Report
- Employee Training Confirmation
- Rainfall Inspection Report

Descriptions of Spills or Leaks

Appendix E also contains a form called the Corrective Actions for Release Incidents. At any time a spill or leak occurs, a record will be kept of the incident including the date, volume of the release, and the corrective actions implemented.

5.0 SPILL CONTROL PROCEDURES

The following paragraphs provide general information regarding these procedures. A Spill Prevention Control and Countermeasure (SPCC) Plan is provided in Appendix F.

The most effective spill control procedure is to reduce the possibility of a release through proper handling of the materials. Petroleum products utilized onsite include motor oil, diesel fuel, and hydraulic fluid in the excavation equipment. Gasoline may also be present at the facility in small quantities, in vehicles and portable gasoline containers.

In the unlikely event of a significant spill at the site, the following steps will be initiated:

- (1) Isolate the source of the release and, if applicable, turn the power to the equipment off;
- (2) Direct spillage to a centralized secondary containment area, if applicable;
- (3) Utilize absorbent booms, pads, and other spill response equipment and materials to contain the spilled material;
- (4) Isolate the affected area(s);
- (5) Restrict access to the affected area(s) pending completion of the response and cleanup procedures;
- (6) Report the spill to the Supervisor-in-Charge so that the necessary internal and regulatory reporting can be completed.

In the event a release of 25 gallons or more of a petroleum product occurs on the site the following information will be compiled:

- (1) Name, address and telephone number of person reporting the spill
- (2) Exact location of the spill
- (3) Company name and location
- (4) Material spilled
- (5) Estimated quantity
- (6) Source of the spill
- (7) Cause of the spill
- (8) Name of the body of water involved or the nearest body of water to the spill area
- (9) Action taken for containment and clean-up

All waste products shall be properly containerized, characterized, and labeled, and temporarily stored in an appropriate location. Waste products and ancillary waste material shall be either recycled or disposed of in a manner consistent with both state and federal laws. Shipping and disposal activities shall be by a qualified and licensed contractor as selected by WM. Records of these activities shall be as described in Section 4.0 Non-Structural Controls, Paragraph 4.7 Records, of this Pollution Abatement and Prevention Plan.

6.0 MONITORING REQUIREMENTS

6.1 Introduction

In order to maintain coverage under the NPDES permit, certain monitoring requirements must be met. Monitoring includes both visual inspections and storm water sampling.

6.2 *Standard Monitoring Requirements*

Stormwater samples will be collected as required by the permit. The NPDES Permit requires sample collection of discharge to surface waters 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 not more than two samples per calendar month. The facility will strive to maintain discharges within the permit requirements. The NPDES General Permit outlines discharge limitations for pH and total suspended solids (TSS). The pH is expected to be between 6 and 8.5 standard units (s.u.), as required by the permit. In the event that pH is lower than the permit allowance, lime or an equivalent will be added to the stormwater to increase pH within permit limitations. TSS should remain below a monthly average of 35 mg/L and daily maximum of 70 mg/L, as required by the general permit.

Stormwater samples from the outfalls will be collected in properly labeled and preserved bottles provided by the contract laboratory and sent to the laboratory for analysis. The samples will be measured for pH on-site, within 15 minutes of sample collection. The pH meter will be calibrated before each use, and calibration records maintained on-site. Flow may be measured by recording time required to fill a container of known volume. Alternatively, flow may be measured by establishing a stage/discharge relationship for the spill pipe.

Laboratory results will be transferred to Alabama Environmental Permitting and Compliance System (AEPACS) provided by ADEM. DMR forms will be kept on file at the facility for a minimum of three years. DMRs are due to ADEM no later than the 28th of the month following the monitoring period.

6.3 *Routine Inspection*

The facility will be formally inspected on a periodic basis as required by the permit. The NPDES Permit requires inspection of all point sources identified in the NOI and all treatment or control facilities or systems used onsite twice per month at a rate of at least every other week. These periodic inspections will include a survey of the facility to identify areas, procedures, and/or practices, which may cause contamination to stormwater runoff. Facility personnel performing periodic inspections will be properly trained.

6.4 *Monitoring in the Presence of Exposed Materials After a Release*

If the facility has a release of a Water Priority Chemical (WPC) that is subject to §313 of SARA Title III, or if the facility has WPCs exposed to stormwater, then the facility is required to sample the stormwater discharges associated with the release or exposure. The samples are to be analyzed for each of the constituents, which will indicate the presence of all WPCs released or exposed. At the time of each sampling, flow is to be estimated or a reading from a rain gauge recorded. Sampling shall occur twice a year and shall continue until it is demonstrated that the WPCs are no longer present in any discharge associated with the release or exposure.

Currently this facility does not use or store any of the Section 313 listed chemicals. However, sampling may be required in the event of a surface spill of a petroleum product in a quantity above the reporting limit.

6.5 *Monitoring Records*

Stormwater samples from the outfalls will be collected in properly labeled and preserved bottles provided by the contract laboratory and sent to the laboratory for analysis. Laboratory results will be transferred to AEPACS as described above. Electronic copies of DMRs will be kept on file at the

facility for a minimum of three years. DMRs are due to ADEM no later than the 28th of the month following the monitoring period.

Records of all sampling and analysis shall include the date, exact place, and time of the sampling and measurements. Records will also be made of who performed the sampling, the procedures used for sample collection and preservation, who conducted the analysis, and the date and time of the analysis. Records will include references and written procedures, when available, for the analytical techniques or methods used for analysis, as well as the results.

6.6 *Operation Records*

6.6.1 System Design and Procedure Changes

Should inspections require a design or procedural change in the conveyance of stormwater runoff or materials handling, these changes will be documented in this Plan. System design and procedure changes may be cross-referenced in other record-keeping sections, especially when procedural changes require the notification and training of employees or subcontractors in new methods.

6.6.2 Corrective Actions For Release Incidents

During implementation of this Plan, the effectiveness of corrective action, if necessary, will be reviewed periodically. Results of these reviews will be included in ongoing employee training.

6.6.3 Record-Keeping and Internal Reporting

The facility will establish a reporting and filing system to document inspections, employee and subcontractor training, system design changes and corrective actions for spill incidents or adverse stormwater impacts. These records will be maintained at the on-site WM office.

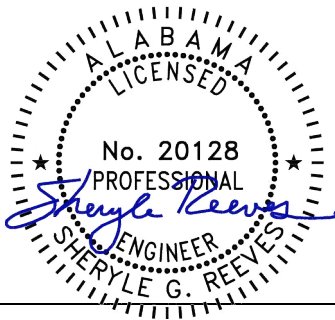
7.0 RECLAMATION PROCEDURES

As excavation progresses, the excavated sump areas of the pits will remain the lowest areas in the project boundary. These areas will continue to collect water. Once excavation is completed, the pits will either be graded and stabilized with vegetation or be allowed to fill with water creating a pond.

During construction and reclamation, erosion control measures such as hay bales, riprap, cleared trees, and other acceptable methods will be utilized as needed to minimize erosion.

CERTIFICATION

I certify under penalty of law that I am a registered professional engineer familiar with Alabama Department of Environmental Management Administrative Code R 335-6-9, regarding pollution control from surface mining operations. This Pollution Abatement Plan was prepared in accordance with good engineering practices. I understand that there are significant penalties for submitting false information, up to and including fine and imprisonment. To the best of my knowledge and belief all of the information in this Pollution Abatement Plan is true, accurate and complete.



Sheryle G. Reeves, P.E.

Alabama License No. 20128

April 22, 2026

Date

MANAGEMENT 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, of 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 willful violations.

A blue ink signature of Paul Burkhalter.

Paul Burkhalter, PE/PLS
Member, Project Manager

April 30, 2026

Date

FIGURES

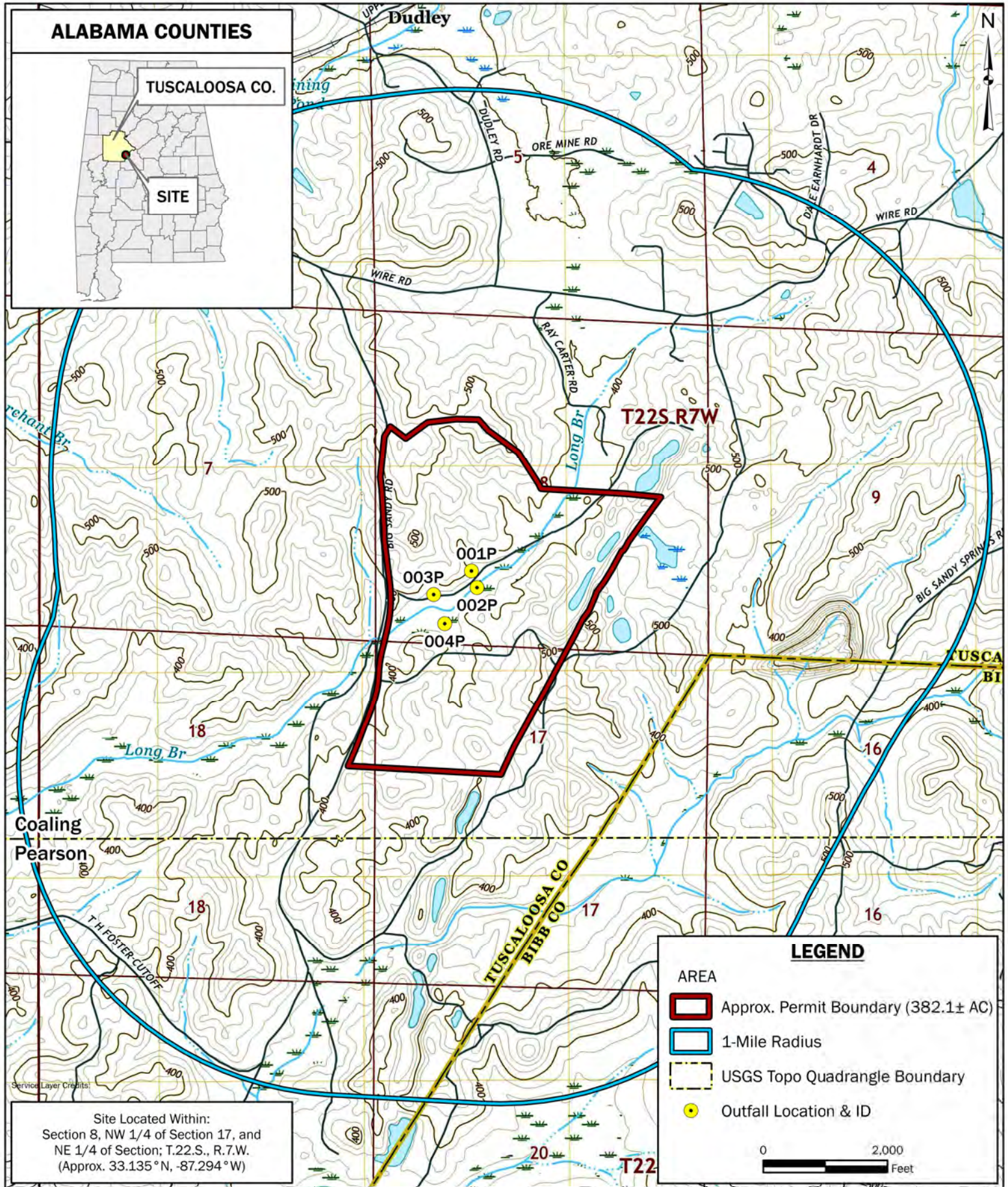
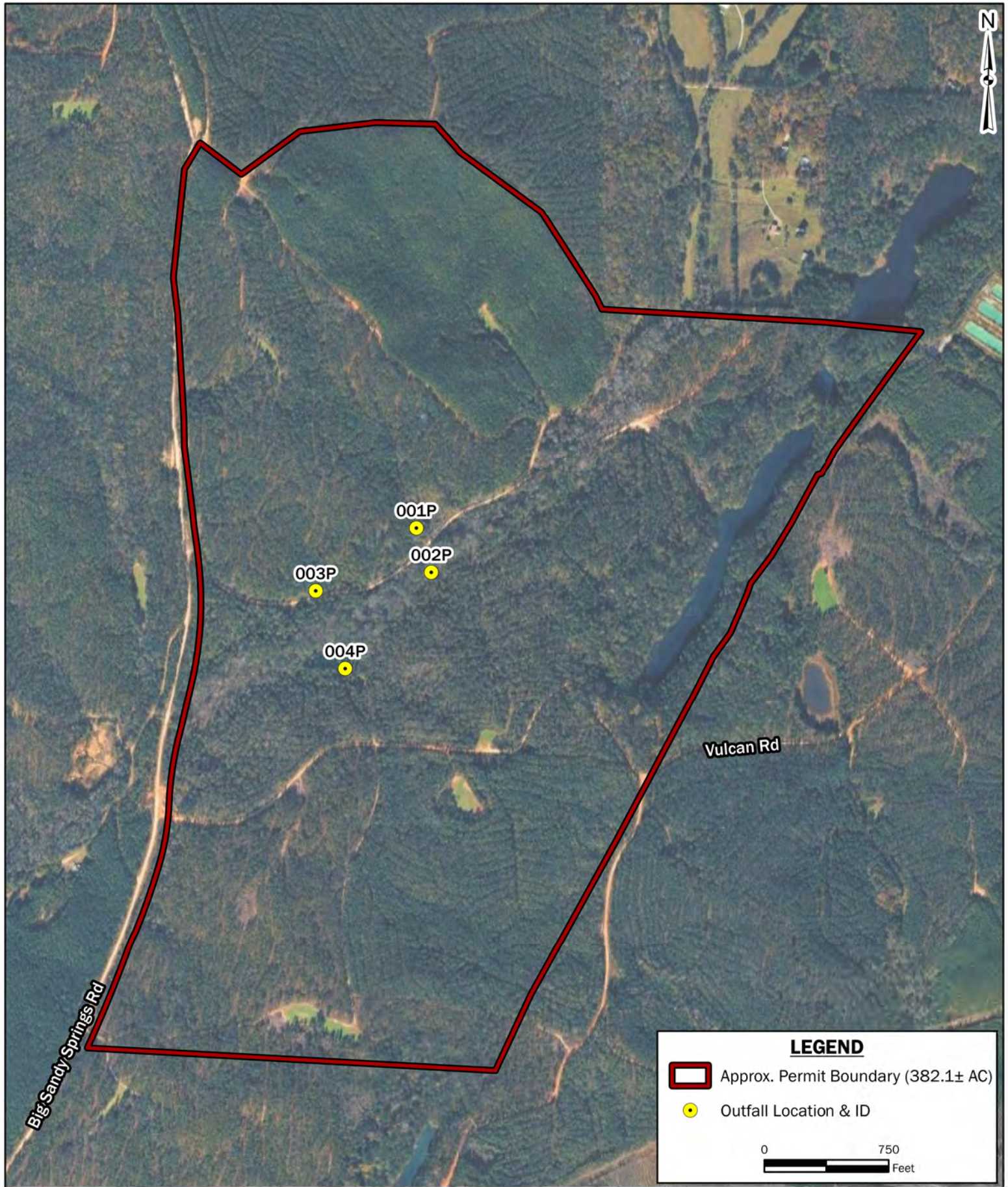


FIGURE 1: SITE LOCATION & TOPOGRAPHIC MAP
WARRIOR MATERIALS, LLC - WARRIOR MATERIALS QUARRY
POLLUTION ABATEMENT PLAN
VANCE, TUSCALOOSA COUNTY, ALABAMA

BASEMAP: Coaling, Alabama USGS 7.5 Minute Quadrangle Map, 2024 (20-ft Contour Interval).



DRAWN BY: SG
CHECKED BY: SGR
DRAWING DATE: 04/14/2026
REVISION DATE: N/A
TTL JOB NO.: 25-01-01858.00
APPROX. SCALE: 1 in = 2,000 ft



LEGEND

Approx. Permit Boundary (382.1± AC)

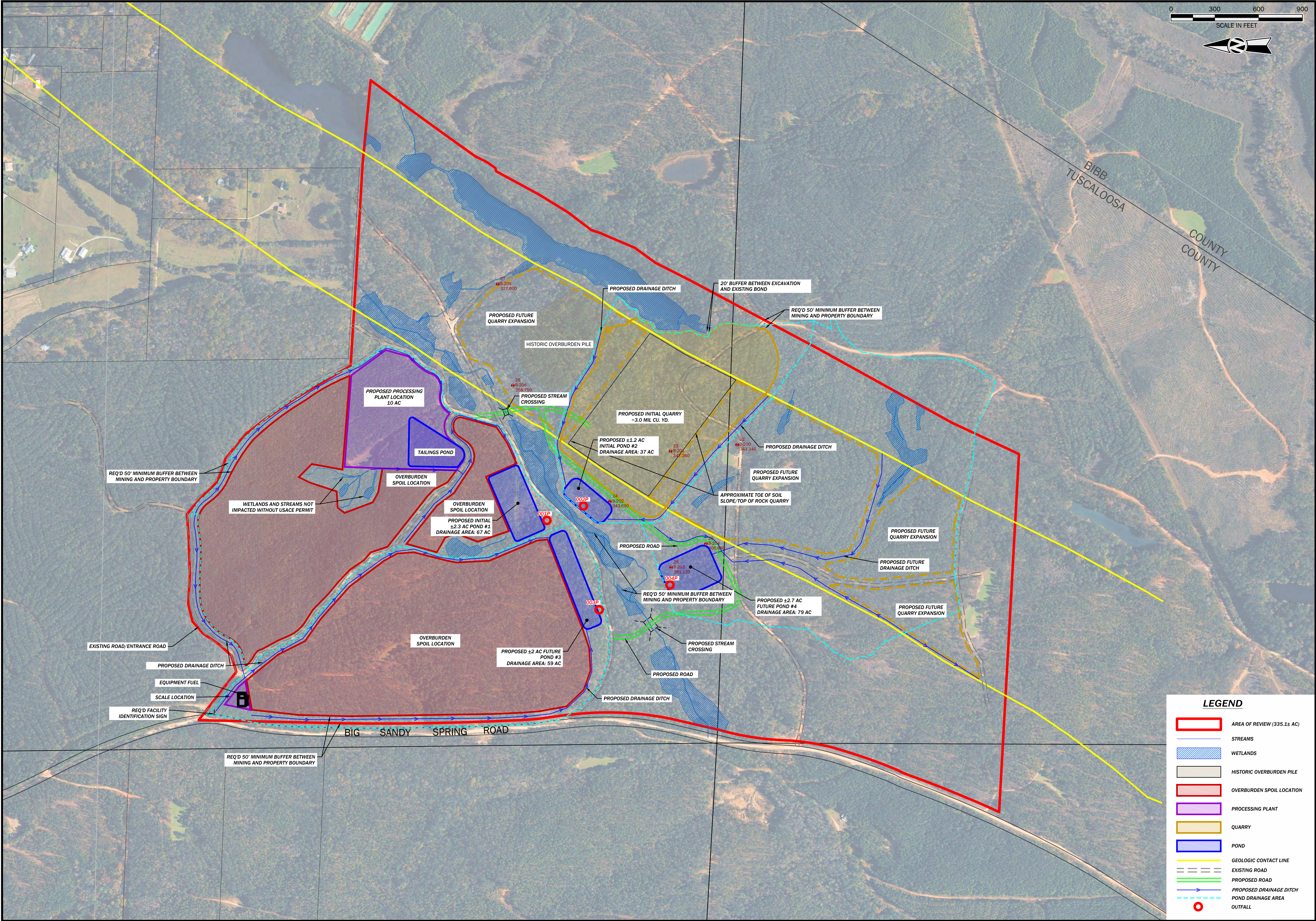
Outfall Location & ID

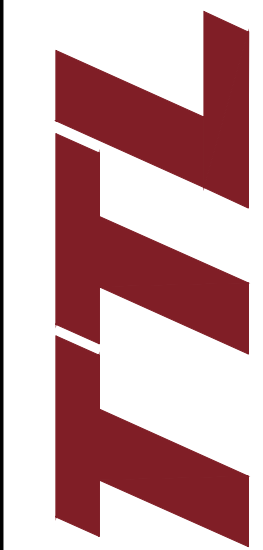
0 750 Feet



FIGURE 2: SITE LOCATION & AERIAL PHOTOGRAPH
WARRIOR MATERIALS, LLC - WARRIOR MATERIALS QUARRY
POLLUTION ABATEMENT PLAN
VANCE, TUSCALOOSA COUNTY, ALABAMA
BASEMAP: Google Earth Satellite Imagery, 11/22/2024.

DRAWN BY: SG
CHECKED BY: SGR
DRAWING DATE: 04/14/2026
REVISION DATE: N/A
TTL JOB NO.: 25-01-01858.00
APPROX. SCALE: 1 in = 750 ft





3200 Rice Mine Road NE | Tuscaloosa, AL 35406
205.345.0816 | www.ttlusa.com

WARRIOR MATERIALS QUARRY

WARRIOR MATERIALS, LLC
BIG SANDY SPRING ROAD
VANCE, TUSCALOOSA COUNTY, ALABAMA

PRELIMINARY
(NOT FOR CONSTRUCTION,
RECORDING PURPOSES
OR IMPLEMENTATION)

Sheet Title

POLLUTION ABATEMENT PLAN

No.	Date	Revision Description

Drawn By: SSN
Date: 04/08/26
File Name: 251858 Preliminary Quarry Plan.dwg

Checked By: ARI
Date: 04/08/26
Proj. No.: 25-01-01858.00

Sheet No.

FIGURE 3

APPENDIX A

TUSCALOOSA COUNTY GIS ONLINE PROPERTY RECORD CARDS

Tuscaloosa County Alabama Public GIS

W19/M109 - f23.5.1c-i23.11Pub - TuscaloosaAL - 04-12-2026

Parcel Details

[FavLink](#) [PRC](#) [NewSrch](#) [Back](#) [Print](#)

Account Pin STR	1530 : 77653 : 17-22S-07W		
Parcel No:	63 39 04 17 0 000 001.000		
Prop Addr:	BIG SANDY RD		
Tax Dist:	02 - County South		Exemption: Not Exempt
Deeded Acres:	437.00ac	Calc't:	458.72ac
Deed Bk,Pg,Date	0	00000	02-06-2007
Plat Info:	Book	Page	
Sub Info:	Sub Block:	Lot	
Subdivision:			

Owner

Name:	WESTERVELT COMPANY
Address:	1400 JACK WARNER PKWY NE
City, State, ZIP:	TUSCALOOSA, AL 35404

2024 Values

Land Total:	\$576,800
Building & Improvements Total:	\$0
Total Appraised Value:	\$576,800
Yrly Tax:	\$573.44 for 2025

Payment History

Tax Year	Date Paid	Amount
2025	12/31/2025	\$573.44
2024	01/02/2025	\$566.42
2023	01/02/2024	\$559.40

Tuscaloosa County Alabama Public GIS

W19/M109 - f23.5.1c-i23.11Pub - TuscaloosaAL - 04-12-2026

Parcel Details

[FavLink](#) [PRC](#) [NewSrch](#) [Back](#) [Print](#)

Account Pin STR	1530 : 77363 : 18-22S-07W		
Parcel No:	63 39 04 18 0 000 001.000		
Prop Addr:	BIG SANDY RD		
Tax Dist:	02 - County South		Exemption: Not Exempt
Deeded Acres:	550.00ac	Calc't:	587.97ac
Deed Bk,Pg,Date	0	00000	02-06-2007
Plat Info:	Book	Page	
Sub Info:	Sub Block:	Lot	
Subdivision:			

Owner

Name:	WESTERVELT COMPANY
Address:	1400 JACK WARNER PKWY NE
City, State, ZIP:	TUSCALOOSA, AL 35404

2024 Values

Land Total:	\$726,000
Building & Improvements Total:	\$0
Total Appraised Value:	\$726,000
Yrly Tax:	\$721.9 for 2025

Payment History

Tax Year	Date Paid	Amount
2025	12/31/2025	\$721.90
2024	01/02/2025	\$712.72
2023	01/02/2024	\$704.08

Tuscaloosa County Alabama Public GIS

W19/M109 - f23.5.1c-i23.11Pub - TuscaloosaAL - 03-29-2026

Parcel Details

[FavLink](#) [PRC](#) [NewSrch](#) [Back](#) [Print](#)

Account Pin STR	1530 : 17965 : 08-22S-07W		
Parcel No:	63 39 03 08 0 000 006.000		
Prop Addr:	BIG SANDY RD		
Tax Dist:	02 - County South Exempt		Exemption: Not Exempt
Deeded Acres:	516.00ac	Calc't:	530.37ac
Deed Bk,Pg,Date	0	00000	02-06-2007
Plat Info:	Book	Page	
Sub Info:	Sub Block:	Lot	
Subdivision:			

Owner

Name:	WESTERVELT COMPANY
Address:	1400 JACK WARNER PKWY NE
City, State, ZIP:	TUSCALOOSA, AL 35404

2024 Values

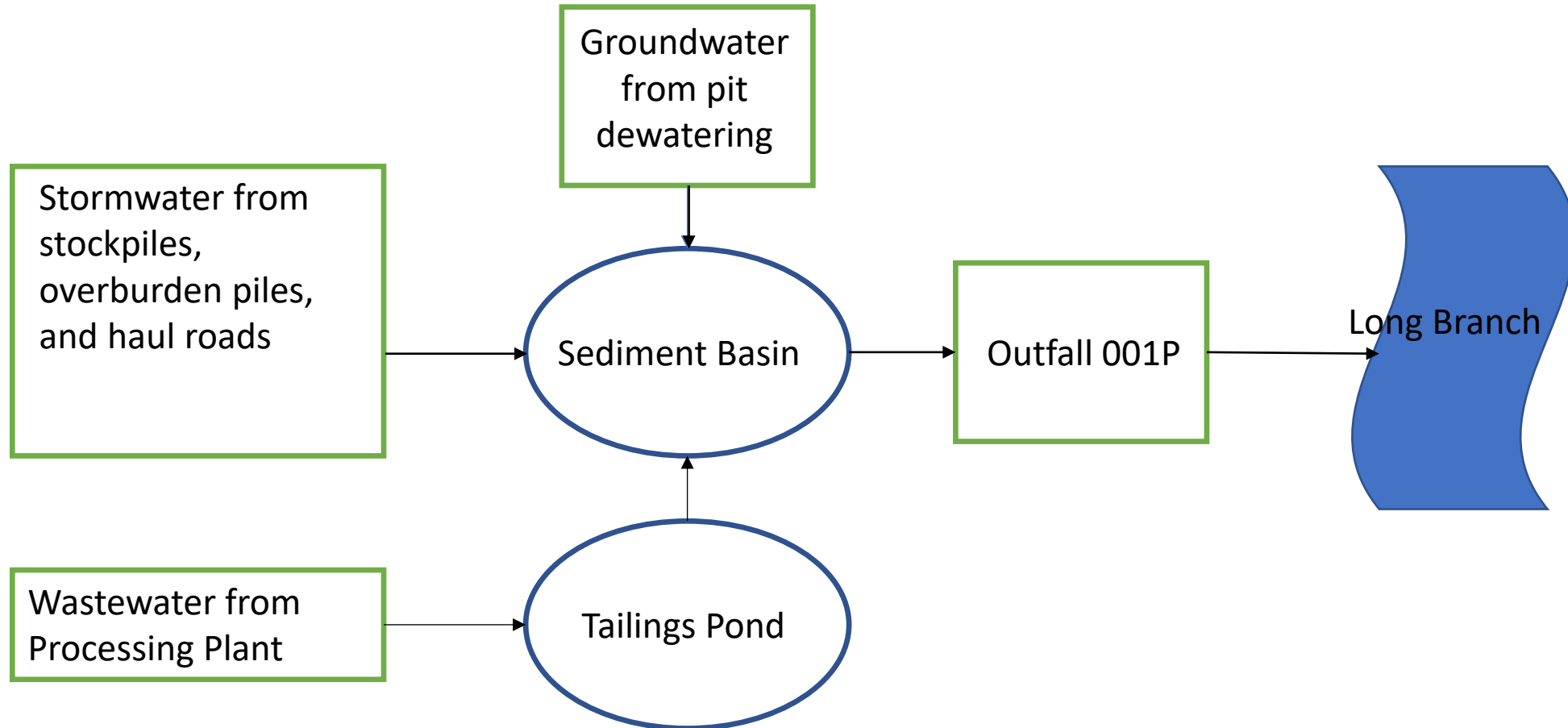
Land Total:	\$730,400
Building & Improvements Total:	\$0
Total Appraised Value:	\$730,400
Yrly Tax:	\$878.34 for 2025

Payment History

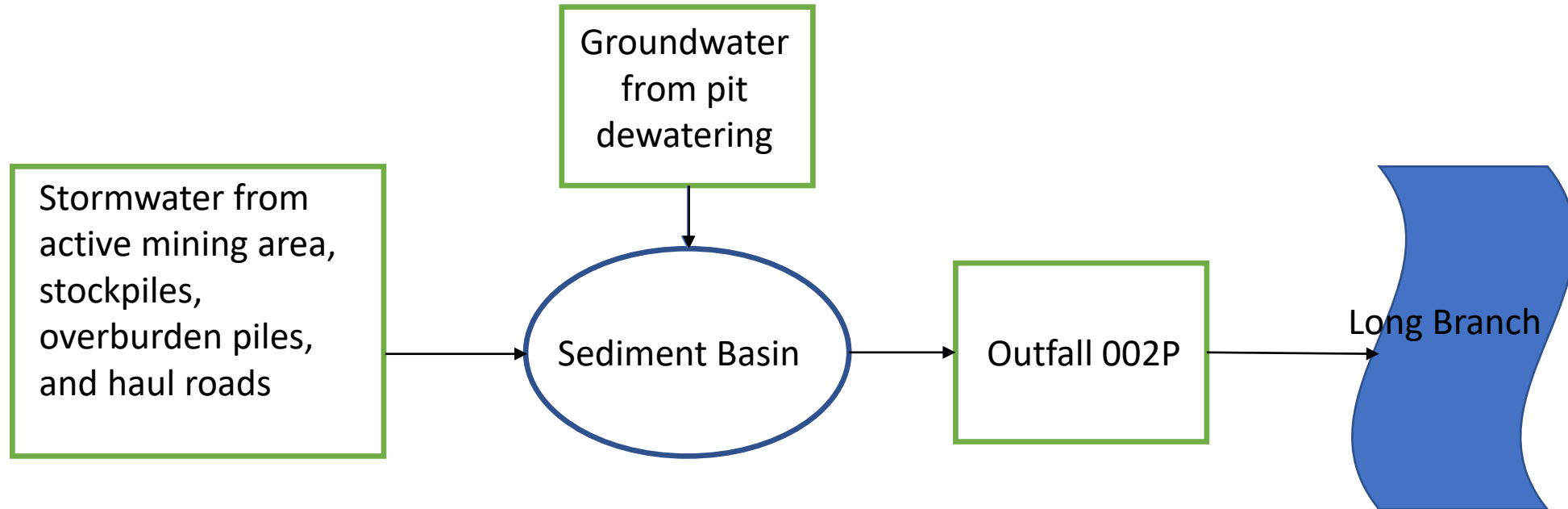
Tax Year	Date Paid	Amount
2025	12/31/2025	\$878.34
2024	01/02/2025	\$867.54
2023	01/02/2024	\$855.66

APPENDIX B
SCHEMATIC DIAGRAM

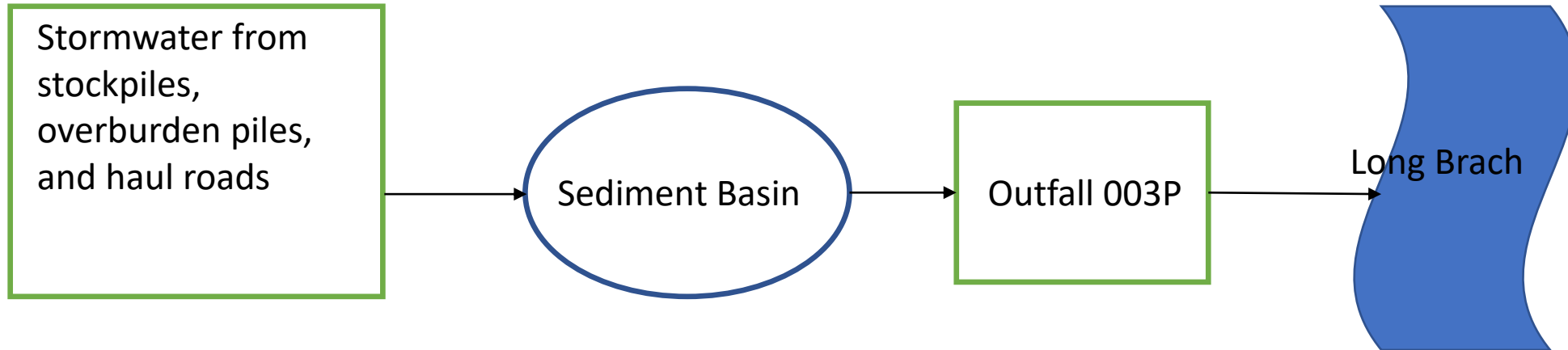
SCHEMATIC DIAGRAM
WARRIOR MATERIALS, LLC
WARRIOR MATERIALS QUARRY
OUTFALL 001P



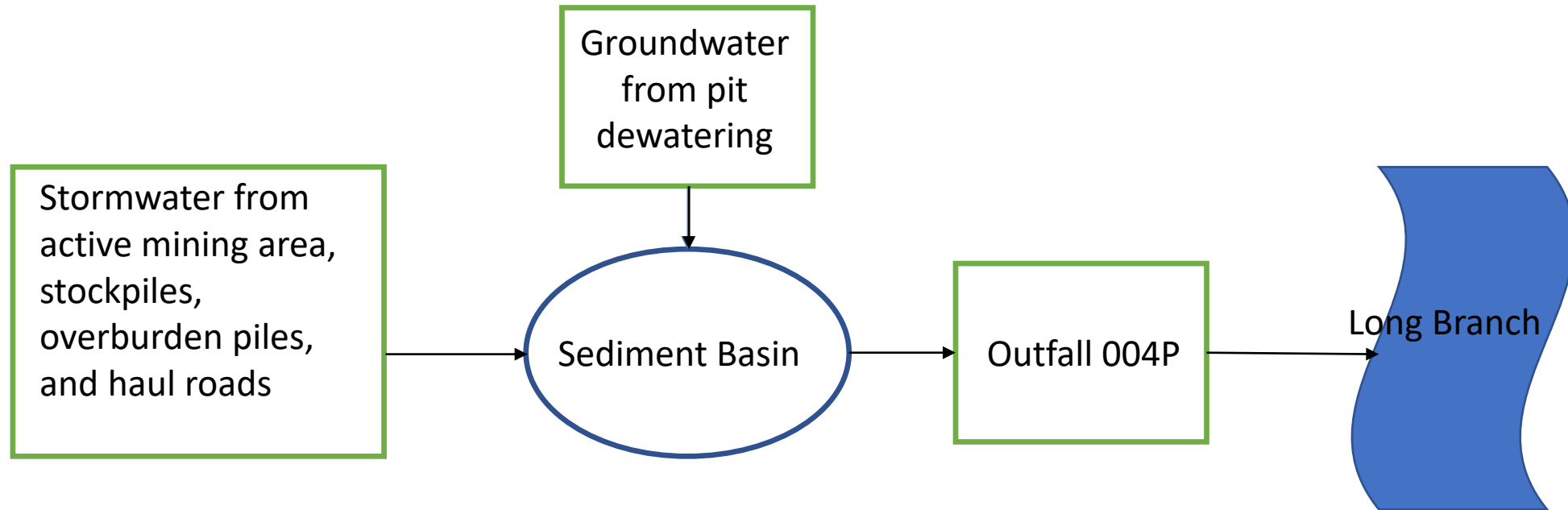
SCHEMATIC DIAGRAM
WARRIOR MATERIALS, LLC
WARRIOR MATERIALS QUARRY
OUTFALL 002P



SCHEMATIC DIAGRAM
WARRIOR MATERIALS, LLC
WARRIOR MATERIALS QUARRY
OUTFALL 003P



SCHEMATIC DIAGRAM
WARRIOR MATERIALS, LLC
WARRIOR MATERIALS QUARRY
OUTFALL 004P



APPENDIX C
EROSION CONTROL DETAILS

Brush/Fabric Barrier (BFB)



Practice Description

A brush/fabric barrier is a dam-like structure constructed from woody residue and faced with a non-woven geotextile fabric to provide a temporary sediment basin. This practice is applicable on sites with a small drainage area where brush and other woody debris are available from a clearing and grubbing operation.

Planning Considerations

This practice is intended to be a temporary sediment basin with a limited life span and applicable only for small drainage areas.

The barrier should be located downslope from areas with potential sheet and rill erosion, with adequate storage volume in front of the barrier, and with no more than 2 acres of drainage area.

Adequate woody material from clearing and grubbing required on the site must be available for the construction of the barrier.

The practice should be located and designed so adequate storage volume and detention time can be obtained, and that failure of the barrier will not result in hazard to the public or damage to either work on-site or off-site property.

Design Criteria

Drainage Area

Brush/fabric barriers should be designed with no more than 2 acres of drainage area. A sediment basin should be considered for larger drainage areas (see Sediment Basin).

Structure Life

The design life of the structure should be 1 year or less. The barrier should be removed and sediment accumulations properly stabilized prior to completion of the construction project.

Sediment Storage

The barrier should be designed to provide 67 cubic yards of sediment storage per acre of disturbed drainage area. Sediment should be removed and properly utilized on site when $\frac{1}{2}$ the sediment storage volume has been filled.

Site Location and Preparation

The site for the barrier should be located so that a basin capable of providing the sediment storage required can be obtained or created. The site for the barrier should be smoothed prior to placement of the brush.

Brush Placement

The barrier should be mostly on a contour or constant elevation with each end of the barrier turned up to a higher elevation so that excessive flows will overtop the barrier instead of bypassing the barrier. Brush should be placed in a longitudinal dense pile with main stems oriented perpendicular to the direction of flow. Generally, the barrier should be at least 3 feet tall, but no more than 6 feet tall. The width of the barrier perpendicular to the direction of flow should be at least 5 feet at its base. Small stems and limbs protruding from the bundle that could damage the fabric should be trimmed.

Fabric

The fabric used to face the upstream surface of the brush should be non-woven geotextile. The geotextile shall be of the strength and durability required for the project. Generally, the non-woven geotextile should be an 8-ounce fabric and meet the same requirements as a temporary silt fence found in AASHTO M288.

The fabric to be used should be supplied in lengths and widths to minimize vertical splices and eliminate horizontal splices. The minimum vertical splice overlap should be 3 feet. Vertical splices must be securely fastened to each other so that flows will not short-circuit through the splice.

The fabric should be securely buried at the bottom of an excavated trench that is at least 6" deep in front of the barrier. Prior to compacting backfill in the trench, the

fabric should be securely staked at 3-foot centers with wooden stakes a minimum of 18" long.

The top edge of the fabric should be secured so that it will not sag below the designed storage elevation. The upper edge can be anchored with twine fastened to the fabric and secured to stakes behind the barrier.

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

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 ft².) and 10-10-10 fertilizer at the rate of 1000 lbs per acre (25 lbs per 1000 ft².). 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, 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.

Check Dam (CD)



Practice Description

A check dam (also referred to as a “ditch check”) is a small barrier or dam constructed across a swale, drainage ditch or other area of concentrated flow for the purpose of reducing channel erosion. Channel erosion is reduced because check dams flatten the gradient of the flow channel and slow the velocity of channel flow. Check dams do not reduce turbidity of runoff. Check dams can be constructed of rock, wattles (sometimes referred to as tubes or rolls), sand bags, or other materials that may be acceptable to the design professional. Unless installed correctly, check dams will not capture a significant amount of sediment. When installed correctly, most check dams can capture the coarser grained material, which can be significant for sandy soils. Sediment capture increases as velocity in the channel decreases by creating impoundments with the check dams. This impoundment pool creates the flattening of the gradient, greatly reducing channel erosion.

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.

Planning Considerations

Check dams are used in concentrated flow areas to provide temporary channel stabilization with minimal sediment retention during rainfall runoff periods on construction sites. Check dams may be constructed of rock, wattles, sand bags, or other suitable material, including manufactured products. Water flowing over a check dam creates turbulent erosive forces (super critical flow) that must be addressed to prevent erosion downstream of the check dam. Inevitably water will likely flow under check dams due to limitation with ground contact. Therefore, it is of utmost importance to ensure the performance of the check dam that erosion and scour under the check dam be minimized. This is best achieved using an underlay such as an 8-oz. nonwoven filter fabric. If the underlay is extended downstream, it will also protect the channel from super critical flows from water flowing over and under the dam.

Check dams should be planned to be compatible with the other features such as streets, walkways, trails, sediment basins and rights-of-way or property lines. Check dams are installed with the center overflow area lower in elevation than the ends to ensure flow goes over the check dam and not around. Check dams are normally constructed in series and the dams should be located at a normal interval from other grade controls such as culverts or sediment basins.

Check dams are generally used as a temporary BMP that is removed following construction to allow for final long-term stabilization of the channel. Provisions should be made to establish permanent channel linings as early as possible.

Check dams can also be used for other purposes such as the capture of sediment upstream of other practices or flocculent dosing upstream of a sediment basin.

Extensive research has been conducted by The Auburn University Erosion and Sediment Control Test Facility. The research recommendations are incorporated in the following planning considerations:

Rock Check Dams

Many check dams are constructed of rock. Rock may not be acceptable in some installations and alternative types of check dams need to be considered. Rock check dams (Figures CD-1 and CD-2) are usually installed with mechanical equipment but hand labor is likely needed to complete most installations to the quality needed. The availability and cost of commercially produced rock should be considered. The use of rock should be considered carefully in areas to be mowed. Some rock may be washed downstream and should be removed before each mowing operation. The use of geotextile can be used on the upstream face of the rock check dam to increase the sediment trapping efficiency of the rock check dam. Measures must be taken to prevent undermining of the check dam and erosion below the check dam. A non-woven geotextile underlayment should be used to prevent this from happening. The geotextile meeting AASHTO M 288 requirement for separation Class II (minimum 8-oz. fabric) should extend approximately 3 ft. upstream and downstream, and pinned securely with the upstream edge buried.

Measures to prevent downstream erosion associated with a rock check dam include placing larger rock on the downstream face of a rock dam, and providing erosion protection material just downstream of the dam.

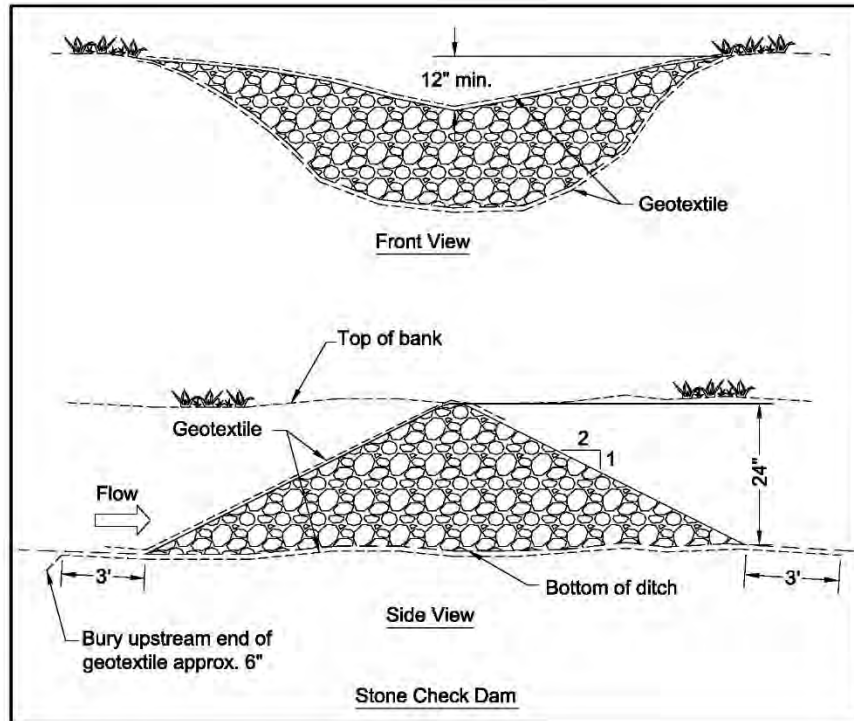


Figure CD-1 Profile and Cross-Section of Typical Rock Check Dams

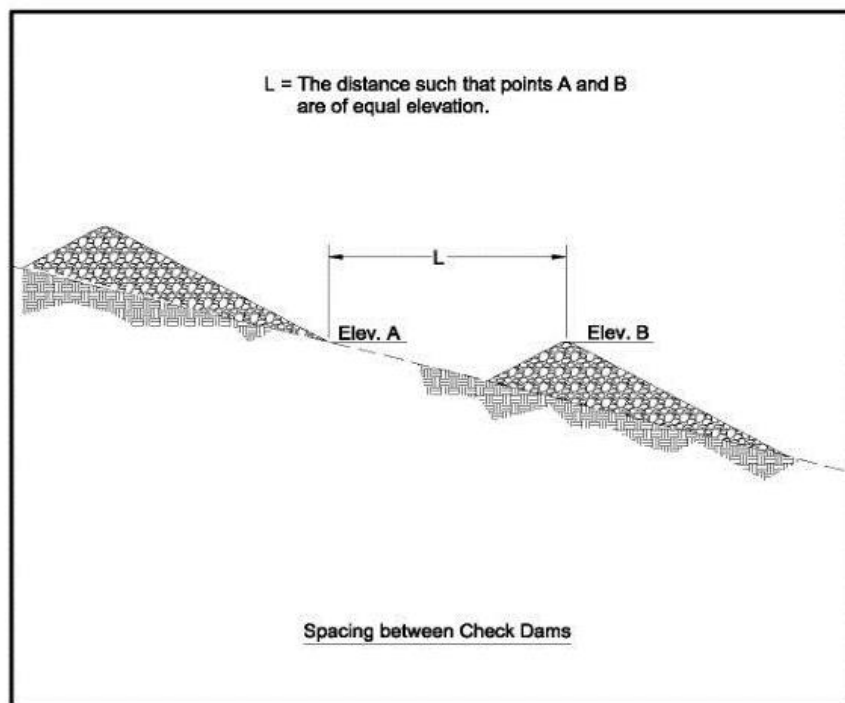


Figure CD-2 Profile of Typical Rock Check Dams

Wattle Check Dams

Wattles have been found to be best installed without trenching and on top of stapled geotextile underlayment that extends a minimum 3 ft. up and downstream from the wattle. Wattles must be properly stapled with sod staples on 10-inch centers on each side of the wattle to prevent flotation, and staked over the top using non-destructive tee-pee type staking. Wattles that provide less “flow through” create more ponding of water that increases the trapping of sediment (see Figures CD-3 and CD-4).

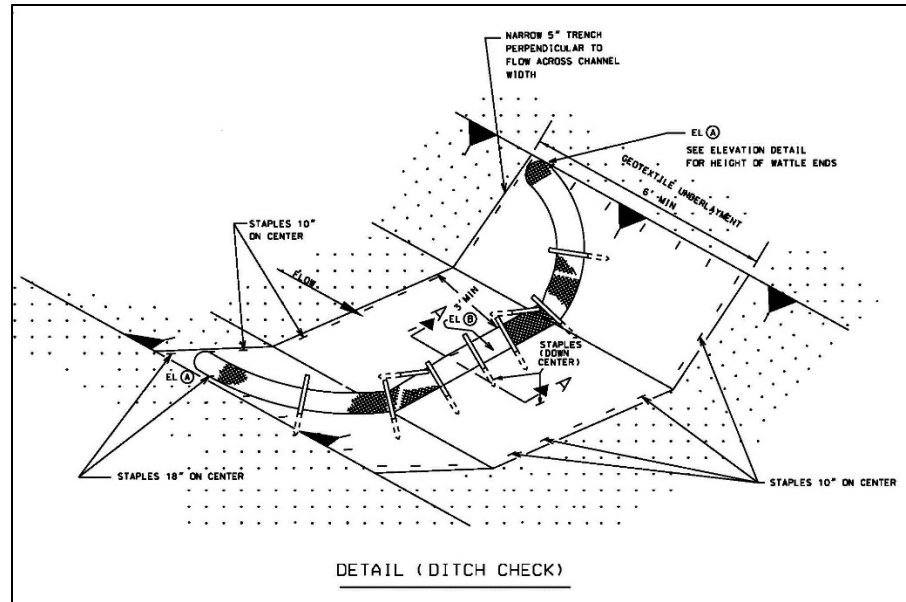


Figure CD-3 Wattle Check Dam (ditch check)



Figure CD-4 Wattle Check Dam (ditch check)

(Photo courtesy of Auburn University Erosion and Sediment Control Test Facility)

Silt Fence Check Dam

When properly designed and installed, typical silt fence materials can be utilized to construct a check dam. Geotextile underlayment should be used and the fence notched as needed to ensure the maximum depth of flow is no greater than the depth of the channel. Figures CD-5 and CD-6 show the recommended details.

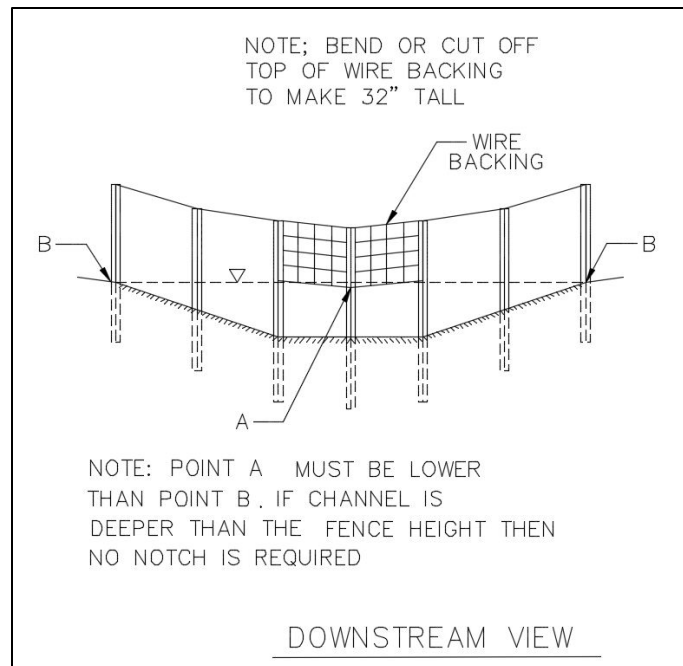


Figure CD-5 Silt Fence Check Dam Cross-Section

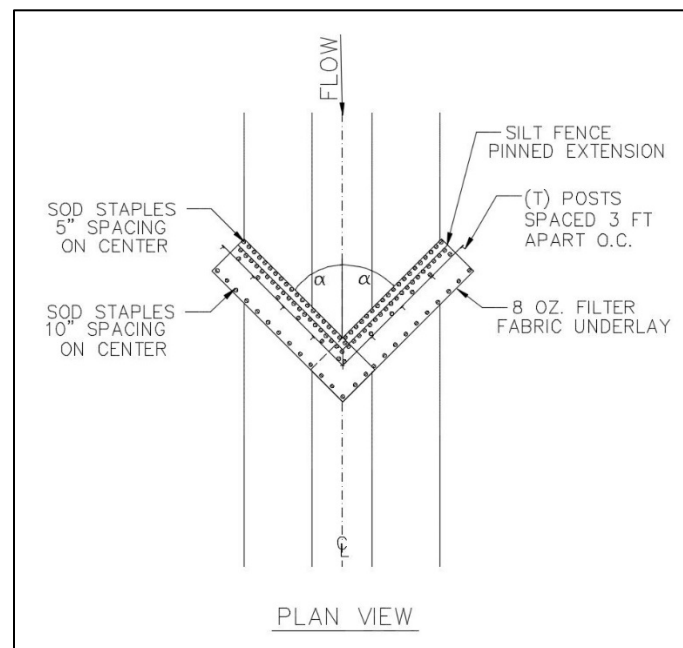


Figure CD-6 Silt Fence Check Dam Plan View



Figure CD-7 Silt Fence Check Dam
(Photo courtesy of Auburn University Erosion and Sediment Control Test Facility)

Sand Bag Check Dam

Sand bags have also been proven to be effective as check dams but only when the bags are properly oriented (See Figures CD-8 and CD-9). A geotextile underlayment that extends approximately 3 ft. upstream and downstream should also be used in earth channel situations to prevent undermining and scour.

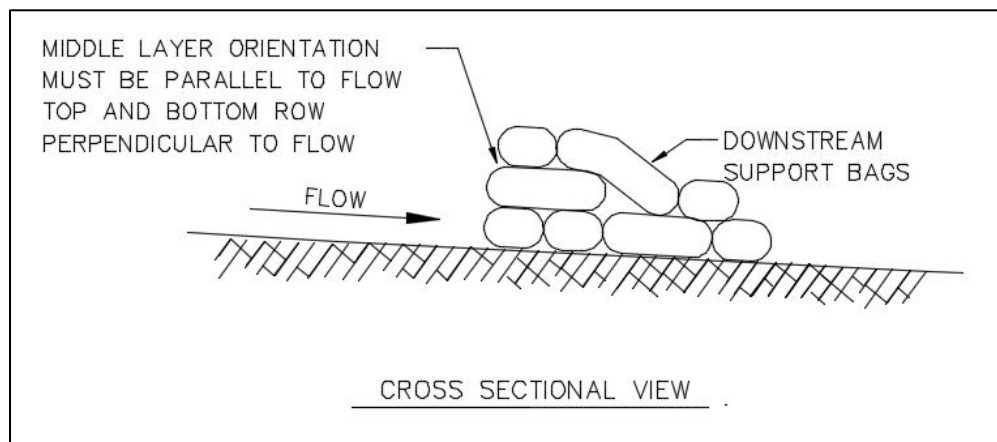


Figure CD-8 Sand Bag Check Dam Cross-Section

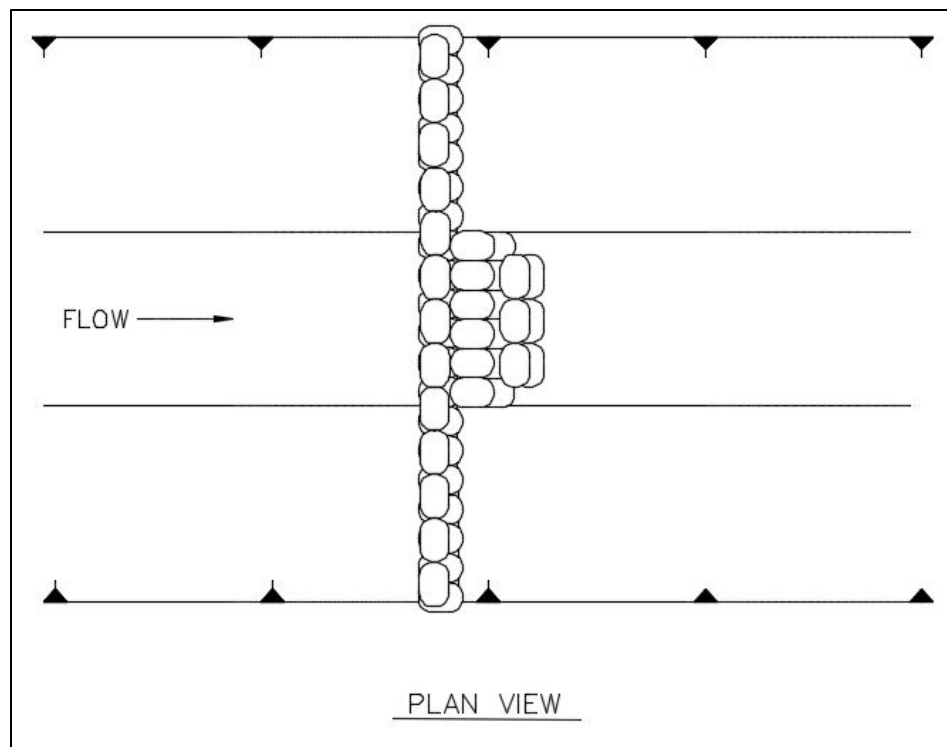


Figure CD-9 Sand Bag Check Dam Plan View

Design Criteria

Formal design is not required. The following factors should be considered when designing check dams.

Drainage Area

Generally, one acre or less.

Maximum Height

Check dam height is a function of channel geometry. Most check dams are 3 feet or less in height.

Depth of Flow

Depth of flow over a check dam is a function of the cross-section and porosity of the check dam. Generally, flows over a check dam are less than 1 foot.

The center of the dam should be constructed lower than the ends. The elevation of the center of the dam should be lower than the ends by the depth of design flow.

Side Slopes

2:1 or flatter (rock check dam).

Spacing

The elevation of the toe of the upstream dam should be at or below the elevation of crest of the downstream dam (Figure CD-2).

For example, if the channel is 3% grade, and the check dam height is 2 feet, The check dam spacing should be 67 feet:

$$\text{Spacing (ft)} = \text{dam height (ft)} / \text{channel grade}$$

$$\text{Spacing} = 2 \text{ ft} / 0.03 = 67 \text{ feet}$$

Geotextile

Generally, the non-woven geotextile should meet the requirements found in AASHTO M 288 Class II used for separation.

Construction Exit Pad (CEP)



Practice Description

A construction exit pad is a stone base pad 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 moving 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

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.

Dust Control (DC)



Practice Description

Dust control includes a wide range of techniques that prevent or reduce movement of wind-borne soil particles (dust) during land disturbing activities. This practice applies to construction routes and other disturbed areas where on-site and off-site damage or hazards may occur if dust is not controlled.

Typical Components of the Practice

- Scheduling
- Erosion Control
- Other Potential Components
 - Sprinkling
 - Barriers
 - Spray-on Adhesives
 - Stone
 - Street Cleaning
- Installation Verification

Construction

Dust control requirements should be designed by a qualified design professional and plans and specifications should be made available to field personnel prior to start of construction. Whenever possible, leave undisturbed vegetated buffer areas between graded areas.

Scheduling

Schedule construction operations so that the smallest area is disturbed at any one time.

Erosion Control

Install surface stabilization measures (vegetative cover or mulch) immediately after completing the land grading.

Vegetative Cover

See Temporary or Permanent Seeding practice for guidance. Vegetation provides the most practical method of dust control for areas not subject to traffic.

Mulching

See Mulching practice for guidance on applying mulch and tackifiers or binders. Mulching is not recommended for areas with heavy traffic.

Sprinkling

Sprinkle the site with water until the surface is moist. This practice is effective for dust control on haul roads or other traffic routes, but constant repetition is required for effective control.

Barriers

Install board fences perpendicular to the prevailing winds at intervals (distance) of 15 times the barrier height.

Calcium Chloride

Apply with a mechanical spreader at a rate that keeps the surface moist.

Consult with a qualified design professional to determine if a permit is required.

Spray-on Adhesives

Spray adhesives according to the design plan.

Consult with a qualified design professional if spray-on adhesives are specified. A permit may be needed.

In the absence of a detailed plan, use manufacturers' recommendations. Table DC-1 presents examples of spray-on adhesives that have been used successfully for dust control.

Table DC-1 Application Rates for Spray-on Adhesives Used in Dust Control

Adhesive	Water Dilution (adhesive: water)	Type of Nozzle	Application Rate (gallons/acre)
Anionic Asphalt Emulsion	7:1	Coarse	1200
Latex Emulsion	12.5:1	Fine	235
Resin in Water	4:1	Fine	300
Acrylic Emulsion (Non-traffic)	7:1	Coarse	450
Non-Acrylic Emulsion (Traffic)	3.5:1	Coarse	350

Source: Virginia Erosion and Sediment Control Handbook, 1993

Consult with a qualified design professional if spray-on adhesives are specified. A permit may be needed.

Stone

Stone should be placed to the width and thickness specified in the design.

Street Cleaning

Use a street sweeper to remove the source materials.

Construction Verification

Check installation of product(s) to verify use of proper product and quantity.

Common Problems

Drought conditions result in dry soils and increase in dust problems—use greater precautions during these periods.

Maintenance

Check construction site during vehicular traffic or windy conditions to see if measures are working adequately. Maintain dust control measures continuously throughout dry weather periods, until all disturbed areas have been stabilized.

Diversion (DV)



Practice Description

A diversion is a watercourse constructed across a slope consisting of an excavated channel, a compacted ridge or a combination of both. Most diversions are constructed by excavating a channel and using the excavated material to construct a ridge on the downslope side of the channel. Right-of-way diversions and temporary diversions are sometimes constructed by making a ridge, often called a berm, from fill material.

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.

Perimeter protection is sometimes used to describe both permanent and temporary diversions used at either the upslope or downslope side of a construction area.

Right-of-way diversions, sometimes referred to as water bars, are used to shorten the flow length on a sloping right-of-way and reduce the erosion potential of the stormwater runoff.

Diversions are designed to intercept and carry excess water to a stable outlet.

Typical Components of the Practice

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

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 earth 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.

Outlet Protection (OP)



Practice Description

This practice is designed to prevent erosion at the outlet of a channel or conduit by reducing the velocity of flow and dissipating the energy. Outlet protection measures usually consist of a riprap-lined apron, a reinforced concrete flume with concrete baffles a reinforced concrete box with chambers or baffles and possibly pre-manufactured products. This practice applies wherever high velocity discharge must be released on erodible material.

Typical Components of the Practice

- Site Preparation
- Installation of Riprap Structures
- Installation of Concrete Structures
- Erosion Control
- Construction Verification

Construction

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

The structure should conform to the dimensions, grades and alignments shown on the plans and specifications.

Site Preparation

Completely remove stumps, roots and other debris from the construction area. Fill depressions caused by clearing and grubbing operations with clean, non-organic soil. Grade the site to the lines and grades shown on the plans. Compact any fill required in the subgrade to the density of the surrounding undisturbed material.

If possible, the alignment should be straight throughout its length. If a curve is required, it should be located in the upstream section of the outlet.

Riprap Structures

Ensure that the subgrade for the filter and riprap follows the required lines and grades shown in the plan. Low areas in the subgrade on undisturbed soil may also be filled by increasing the riprap thickness.

Geotextile fabric must meet design requirements and be properly protected from puncturing or tearing during installation. Repair any damage by removing the riprap and placing another piece of fabric over the damaged area. All connecting joints should overlap a minimum of 1.5 feet with the upstream edge over the downstream edge. If the damage is extensive, replace the entire geotextile fabric.

Riprap may be placed by equipment. Care should be taken to avoid damaging the fabric.

Construct the apron on zero grade with no overfall at the end. Make the top of the riprap at the downstream end level with the receiving area or slightly below it.

Concrete Structures

Reinforcing steel welded wire fabric should be placed in strict accordance with the design plans and maintained in the proper position during the pouring of concrete. Concrete should be placed in horizontal layers not exceeding 24" in thickness or as specified in the design, and consolidated by mechanical vibrating equipment supplemented by hand-spading, rodding or tamping.

Concrete should be placed in sturdy wood or metal forms, adequately supported to prevent deformation. Forms should be oiled with form release agent prior to placement to prevent bonding between concrete and forms.

If possible, concrete should not be placed during inclement weather or periods of temperature extremes. If temperature extremes cannot be avoided, American Concrete Institute (ACI) guidelines for placement of concrete during such extremes should be consulted.

Concrete should be allowed to cure as required by the plans and specifications.

Typically, the surface should be kept wet during curing by covering it with wet burlap sacks or other means. Design strengths should be confirmed by laboratory tests on representative cylinders made during concrete placement. Form work should not be removed prior to the specified time.

Erosion Control

Immediately after construction, stabilize all disturbed areas with vegetation.

Construction Verification

Check finished structures for conformance with design specifications.

Common Problems

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

- Variations in topography on site indicate measure will not function as intended.
- Design specifications for riprap, filter fabric, concrete, reinforcing steel or backfill cannot be met; substitutions may be required. Unapproved substitutions could lead to failure.
- Problems with the structure develop during or after installation.

Maintenance

Inspect riprap outlet structures after heavy rains to see if any erosion around or below the riprap has taken place or if stones have been dislodged. Check concrete structures for cracks and movement. Immediately make all needed repairs to prevent further damage.

Permanent Seeding (PS)



Practice Description

Permanent seeding is the establishment of perennial vegetation on disturbed areas from seed. Permanent vegetation provides economical long-term erosion control and helps prevent sediment from leaving the site. 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
- Inspection

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 ft²) 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 ft²) starting. When vegetation has emerged to a stand and is growing, 30 lbs/acre (approximately 0.8 lbs/1000 ft²) 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 ft²).

Legume Alone

Use 0-20-20 or equivalent – apply 400 - 600 lbs/acre (approximately 9 - 14 lbs/1000 ft²) 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 manufactured product, 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 HECs 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

Species	Seeding Rates/Ac PLS	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

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%, $PLS = 0.8 \times 0.9 = 72\%$. 10 lbs 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. 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.

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 seedlings 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.

Sediment Barrier (SB)



Practice Description

A sediment barrier is a temporary structure used across a landscape mostly on the contour to reduce the quantity of sediment that is moving downslope. The most commonly used barrier is a silt fence (a geotextile fabric that is trenched 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 where sheet and rill erosion occurs on small disturbed areas. Barriers intercept runoff from upslope to form ponds that temporarily store runoff and allow sediment to settle out of the water and remain on the construction site.

Planning Considerations

Sediment barriers may be used on developing sites. It is important that they be installed on the contour so that flow will not concentrate and cause overtopping due to lack of storage capacity. It is also important that the ends of sediment barriers are turned upslope to prevent runoff from bypass around the ends of the barrier. Prevention of scouring, erosion, and undermining at and under sediment barriers is also of utmost importance to ensure maximum impoundment capabilities.

The most commonly used sediment barriers are silt fences and manufactured sediment logs (often referred to as wattles or sediment retention fiber rolls). Manufactured sediment logs should be installed according to manufacturer's recommendations.

The success of silt fences depends on a proper installation (on the contour with each end turned up slope) that causes the fence to develop maximum efficiency of sediment trapping. Silt fences should be carefully installed to meet the intended purpose. Silt fences are effective at trapping coarse sediment but do not effectively reduce turbidity as water passes through the geotextile fabric.

A silt fence is specifically designed to retain sediment transported by sheet flow from disturbed areas, while allowing water to pass through the fence. Water flow through the silt fence often decreases over time as silts and trash “blind” or seal the geotextile fabric. Silt fences should be installed to be stable under the flows expected from the site. Generally, silt fences should not be installed across streams, ditches, waterways, or other concentrated flow areas. When properly designed and installed, silt fence can be used as a Check Dam (See Check Dam).

Silt fences are composed of geotextile (i.e., woven and non-woven) supported between steel or wooden posts. Silt fences are commercially available with geotextile attached to the post and can be rolled out and installed by driving the post into the ground. This type of silt fence is simple to install, but more expensive than some other installations. Silt fences must be trenched in at the bottom to prevent runoff from undermining the fence and developing rills under the fence. Locations with high runoff flows or velocities should use either a wire or polypropylene net reinforcement. In addition, decreasing the spacing between support posts will improve the structural integrity of the silt fence in these areas.

Design professionals should consider specifying an “off-set” trench installation. This involves a conventional 6 in. x 6 in. trench to bury the geotextile with the posts and wire installed 6 in. downslope of the trench. The wire is on top of the ground surface and not in a trench. This installation has proven to have less potential for undermining than any installation tested at the Auburn University Erosion and Sediment Control Test Facility.

A rather recent innovation that is still being tested and refined is referred to as a “sediment retention barrier with flocculant.” It is used to introduce flocculant to turbid runoff causing flocculation. A sediment retention barrier should only be used in conjunction with effective erosion and sediment control practices upstream that have removed sediment and turbidity as much as possible without chemical additive. The measure consists of a double row of netting on the contour that allows runoff to easily pass through. Material such as jute is secured to the ground between the rows of netting and adjacent to the downslope row. Loose straw is placed between the rows (see Figure SB-1). An approved flocculant powder is added at a designed rate to all the jute and in layers within the straw. The measure is located upstream of sediment control (sediment basin, sediment trap, or sediment barrier) which will pond, allow for flocs to settle, and capture flocs prior to runoff leaving the site. Design professionals should get details needed to design this measure from a research professional or a qualified industry representative.



Figure SB-1 Sediment Retention Barrier

Design Criteria (for silt fence)

Silt fence installations are normally limited to situations in which only sheet or overland flow is expected because the practice cannot pass the volumes of water generated by channelized flows. Silt fences are normally constructed of synthetic fabric (geotextile) and the life is expected to be the duration of most construction projects. Silt fence geotextile should conform to the property requirements found in AASHTO M288 shown in Table SB-1 as follows:

Table SB-1 Silt Fence Geotextile Fabric Requirements per AASHTO M288

Requirement	Test Methods	Units	Type A supported fence	Type B unsupported fence
Grab Strength	ASTM			
Machine Direction	D4632/D4632M	N	400	550
X-Machine Direction			400	450
Permittivity	ASTM D4491	sec ⁻¹	0.05	0.05
Apparent Opening Size	ASTM D4751	mm	0.60 max avg roll value	0.60 max avg roll value
Ultraviolet stability (retained strength)	ASTM D4355/4355M	%	70% after 500 h of exposure	70% after 500 h of exposure

Note: ALDOT has an approved products list for geotextile

The drainage area behind the silt fence should not exceed $\frac{1}{4}$ acre per 100 linear feet of silt fence for non-reinforced fence and $\frac{1}{2}$ acre per 100 feet of reinforced silt fence. When all runoff from the drainage area is to be stored behind the fence (i.e. there is no stormwater disposal system in place) the maximum slope length behind the fence should not exceed those shown in Table SB-2.

Table SB-2 Slope Limitations for Silt Fence

Land Slope (Percent)	Maximum Slope Length Above Fence (Feet)
<2	100
2 to 5	75
5 to 10	50
10 to 20*	25
>20	15

*In areas where the slope is greater than 10%, a flat area length of 10 feet between the toe of the slope to the fence should be provided.

Type A Silt Fence

Type A fence shall be a minimum of 24" and not more than 32" above ground with wire reinforcements and is used on sites needing the highest degree of protection by a silt fence. The wire reinforcement is necessary because this type of silt fence is used for the highest flow situations and has almost 3 times the flow rate as Type B silt fence. Wire fence should be made of 14-gauge wire with 6 in. x 6 in. openings (Note: ALDOT wire spacing may differ). Type A silt fence should be used where runoff flows or velocities are particularly high or where slopes exceed a vertical height of 10 feet. Staked tie backs on each end of a Type A silt fence may be necessary to prevent overturning. Tie backs should also be used at points of possible concentration and overtopping if site conditions do not allow for the silt fence to be installed on the contour.

Provide a riprap splash pad with a geotextile underlay or other outlet protection device for any point where flow may overtop the silt fence.

The silt fence should be installed as shown in Figure SB-2. Maximum post spacing is 10 ft. In situations where runoff flows parallel with the silt fence when in perimeter control applications, 10 ft. spacing is adequate. J-hooks should also be considered for long parallel flow scenarios to slow flow velocity and create areas of impoundments, thereby reducing scour potential under the silt fence. For the portion of the silt fence that creates the J-hook impoundment area, the post spacing should be reduced to 5 ft. to support the hydrostatic loads. For all installations that intercept flow perpendicularly to the slope causing a concentrated impoundment, the maximum post spacing should be reduced to 5 ft. Materials for posts, post size, and fasteners are shown in Tables SB-3 and SB-4. Do not use "light weight" steel posts commonly found at building supply stores. Details for overlap of Type A silt fence is available from The Alabama Department of Transportation construction drawings.

Geotextile silt fence material should be looped over each post and the top of the wire to prevent sagging. A “hog ring” attachment should be made each 2 feet along the top of the wire.

Table SB-3 Post Size for Silt Fence

	Minimum Length	Type of Post	Size of Post
Type A	5'	Steel “T” Post	1.25 lb./ft. min.
Type B	4'	Soft Wood	3" diameter or 2X4
		Oak	1.5" X 1.5"
		Steel	1.25 lb./ft. min.

Table SB-4 Wood Post Fasteners for Silt Fence

	Gauge	Crown	Legs	Staples/Post
Wire Staples	17 min.	¾" wide	½" long	5 min.
	Gauge	Length	Button Heads	Nail/Post
Nails	14 min.	1"	¾" long	4 min.

Type B Silt Fence

This 36" wide geotextile fabric should be used on developments where the life of the project is short (6 months or less) and there is less need for protection from a silt fence.

The silt fence should be installed as shown in Figure SB-3. Post spacing is either 4 ft. or 6 ft. based on geotextile elongation % (see note on Figure SB-3). Materials for posts and fasteners are shown in Tables SB-3 and SB-4. Details for overlap of the silt fence and fastener placement are shown in Figure SB-4.

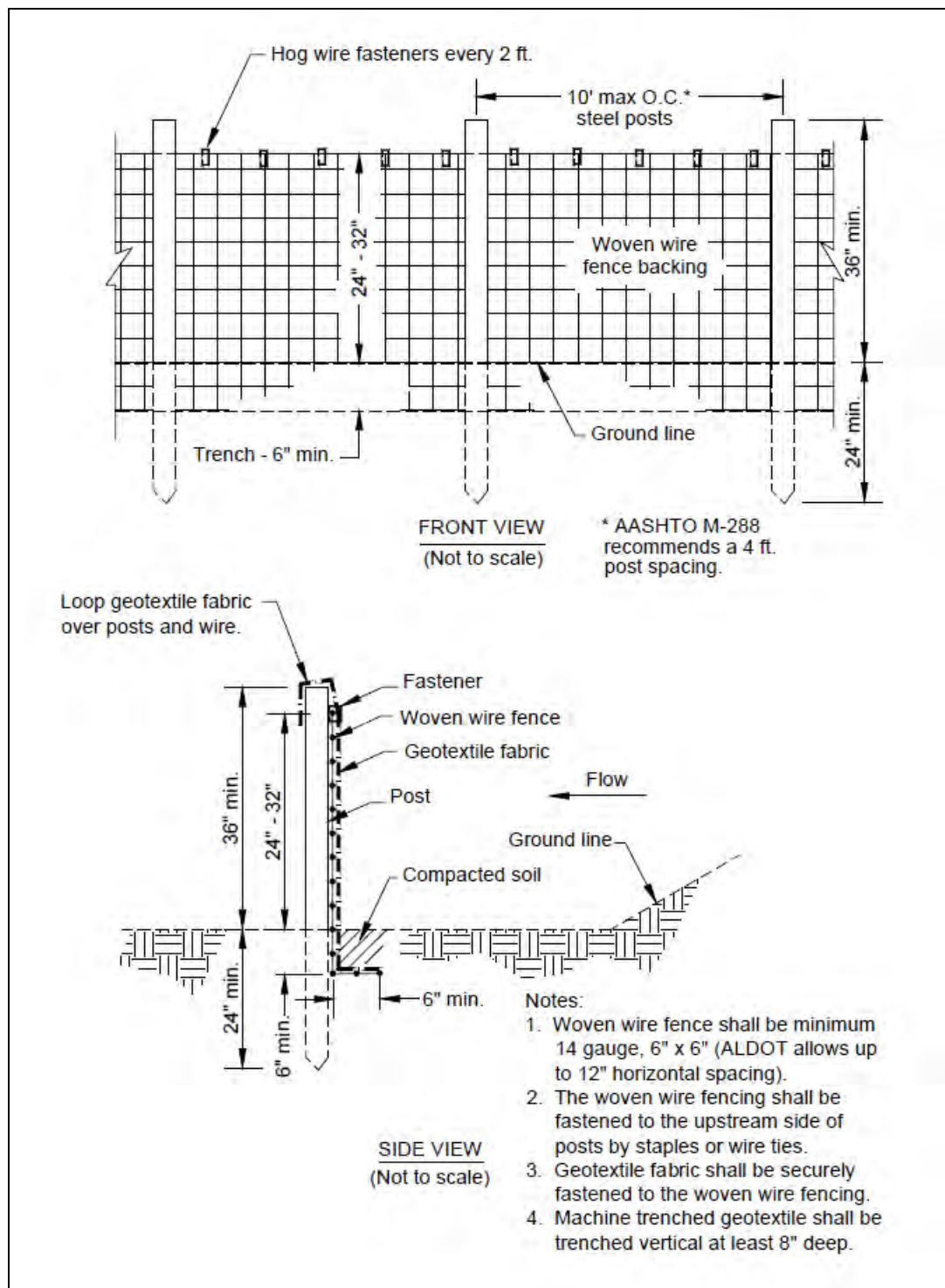


Figure SB-2 Silt Fence-Type A

(For post material requirements see Tables SB-3 and SB-4)

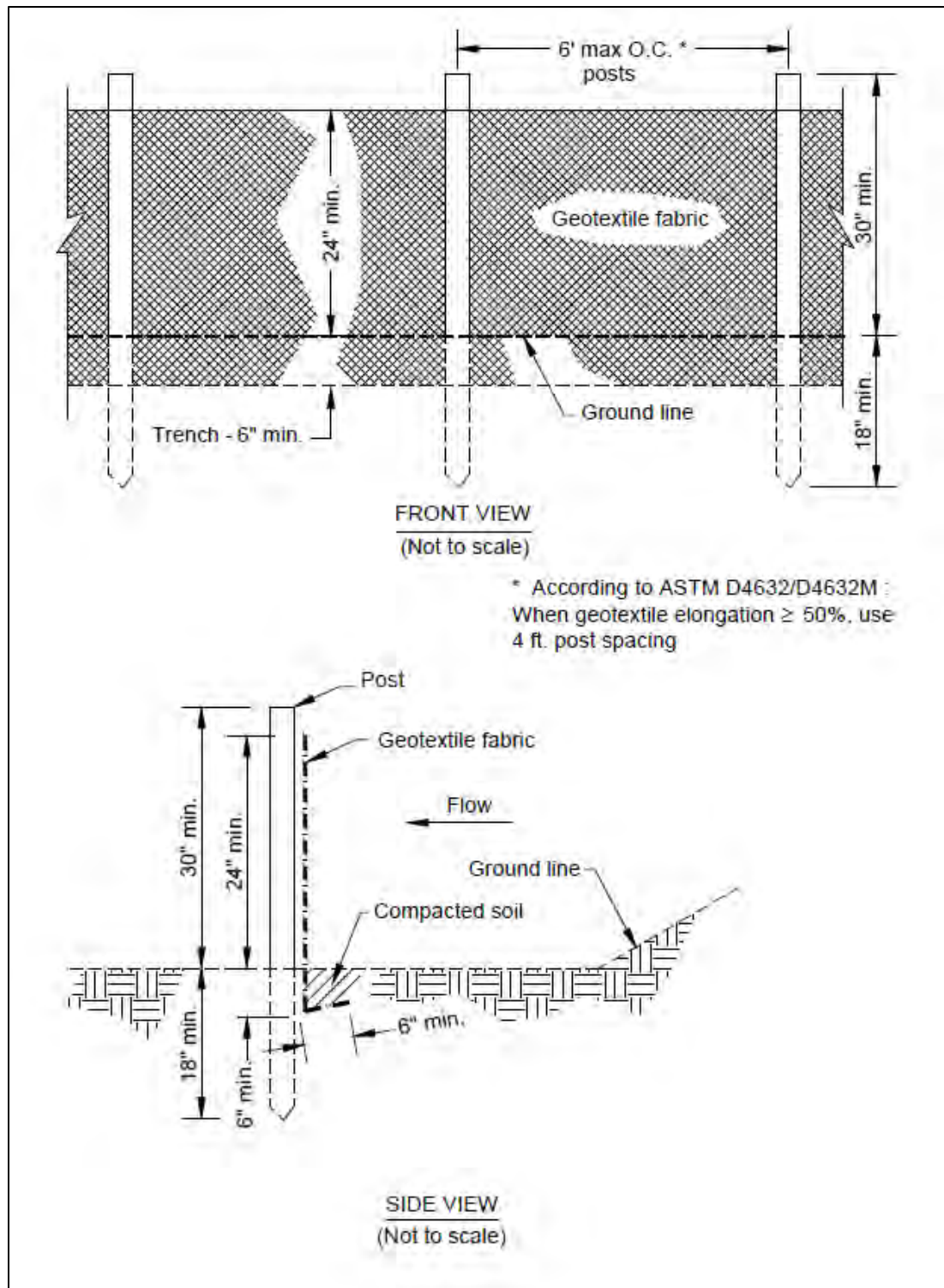


Figure SB-3 Silt Fence - Type B

(1) For post material requirements see Tables SB-3 and SB-4

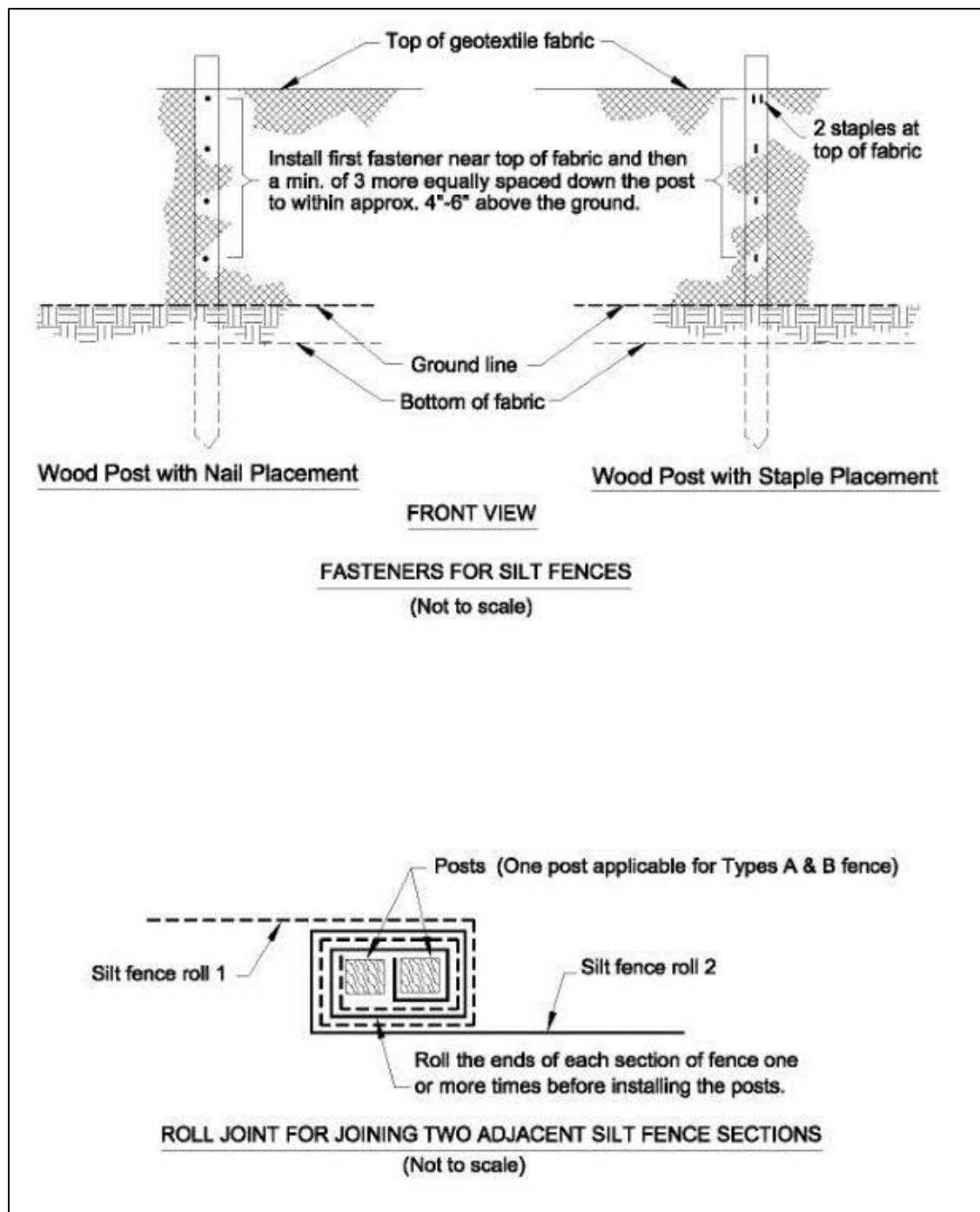


Figure SB-4 Silt Fence Installation Details

Sediment Trap (ST)



Practice Description

A sediment trap is a temporary catch basin used for intercepting and detaining small amounts of sediment to prevent it from leaving the construction site. This practice applies within disturbed areas with very small drainage basins that are subject to sheet erosion or in minor swales. Various materials may be used for sediment traps and include straw bales, sand bags, wattles, and various man-made materials and devices.

Planning Considerations

Note: Straw bales are the only sediment trap material covered in this handbook.

In certain situations, straw bales can be used as an alternative to silt fence for trapping sediment. The practice should only be used to trap sediment for a short duration from very small drainage areas. Straw bales comparatively low flow rate should be considered before choosing to use this practice. Ponding above the bales can occur rapidly due to the low flow rate. Overtopping and bypass of the bales can cause significant damage to the site. Additional measures should be used if turbidity leaving the site served by this practice is an issue.

Design Criteria

Drainage Area

For disturbed areas subject to sheet erosion the drainage area should be restricted to $\frac{1}{4}$ acre per 100 feet of trap. The slope length behind the trap should be restricted according to Table ST-1.

Table ST-1 Criteria for Straw or Hay Bale Placement

Land Slope (Percent)	Maximum Slope Length Above Bale (Feet)
<2	75
2 to 5	50
5 to 10	35
10 to 20	20
>20	10

Bale Size

Bales should be 14" x 18" x 36".

Anchors

Two 36" long (minimum) 2" x 2" hardwood stakes should be driven through each bale after the bales are properly entranced. Alternate anchors can be 2 pieces of no.4 steel rebar, 36" long (minimum). See Figure ST-1 for details on proper installation of straw bales.

Effective Life

Straw and hay bales have a relatively short period of usefulness and should not be used if the project duration is expected to exceed 3 months. Bale placement should result in the twine or cord being on the side and not the bottom of the bale.

Location

This practice should be used on nearly level ground and be placed at least 10 feet from the toe of any slope. The barrier should follow the land contour. The practice should never be used in live streams or in swales where there is a possibility of washout. The practice should also not be used in areas where rock or hard surfaces prevent the full and uniform anchoring of the bales.

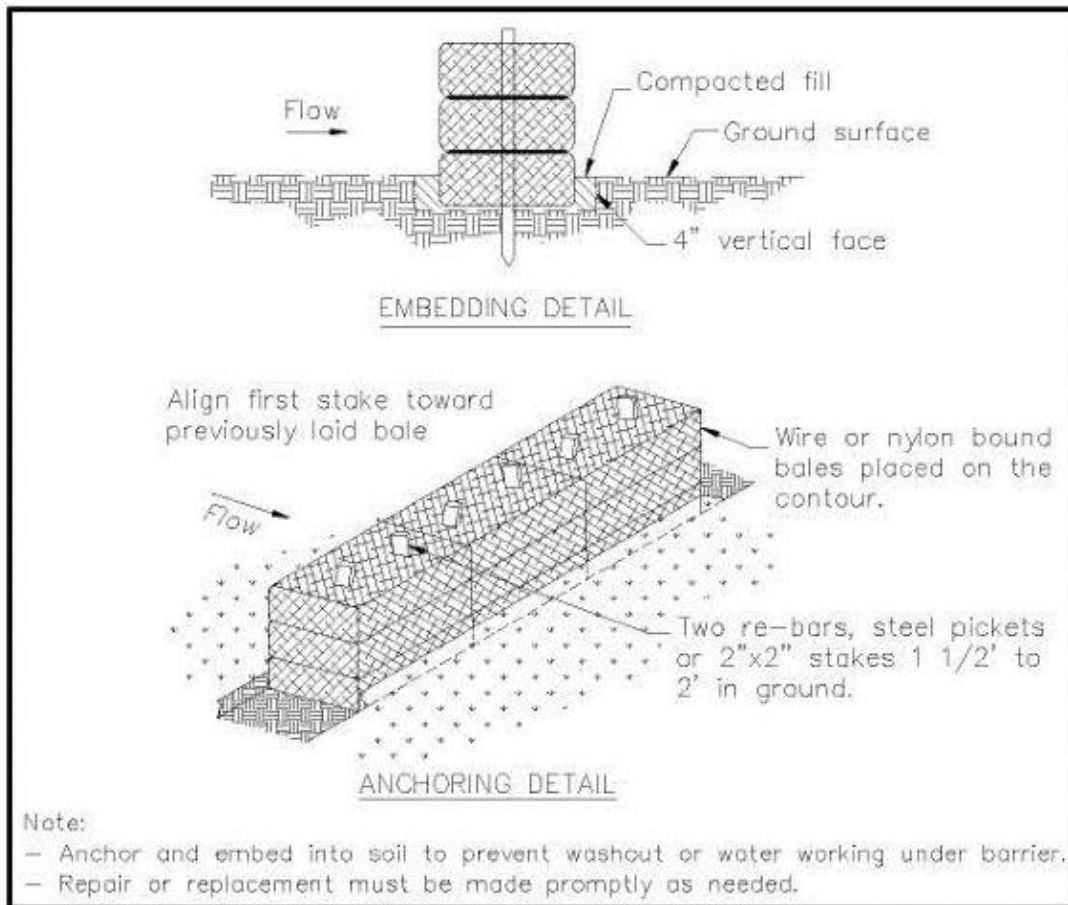


Figure ST-1 Anchoring Technique for Straw Bales

Temporary Seeding (TS)



Practice Description

Temporary seeding is the establishment of fast-growing annual vegetation from seed on disturbed areas. 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 (fertilizer and lime)
- Planting
- Mulching or Installation of Erosion Control Blanket
- Inspection

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 ft².) and 1 ton/acre on sandy soils (approximately 45 lbs/ft².).

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 ft²) at planting.

When vegetation has emerged to a stand and is growing, 30 to 40 lbs/acre (approximately 0.8 lbs/1000 ft²) 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 or by hand 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.

TS-1 Commonly Used Plants for Temporary Cover

Species	Seeding Rate/Ac PLS	North Seeding Dates	Central	South
Millet, Browntop or German	40 lbs	May 1-Aug 1	Apr 1-Aug 15	Apr 1-Aug 15
Rye	3 bu	Sept 1-Nov 15	Sept 15-Nov 15	Sept 15-Nov 15
Ryegrass	30 lbs	Aug 1-Sept 15	Sept 1-Oct 15	Sept 1 -Oct 15
Sorghum-Sudan Hybrids	40 lbs	May 1-Aug 1	Apr 15-Aug 1	Apr 1-Aug 15
Sudangrass	40 lbs	May 1-Aug 1	Apr 15-Aug 1	Apr 1-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

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%, $PLS = 0.8 \times 0.9 = 72\%$. 10 lbs 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.

Mulching

Mulching is extremely important for successful seeding. Whether the mulching material is straw or a manufactured product, 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*).

Verification of Installation

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 refertilizing 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.

6.23

→ WB →

RIGHT-OF-WAY DIVERSIONS (Water Bars)

Definition A ridge or ridge and channel constructed diagonally across a sloping road or utility right-of-way that is subject to erosion.

Purpose To limit the accumulation of erosive volumes of water by diverting surface runoff at predesigned intervals.

Conditions Where Practice Applies Where runoff protection is needed to prevent erosion on sloping access rights-of-way or other long, narrow sloping areas generally less than 100 feet in width.

Planning Considerations Construction of access roads, power lines, pipelines, and other similar installations often requires clearing long narrow rights-of-way over sloping terrain (Figure 6.23a). Disturbance and compaction promotes gully formation in these cleared strips by increasing the volume and velocity of runoff. Gully formation may be especially severe in tire tracks and ruts. To prevent gully formation, runoff can often be diverted across the width of the right-of-way to undisturbed areas by using small predesigned diversions. Give special consideration to each individual outlet area, as well as to the cumulative effect of added diversions. Use gravel to stabilize the diversion where significant vehicular traffic is anticipated.

Design Criteria **Height**—18-inch minimum measured from the channel bottom to the ridge top.

Side slope—2:1 or flatter

3:1 or flatter where vehicles cross

Base width of ridge—6 feet minimum (Figure 6.23b).

Spacing of water bars is shown in Table 6.23a:

Table 6.23a
Spacing of Water Bars on
Right-of-Way Less than
100 ft Wide

Slope (%)	Spacing (Ft)
<5	125
5 to 10	100
10 to 20	75
20 to 35	50
>35	25

Grade and angle—A crossing angle should be selected to provide a positive grade not to exceed 2%

Outlet—Diversions should have stable outlets, either natural or constructed. Site spacing may need to be adjusted for field conditions to use the most suitable areas for water disposal.

Construction
Specifications

1. Install the diversion as soon as the right-of-way has been cleared and graded.
2. Disk the base for the constructed ridge before placing fill.



Figure 6.23a Water bars to protect utility right-of-way.

3. Track the ridge to compact it to the design cross section.
4. Locate the outlet on an undisturbed area. Adjust field spacing of the diversion to use the most stable outlet areas. When natural areas are not deemed satisfactory, provide outlet protection (Practices 6.40, *Level Spreader*, and 6.41, *Outlet Stabilization Structure*).
5. Immediately seed and mulch the portions of the diversions not subject to construction traffic. Stabilize with gravel areas to be crossed by vehicles.

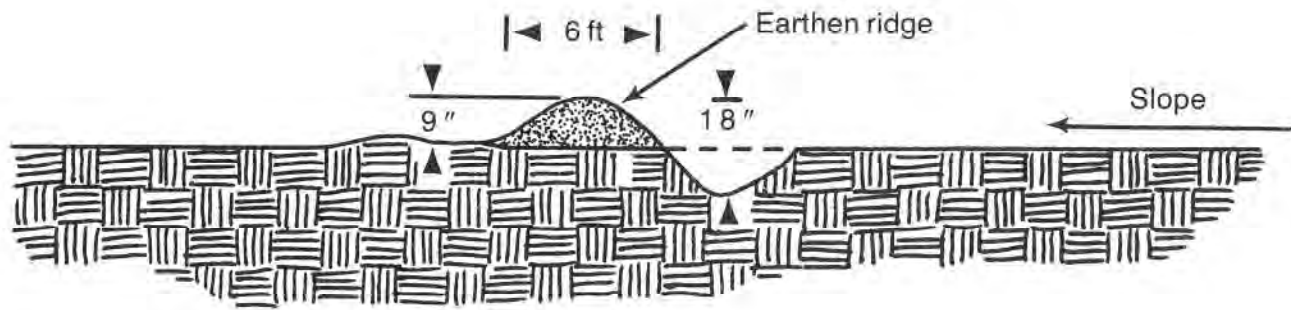


Figure 6.23b Section view of a water bar.

Maintenance Periodically inspect right-of-way diversions for wear and after every heavy rainfall for erosion damage. Immediately remove sediment from the flow area, and repair the dike. Check outlet areas, and make timely repairs as needed. When permanent road drainage is established and the area above the temporary right-of-way diversions is permanently stabilized, remove the dike, and fill the channel to blend with the natural ground, and appropriately stabilize the disturbed area.

References *Outlet Protection*
6.40, Level Spreader
6.41, Outlet Stabilization Structure

Appendix
8.03, Estimating Runoff

APPENDIX D
DESIGN DETAILS

**Design Data
Sedimentation Basin
Warrior Materials, LLC
Warrior Materials Quarry
TTL Project No. 250101858.00**

Pond	Total Drainage Area (Acres)	Disturbed Area (Acres)	ADEM requirement of 0.25 acre-ft storage per acre disturbed land (Acre-feet)	Approximate available storage at emergency spillway elevation (Acre-feet) ¹	Height between normal pool and spillway elevation (feet)	Approximate Pond Size (acres)
001P	67	34	8.5	10.3	3	2.3
002P	37	19	4.8	5.4	3	1.2
003P	59	30	7.5	9.0	3	2.0
004P	79	40	10	12	3	2.7

¹ Assume average pond depth at normal pool is 5 feet

Pond	Pre-Development		Design	
	Peak Discharge - 2 yr, 24 hour storm (cfs)	Peak Discharge - 25 yr, 24 hour storm (cfs)	Peak Discharge through principal spillpipe (cfs)	Peak discharge over emergency spillway (cfs) for 25 yr, 24 hour storm
001P	42	127	42	85
002P	28	76	28	48
003P	38	112	38	74
004P	56	166	56	110

Pond	Spillpipe Diameter (inches)	Emergency Spillway Dimensions	
		Width (feet)	Height (feet)
001P	36	18	3.0
002P	24	14	3.0
003P	30	16	3.0
004P	24	22	3.2

APPENDIX E

**PREVENTIVE MAINTENANCE, TRAINING CHECKLISTS, AND RAINFALL
INSPECTION LOG**

WARRIOR MATERIALS QUARRY

Routine Site Inspection Report

Inspection must be conducted twice monthly

Yes	No		
		Stormwater Drainage Areas	Drainage areas have been visually inspected for evidence of pollutant runoff and no pollutants have been detected.
		Discharge from the Site	Stormwater discharge was observed onsite. If so, note whether a sample was collected.
		Spills and Leaks from Machinery	No soil staining or other evidence of leaking oil is visible from machinery, vehicles, or equipment located on the site.
		Spill Control Equipment	All spill control material is properly located onsite during operations and is in adequate supply.
		New Sources	The site has been thoroughly inspected for new potential pollutant sources and no new sources have been introduced.
		Outdoor Storage	Provisions have been made for offsite storage of materials.
		Problems Noted and Countermeasures:	
		Sample Collection Notes:	
I do hereby certify that this facility is in full compliance with its Pollution Abatement and Prevention Plan, with the exception of the following incidents of noncompliance:			
Signed:			
Date/Time:			

WARRIOR MATERIALS QUARRY

Employee Training Confirmation

I, _____, duly informed _____ of
(employer) (employee)
_____ of the objectives and requirements of the Pollution Abatement
(company)

Plan on this _____ day of _____,
(date) (month) (year)

Signature of Employer

I, _____ understand my responsibilities concerning the
(employee)
Pollution Abatement Plan as described to me this _____ day of
(date)

_____,
(month) (year)

Signature of Employee

WARRIOR MATERIALS QUARRY

Employee Training Report

Mandatory one per year, greater frequency is recommended.

[illegible]

WARRIOR MATERIALS QUARRY

Corrective Actions Planned:

Mandatory for any pollutant/contaminant release requiring clean-up response.

Facility Name:			
Reporter's Name:		Date:	
Reason for Report			
Release Response Activity Information			
Description of Activities:			
Response Equipment Used:			
Outside Agencies Used in Response:			
Corrective Actions Planned:			
Start Date:		Supervisor:	
Finish Date:		Contractor:	

Rainfall Inspection Report WARRIOR MATERIALS QUARRY	
Perfrom during or after a rainfall event of 3/4-inch or greater acculation within a 24 hour period. Inspect each outfall, haul roads, silt fences, and overburden piles.	
Date of Inspection: _____ Inspector: _____	
Precipitation Event Type:	
Duration:	
Hours:	
Amount:	
Inspection Comments:	
Area Inspected:	
Observations:	

APPENDIX F

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

**WARRIOR MATERIALS, LLC
WARRIOR MATERIALS QUARRY
VANCE, TUSCALOOSA COUNTY, ALABAMA**

Owner:

**Warrior Materials, LLC
P.O. Box 70
Duncanville, Alabama 35466**

Prepared By:



**2743-B Gunter Park Drive West
Montgomery, Alabama 36109**

TTL Project Number 25-01-01858.00

April 22, 2026

TABLE OF CONTENTS

1.0	Introduction [§112.1, §112.2, and §112.3 (a) and (b)]	1
2.0	Professional Engineer Certification [§112.3(d)].....	3
3.0	Location of SPCC Plan [§112.3 (e)].....	4
4.0	Regulator's Review and/or Amendment of Plan [§112.4]	4
5.0	Five Year Review [§112.5 and ALG20000 Part IV.A.4.d]	5
6.0	Management Approval [§112.7]	6
7.0	Oil Spill/discharge History [§112.7(a)(1)]	7
8.0	Alternative Organization of the SPCC Plan [§112.7(a)(2)].....	7
9.0	Facility Location [§112.7(a)(3)]	7
10.0	Oil Storage Containers [§112.7(a)(3)(i) and (iii)].....	7
11.0	Discharge Prevention Measures [§112.7(a)(3)(ii) and (iii)]	8
12.0	Countermeasure for Discharge Discovery, Response, and Cleanup [§112.7(a)(3)(iv) and (v)]	8
13.0	Contact List [§112.7(a)(3)(vi)]	9
14.0	Notification Procedure [§112.7(a)(4) and (a)(5)]	9
15.0	Potential Discharge Volumes [§112.7(b)]	10
16.0	Containment and Diversionary Structures [§112.7(c)]	10
17.0	Demonstration of Practicability [§112.7(d)]	11
18.0	Inspections, Testing, and Recordkeeping [§112.7(e), §112.8(c)(6) and (d)(4), §112.9(c)(3), §112.12(c)(6) and (d)(4)]	11
19.0	Training and Discharge Prevention Procedures [§112.7(f)]	12
20.0	Security [§112.7(g)].....	13
21.0	Tank Car and Tank Truck Loading/Unloading Rack [§112.7(h)].....	13
22.0	Brittle Fraction Evaluation [§112.7(i)]	13
23.0	Facility Drainage [§112.8(b)/§112.12(b)]	13
24.0	Bulk Storage Containers [§112.8(c)/§112.12(c)]	13
25.0	Transfer Operations, Pumping, And In-Plant Processes [§112.8(d)/ §112.12(d)]	14
26.0	Oil Spill Contingency Plan [§109]	14

FIGURES

Figure 1 – Topographic Location Map

Figure 2 – Site Map with Stormwater Drainage and Tank Location

APPENDICES

Appendix I	Certification of Substantial Harm
Appendix II	Definitions
Appendix III	Five Year Review Log and Technical Amendment Log
Appendix IV	Past Discharge History and Discharge Notification Form
Appendix V	Inspection Logs
Appendix VI	Personnel Training Log
Appendix VII	Record of Secondary Containment Drainage

**SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
WARRIOR MATERIALS QUARRY
VANCE, ALABAMA
TTL PROJECT NUMBER 25-01-01858.00**

1.0 Introduction [*§112.1, §112.2, and §112.3 (a) and (b)*]

Facility Name	Warrior Materials Quarry		
Facility Address	Big Sandy Road		
City	Vance	State	Alabama
		ZIP	35490
County	Tuscaloosa	Tel. Number	(205) 342-2030

Warrior Materials, LLC plans to operate a limestone quarry (Warrior Materials Quarry) in Vance, Tuscaloosa County, Alabama. The Warrior Materials Quarry is located in Section 8, the northwestern $\frac{1}{4}$ of Section 17, and the northeastern $\frac{1}{4}$ of Section 18, Township 22 South, Range 7 West as shown on the 2026 Coaling, Alabama, U. S. G. S., 7.5-minute topographic map. A topographic location (Figure 1) and site map (Figure 2) are attached. The entire property encompasses approximately 382.1 acres.

This Spill Prevention, Control and Countermeasure (SPCC) Plan was designed for the Warrior Materials Quarry in Vance, Alabama. The plan was designed as part of compliance with the requirements of 40 Code of Federal Regulations (CFR) 112.

The provisions of 40 CFR Part 112 require that a SPCC Plan be prepared if a facility has 42,000 gallons or more of buried underground storage, or 1,320 gallons of total storage in aboveground tanks that have a capacity of 55 gallons or greater. The regulations state that the name, type, and location of the facility, date of initial operation; name and address of the owner; a designated person responsible for oil spill prevention; management approval; oil spill history; professional engineer certification; spill potential analysis; five-year management review; and Plan amendments must be included in the SPCC Plan. In addition to these required elements, the SPCC Plan should provide for the following: secondary containment, facility drainage, release prevention and clean up, regular inspections and record keeping, security for the facility, and personnel training.

This SPCC Plan (Plan) was prepared based on the provisions of 40 CFR 112 – Oil Pollution Prevention, most recently amended March 19, 2026, and is intended to meet those requirements. At least every five years, this Plan must be evaluated to determine if new ‘field-proven’ technologies might decrease the potential for a petroleum release. Also, the Plan must be updated whenever there is a change in facility design, operation, or maintenance that would affect the potential for a petroleum release. A registered professional engineer must certify the Plan each time it is updated or modified with technical amendments described below in the section entitled, “In-House Amendments of the SPCC Plan” – 40 CFR 112.5.

The owners and operators of a facility that are required to prepare a SPCC Plan are also required to complete and sign the Certification of Substantial Harm Determination Form provided in Appendix I (referenced in Appendix C of 40 CFR 112). If the facility answers 'no' to each question provided in this form, the facility is not required to submit a Facility Response Plan.

For definitions of terms used throughout this Plan, refer to Appendix II

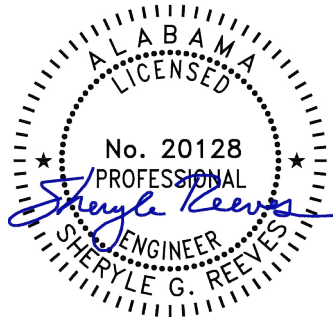
2.0 Professional Engineer Certification [§112.3(d)]

CERTIFICATION: By means of this certification, I attest that I am familiar with the requirements of provisions of 40 CFR Part 112, that I or my designated agent have visited and examined the facility, that 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, that procedures for required inspections and testing have been established and that the Plan is adequate for the facility.

I certify under penalty of law that I am a registered professional engineer experienced in stormwater management. The information submitted herein, to the best of my knowledge and belief, is true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

Engineer: Sheryle G. Reeves Registration Number: P.E. 20128 State: AL

Seal and Signature:



Date of Plan Certification: April 21, 2026

3.0 Location of SPCC Plan [§112.3 (e)]

Federal regulations require that a complete copy of this Plan be maintained at the Warrior Materials Quarry facility, and that the Plan be available to representatives of the U.S. Environmental Protection Agency (EPA) or Alabama Department of Environmental Management (ADEM) for on-site review during normal working hours.

4.0 Regulator's Review and/or Amendment of Plan [§112.4]

A SPCC Plan is not required to be filed with the EPA under normal circumstances. However, the Plan must be submitted to the EPA Region IV Regional Administrator and to the ADEM if either of the following circumstances occurs:

1. The facility discharges more than 1,000 gallons of oil; or
2. The facility discharges more than 42 gallons of oil in each of two discharge events within any 12-month period.

If either of these discharge thresholds is exceeded, a copy of this SPCC Plan must be submitted to the EPA regional Administrator and to the ADEM within 60 days of the discharge, along with the information outlined below:

1. Name of the facility: Warrior Materials Quarry
2. Your name:
3. Location of the facility: Big Sandy Road, Vance, Alabama
4. Maximum storage or handling capacity of the facility and normal daily throughput;
5. Corrective action and counter measure you have taken, including a description of equipment repairs and replacements;
6. An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
7. The cause of such discharge as described in §112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;
8. Additional preventative measures you have taken or contemplated to minimize the possibility of recurrence; and
9. Such other information as the Regional Administrator may reasonable require pertinent to the Plan or discharge.

If the EPA regional Administrator requires amendments to the SPCC Plan, the office of the Regional Administrator will notify Warrior Materials, LLC.

Please note that if a discharge of any quantity breaches secondary containment and results in a spill onto protected waters of the state, an initial telephone notification to the National Response Center (NRC), the ADEM, and other agencies specified in 40 CFR 112.7(a)(3)(vi) is required. Additional written reporting requirements, beyond that of the telephone notification, are detailed in a subsequent section of this Plan.

5.0 Five Year Review *[§112.5 and ALG20000 Part IV.A.4.d]*

Warrior Materials, LLC will complete a review of this SPCC Plan at least once every five years. As a result of the review, Warrior Materials, LLC will amend this Plan within six months to include more effective prevention and control measures for the facility, if applicable. Warrior Materials, LLC will implement any SPCC Plan amendment as soon as possible, but no later than six months following Plan amendment. Warrior Materials, LLC will document completion of the review and evaluation and complete the Five-Year Review Log in Appendix III.

This SPCC Plan will be amended when there is a change in the facility design, construction, operation, or maintenance that materially affects the potential for a discharge to navigable waters or adjoining shorelines. Examples include adding or removing containers, reconstruction, replacement, or installation of piping systems, changes to secondary containment systems, changes in product stored at this facility, or revisions to standard operating procedures.

Any technical amendments to this Plan will be re-certified. A Technical Amendment Log is provided in Appendix III.

6.0 Management Approval [§112.7]

The SPCC regulations (40 CFR 112) require the owners/operators of Warrior Materials Quarry to prepare a SPCC Plan, in accordance with good engineering practices, to prevent, to the maximum extent possible, a potential oil spill onto protected waters. This Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. As required by the regulations, this Plan follows the sequence of the requirements in 40 CFR 112. As required under 40 CFR 112.7, the following certification is provided:

As operator of this facility, I certify under penalty of law that this SPCC Plan and all appendices have been prepared in accordance with good engineering practices, and that the Plans have the full approval of management at the level of authority to commit the necessary resources to fully implement the Plans. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, that 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.



Paul Burkhalter, Member, Project Manger

May 7, 2026

Date

7.0 Oil Spill/discharge History [§112.7(a)(1)]

There are no known spills or discharges to report. Records of any future reportable spills and response actions will be recorded in the Past Discharge History table in Appendix IV.

8.0 Alternative Organization of the SPCC Plan [§112.7(a)(2)]

No deviations from the regulations specified in 40 CFR 112 were made.

9.0 Facility Location [§112.7(a)(3)]

The Warrior Materials Quarry is located on Big Sandy Road, in Vance, Tuscaloosa County, Alabama, and in Section 8, the northwestern ¼ of Section 17, and the northeastern ¼ of Section 18, Township 22 South, Range 7 West as shown on the 2026 Coaling, Alabama, U. S. G. S., 7.5-minute topographic maps. The entire property encompasses approximately 382.1 acres and is comprised of three parcels. Mining operations will be conducted within the entire property.

Warrior Materials, LLC will excavate limestone from the site. The material will be processed on site. For the purposes of this SPCC Plan, TTL, Inc. (TTL) has identified one petroleum-based storage area of the site. Figure 2 shows a general site map including the petroleum storage area as well as the general direction of stormwater sheet flow.

10.0 Oil Storage Containers [§112.7(a)(3)(i) and (iii)]

Aboveground containers that must be included when calculating total facility oil storage capacity include: tanks and mobile or portable containers; oil-filled operational equipment (e.g. transformers); and other oil-filled equipment, such as flow-through process equipment. Exempt containers that are not included in the capacity calculation include: any container with a storage capacity of less than 55 gallons of oil; containers used exclusively for wastewater treatment; permanently closed containers; motive power containers; hot-mix asphalt containers; heating oil containers used solely at a single-family residence; and pesticide application equipment or related mix containers.

One aboveground storage tank (AST) (4,000-gallon diesel) will be installed at the site. The AST system will be constructed from materials that are compatible with the product stored, and are appropriate for pressure and temperature ratings. The tank used on the site for fuel storage will be of double-walled steel construction.

The site will operate a variety of oil-filled operational equipment including, but not limited to, dump trucks, backhoes, earth movers, water pumps, and hydraulic conveyors. The amount of equipment on-site can vary daily, so exact oil volumes are unknown. Additionally, this equipment is mobile so secondary containment is not required.

It is possible that there may be mobile diesel fuel distributor trucks utilized on the property. These trucks would feature tanks constructed of single-walled steel and, as mobile units, do not require secondary containment in line with SPCC regulations.

11.0 Discharge Prevention Measures [§112.7(a)(3)(ii) and (iii)]

The fuel storage area will contain a 4,000-gallon double-walled diesel AST. The AST will be placed within a 110% capacity concrete containment with roof. If a release were to breach containment, the discharge would flow southeast towards an on-site pond connected to outfall 001P.

12.0 Countermeasure for Discharge Discovery, Response, and Cleanup [§112.7(a)(3)(iv) and (v)]

This Plan is required to address the countermeasure for discharge discovery, response, and cleanup [§112.7(a)(3)(iv)]. This section describes the process to be taken to contain a spill and cleanup the material that has spilled.

Spills/releases of petroleum products that occur at the facility will be cleaned up immediately upon discovery. In the event of a release, the Project Manager will be notified immediately, and the following steps will be taken, provided the response to the event falls within the training and experience of the responder:

- Attempt to determine the source, volume and extent of the release;
 - Determine the safest and quickest way to stop the release (i.e., provide appropriate containment, pump product out of leaking tank into a structurally sound tank, etc.);
 - Contain the release as close to the source as possible. This can be done by using an earthen berm, a ditch, a boom, or other means to restrict the flow of the fluid;
 - After the flow of the product has been restricted, remove the product;
 - If a small volume of product is spilled inside of the secondary containment areas, absorbent booms, absorbent pads, oil dry or other suitable material will be used to absorb the product. For larger volumes of product, a pump, bucket, or other similar equipment will be used to transfer the product into a structurally sound container, and from there it can be properly disposed;
 - In the event of a release of product that reaches the soils outside of the secondary containment areas, absorbent booms or a portable skimmer will be used to remove the product. Recovered petroleum products will be used, if possible, or transported to a permitted recycling or disposal facility. If possible, spill residue will be placed in a DOT-approved 55-gallon drum for transportation.
 - Material used to cleanup spills (sawdust, booms, etc.) and oil-contaminated booms/absorbents will be disposed of in accordance with ADEM regulations.
- [§112.7(a)(3)(v)]

In the event responding to a release is beyond the scope of training and experience of the responder, outside response agencies (i.e. Fire Department, emergency response service provider) will be notified.

13.0 Contact List [§112.7(a)(3)(vi)]

Contact Organization / Person	Telephone Number
National Response Center (NRC)	1-800-424-8802
Cleanup Contractor(s) Action Environmental	(256) 401-0590
Responsible Official/Project Manager: Paul Burkhalter	(205) 342-2030
State Oil Pollution Control Agencies Alabama Department of Environmental Management	(334) 260-2700
Other State, Federal, and Local Agencies Alabama Department of Public Safety Alabama Emergency Management Agency	(334) 242-4378 1-800-843-0699
Local Fire Department Coaling Fire Department Station 2	911 (205) 507-0090
Local Police Department Tuscaloosa County Police Department	911 (205) 752-0616
Hospital UAB Medical West Hospital	(205) 481-7000
Other Contact References (e.g., downstream water intakes or neighboring facilities)	

14.0 Notification Procedure [§112.7(a)(4) and (a)(5)]

The following describes the steps to be taken to report a release to the appropriate agencies. Each person responsible for oil handling operations must be familiar with these steps and be able to execute them in the event of a release.

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center immediately following identification of a discharge to navigable waters or adjoining shorelines (see Appendix IV for a Discharge Notification Form): [§112.7(a)(4) and (a)(5)]

- The exact address or location and phone number of the facility;
- Date and time of the discharge;
- Type of material discharged;
- Estimate of the total quantity discharged;
- Estimate of the quantity discharged to navigable waters;

- Source of the discharge;
- Description of all affected media;
- Cause of the discharge;
- Any damages or injuries caused by the discharge;
- Actions being used to stop, remove, and mitigate the effects of the discharge;
- Whether an evacuation may be needed; and
- Names of individuals and/or organizations who have also been contacted.

A written description addressing the measures taken in response to the release should be submitted to the ADEM within 15 days after the incident.

Should the facility discharge more than 1,000 gallons of oil in a single discharge, or more than 42 gallons of oil in each of two discharges occurring within any twelve month period, as described in Section 112.1(b), the EPA Regional Administrator must be notified within 60 days from the time the facility becomes subject to this requirement.

15.0 Potential Discharge Volumes [§112.7(b)]

This potential spill analysis describes the worst-case scenario for a release of petroleum products at the Warrior Materials Quarry and assesses the path of flow of the material. The worst-case scenario for a large release of petroleum products at the Warrior Materials Quarry would be the catastrophic failure of the 4,000-gallon diesel fuel AST. If this completely full AST experienced catastrophic failure (i.e., a tank rupture) and breach of secondary containment, the material would flow generally southwest towards an on-site pond. The size of the secondary containment unit would make it unlikely for any discharge of this material to leave the site. However, with the aid of stormwater during a rain event, the discharge would flow generally southwest.

Area	Type of Failure (discharge scenario)	Potential Discharge Volume (gallons)	Direction of Flow for Uncontained Discharge	Secondary Containment Method
Diesel Fuel AST	Catastrophic Failure of AST and Secondary Containment	4,000	Southwest	Double-walled

16.0 Containment and Diversionary Structures [§112.7(c)]

A detailed discussion of secondary containment and discharge/drainage controls in use at the facility is provided in Section 11.0 of this Plan. Secondary containment is required for all ASTs and containers of 55 gallons or greater in capacity. Secondary containment must be sized to contain the volume of the single largest tank stored within the containment unit. If the tank and containment unit are stored outdoors, the containment unit must be sized to have appropriate freeboard for the 25-year, 24-hour storm event plus the volume of the single largest container in the unit.

Acceptable methods of secondary containment include: (1) dikes, berms, or retaining walls sufficiently impervious to contain oil; (2) curbing; or drip pans (3) culverting, gutters, or other

drainage systems; (4) weirs, booms, or other barriers; (5) spill diversion ponds; (6) retention ponds; or (7) sorbent materials. [§112.7(c)]

The ASTs on-site will meet the secondary requirements as outlined in Section 11.0 of this Plan. Spill kits, which should include sorbent materials such as oil dry and absorbent pads should be made available in the fuel storage area. These materials would be used generally to contain smaller spills.

In the event of any release, spilled petroleum-based products and any resulting contaminated soil must be cleaned up immediately and disposed of properly.

17.0 Demonstration of Practicability [§112.7(d)]

A demonstration of practicability of the measures outlined in this plan to prevent a release or discharge to the facility is required as part of the SPCC Plan. If the prevention, control, and response measures are not practicable to the facility, the reasons must be explained in this section. [§112.7(d)]

Secondary containment and diversionary structures identified in this Plan or other equipment used to prevent discharged oil from reaching navigable water appear to be practicable and effective for the needs of this facility.

18.0 Inspections, Testing, and Recordkeeping [§112.7(e), §112.8(c)(6) and (d)(4), §112.9(c)(3), §112.12(c)(6) and (d)(4)]

An inspection and/or sampling program is required to be implemented for all aboveground bulk storage containers. The following is a description of the inspection and/or sampling program for all aboveground bulk storage containers at this facility.

Visual inspections of all petroleum bulk storage containers and associated piping will be conducted **monthly**, and documented on a Monthly Tank Inspection Log provided in Appendix V of this Plan. These inspections will check for tank damage or leakage, corrosion, integrity of secondary containment systems and oil/water separators, if applicable.

Additional inspections will consist of a complete walkthrough of the facility property to check for stained or discolored soils or concrete, excessive accumulation of chemical product or water in diked areas, and effluent discharged from secondary containment areas. This inspection also ensures that secondary containment structures are securely closed. **Inspections will be conducted weekly.** In addition to these formal inspections, daily visual inspections while conducting routine site maintenance can be used to notify the General Manager of problems with the tanks or the on-site equipment. A sample inspection log is provided in Appendix V of this Plan. The checklists will be signed by the inspector and maintained with this Plan for three years.

In addition to the periodic visual inspections of the bulk containers, 40 CFR 112(8)(c)(6) requires structural integrity testing of all aboveground tanks containing oil products on a regular basis and whenever material repairs are made. This structural integrity testing may be hydrostatic, radiographic, acoustic, ultrasonic or some other type of nondestructive testing. Although the testing must take place regularly in accordance with industry standards, the type

and frequency with which this testing must take place is unspecified.

TTL recommends using the Steel Tank Institute SP001 Standard, which specifies a formal external inspection to be performed by a certified inspector and a leak test performed by the tank owner or owner's designee every 10 years for ASTs between 1,101 gallons and 5,000 gallons in volume. Records of the structural integrity testing should be maintained for the life of the facility.

19.0 Training and Discharge Prevention Procedures [§112.7(f)]

Oil-handling personnel are required to be trained in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan on an annual basis.

Discharge prevention briefings are conducted for oil-handling personnel annually to assure adequate understanding of the SPCC Plan for the facility. Such briefings highlight and describe past reportable discharges or failures, malfunctioning components, and any recently developed precautionary measures. An Oil-handling Personnel Training and Briefing Log is provided in Appendix VI.

During the orientation of each new employee, instruction is given verbally in the proper operation and maintenance of equipment necessary for his or her job function. At this time, the employee is instructed in the general importance of preventing, controlling, containing, and cleaning up discharges of oil, chemicals, or hazardous substances.

A training program has been established to familiarize the appropriate personnel with emergency procedures. Employees are instructed in the use of procedures, which must be followed in the event of an emergency, and are made aware of applicable pollution control laws and regulations. Spill prevention briefings to familiarize appropriate personnel with this SPCC Plan are scheduled to coincide with safety meetings. Additional briefings will be held whenever changes, which affect the SPCC Plan, are made and as deemed necessary by plant management.

Maintenance employees who generally assist in the event of a spill of oil material do not fall under regulations of National Fire Protection Agency (NFPA) 471 and 472 and applicable portions of OSHA HAZWOPER standards in 29 CFR 1910.120 that require 24 hours of Hazardous Materials Response Training.

Any contractor, subcontractor or temporary personnel whose work could cause a spill are informed of facility operating features and spill prevention features, which they must know in order to prevent, control, contain, and clean up a spill.

Training in the operation and maintenance of oil pollution prevention equipment and pollution control laws and regulations is given to all applicable employees on a yearly basis.

Twenty-four hour contact numbers are provided for guidance and consultation. Instructions and telephone numbers regarding the reporting of a spill to the National Response Center and the state are listed in Sections 13.0 and 14.0 of this Plan.

20.0 Security [§112.7(g)]

Regulations require that the facility secure and control access to all oil handling, processing, and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address facility lighting to prevent acts of vandalism and detect the presence of a release.

21.0 Tank Car and Tank Truck Loading/Unloading Rack [§112.7(h)]

As normal operation at Warrior Materials Quarry does not include tank car and tank truck loading/unloading racks, this section does not apply.

22.0 Brittle Fraction Evaluation [§112.7(i)]

If an aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture failure or other catastrophe, the container will be evaluated for risk of discharge or failure due to brittle fracture or other catastrophe, and corrective action will be taken as necessary.

23.0 Facility Drainage [§112.8(b)/§112.12(b)]

This section describes the drainage in operating area of the facility, which includes the fuel storage area. The overall site consists of hilly terrain, with areas of changing topography due to surface mining operations.

Stormwater in the fuel storage area would flow generally to the southwest towards an on-site pond. It is unlikely that stormwater would breach pond containment, but if so, it would continue flowing south to Long Branch, which bisects the site (northeast to southwest). Figure 2 shows the general direction of stormwater flow in this area.

24.0 Bulk Storage Containers [§112.8(c)/§112.12(c)]

All tanks and containers are built of material compatible with contents stored within the respective tank. Tanks used on the site for fuel storage will be of double-walled steel construction.

Should rainwater accumulate in the AST's secondary containment structure, water should be removed only if it will not cause a discharge that will result in a visible sheen on the receiving waters. When accumulated water is removed, a record should be kept in the log provided in Appendix VII of this Plan. Accumulated water that is impacted by oil should be routed through an oil/water separator.

25.0 Transfer Operations, Pumping, And In-Plant Processes [§112.8(d)/ §112.12(d)]

Facility transfer operations, including pumping and in-plant processes, is the transfer of oil by pipelines.

If buried pipes are used for the transfer or pumping of oils through the facility or for loading/unloading operations, cathodic protection must be provided to prevent corrosion. If the pipe is exposed to the surface anywhere, that section must be inspected periodically for corrosion. [§112.8(d)]

The facility must cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby for an extended period of time. [§112.8(d)(2)]

There will be no buried pipes used to load or unload new oils or waste oils; therefore, there is no need for inspection and there are no pipes to be capped or blank flanged when not in use.

The facility must design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction. [§112.8(d)(3)]

The piping must be periodically inspected. Aboveground piping, valves and appurtenances must be assessed for the general condition of items such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking valves, and metal surfaces. Underground piping must be integrity and leak tested at the time of installation, modification, construction, relocation, or replacement. [§112.8(d)(4)]

Vehicles entering the facility must be warned of any aboveground piping or other oil transfer operations so they are not damaged. [§112.8(d)(5)]

There will be no aboveground pipes used to load or unload new oils or waste oils.

26.0 Oil Spill Contingency Plan [§109]

According to the final rule signed in December 2006, the EPA made changes to secondary containment requirements for oil-filled operational equipment. This section describes the requirements and provides a contingency plan to meet the requirements EPA has set forth.

26.1 Storage Containers

Oil-Filled Operational Equipment

Oil-filled operational equipment has been exempted from secondary containment requirements provided that the facility has not had a discharge from any oil-filled operational equipment (1) of more than 1,000 U.S. gallons of oil in a single discharge to navigable waters, or (2) discharge of more than 42 U.S. gallons of oil in each of two discharges to navigable waters, within any twelve-month period, in the three years prior to the SPCC Plan certification date and an Oil Spill Contingency Plan has been prepared for the facility. There have been no previous discharges to navigable waters.

Spill kits will be located throughout the facility to be used in the event of a release.

26.2 *Commitment of Manpower and Equipment*

The Warrior Materials Quarry employs numerous personnel. Key personnel members located throughout the facility are equipped with mobile telephones for communication purposes. A list of emergency contact phone numbers is provided in Section 9.0 of this Plan. In the event of a release, the Project Manager will be notified immediately and steps will be taken to contain the spill and initiate clean-up as soon as possible. Spill kits are located throughout the facility. Section 10.0 of this Plan outlines steps to be taken in the event of a spill.

26.3 *Inspections*

Section 18.0 of the Plan addresses the inspection program the facility has established.

FIGURES

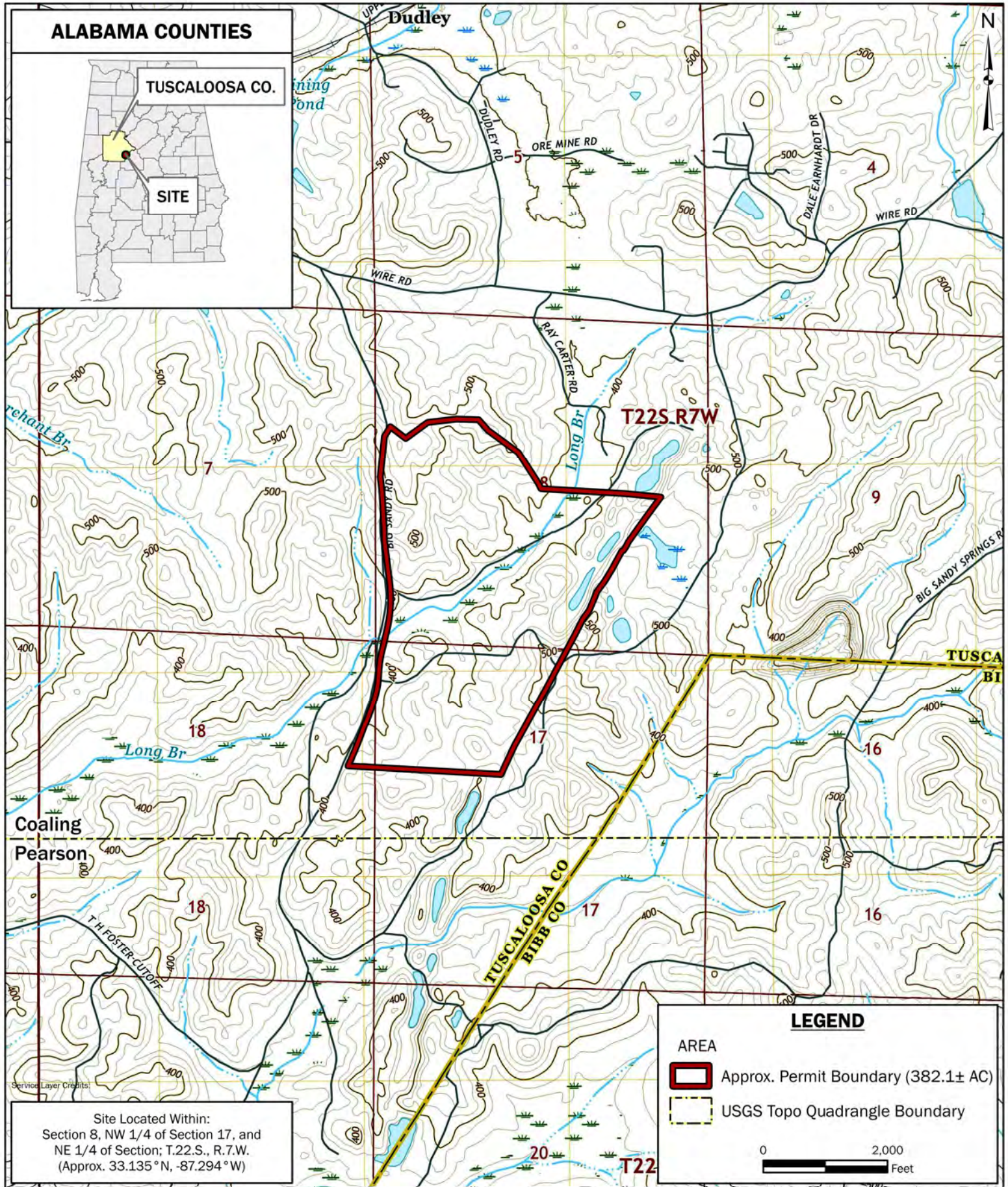


FIGURE 1: SITE LOCATION & TOPOGRAPHIC MAP
WARRIOR MATERIALS, LLC - WARRIOR MATERIALS QUARRY
SPILL PREVENTION, CONTROL, & COUNTERMEASURE PLAN
VANCE, TUSCALOOSA COUNTY, ALABAMA

BASEMAP: Coaling, Alabama USGS 7.5 Minute Quadrangle Map, 2024 (20-ft Contour Interval).

DRAWN BY: SG
CHECKED BY: SGR
DRAWING DATE: 04/14/2026
REVISION DATE: N/A
TTL JOB NO.: 25-01-01858.00
APPROX. SCALE: 1 in = 2,000 ft



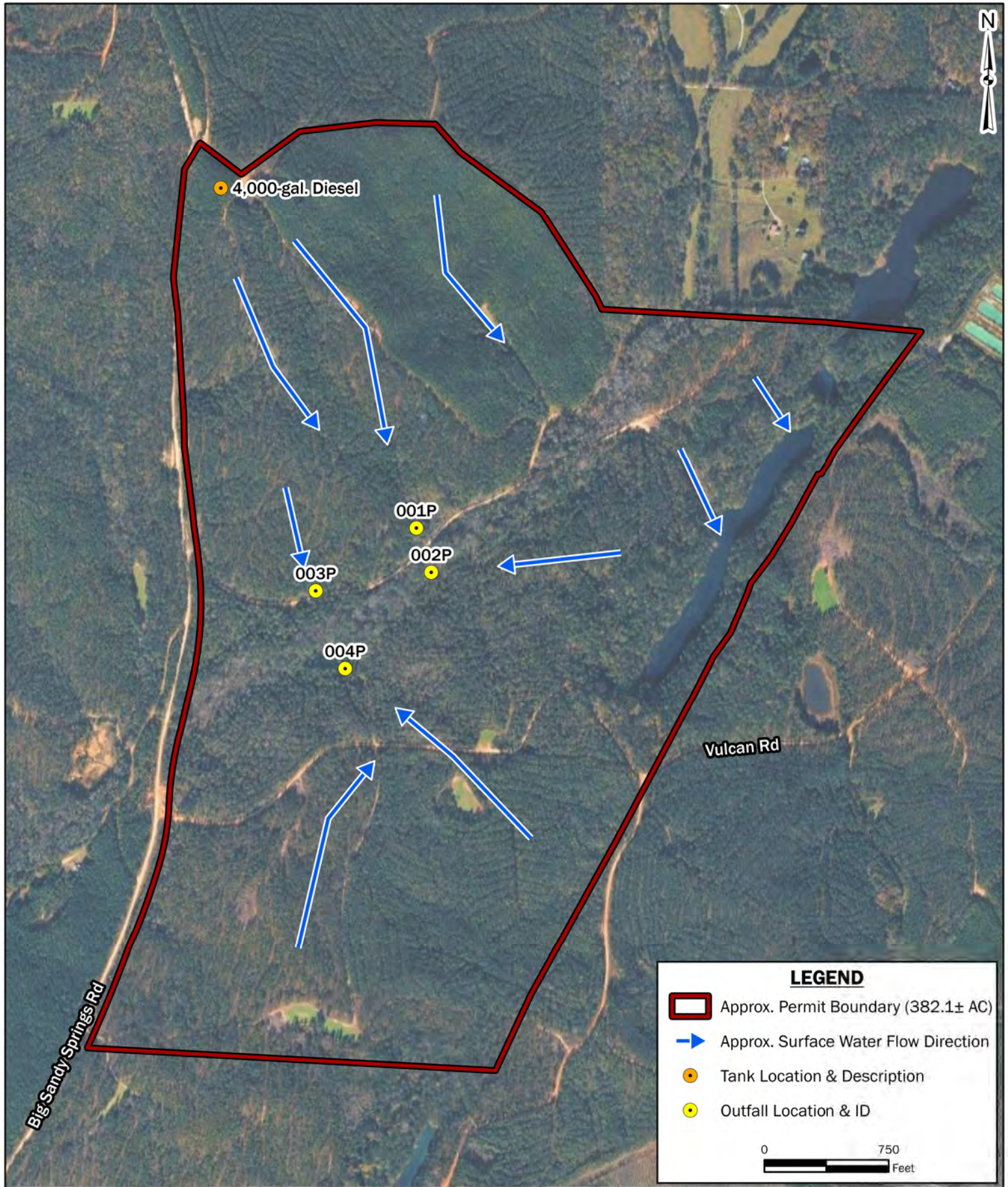


FIGURE 2: SITE MAP
WARRIOR MATERIALS, LLC - WARRIOR MATERIALS QUARRY
SPILL PREVENTION, CONTROL, & COUNTERMEASURE
VANCE, TUSCALOOSA COUNTY, ALABAMA
BASEMAP: Google Earth Satellite Imagery, 11/22/2024.

DRAWN BY: SG
CHECKED BY: SGR
DRAWING DATE: 04/14/2026
REVISION DATE: N/A
TTL JOB NO.: 25-01-01858.00
APPROX. SCALE: 1 in = 750 ft

APPENDIX I

CERTIFICATION OF SUBSTANTIAL HARM

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater to or equal to 42,000 gallons?

Yes _____ No X

2. Does the facility have a total oil storage capacity greater to 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 storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

Yes _____ No X

3. Does the facility have a total oil storage capacity greater to or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C-III to this appendix or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plan" Fish and Wildlife Sensitive Environments" (see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan.

Yes _____ No X

4. Does the facility have a total oil storage capacity greater to or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C-III to this appendix or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes _____ No X

5. Does the facility have a total storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil discharge in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No X

CERTIFICATION

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



Signature

May 7, 2026

Date

APPENDIX II

DEFINITIONS

APPENDIX II

Definitions from 40 CFR Part 112 Oil Pollution Prevention

Adverse weather means weather conditions that make it difficult for response equipment and personnel to clean up or remove spilled oil, and that must be considered when identifying response systems and equipment in a response plan for the applicable operating environment. Factors to consider include significant wave height as specified in appendix E to this part (as appropriate), ice conditions, temperatures, weather-related visibility, and currents within the area in which the systems or equipment is intended to function.

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

Animal fat means a non-petroleum oil, fat, or grease of animal, fish, or marine mammal origin.

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

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

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

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

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

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

Contract or other approved means means:

- (1) A written contractual agreement with an oil spill removal organization that identifies and ensures the availability of the necessary personnel and equipment within appropriate response times; and/or
- (2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times; and/or
- (3) Active membership in a local or regional oil spill removal organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified geographic area; and/or
- (4) Any other specific arrangement approved by the Regional Administrator upon request of the owner or operator.

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

Facility means any mobile or fixed, onshore or offshore building, property, parcel, lease, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and oil waste treatment, or in which oil is used, as described in appendix A to this part. The boundaries of a facility depend on several site-specific factors, including but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and types of activity at the site. Contiguous or non-contiguous buildings, properties, parcels, leases, structures, installations, pipes, or pipelines under the ownership or operation of the same person may be considered separate facilities. Only this definition governs whether a facility is subject to this part.

Farm means a facility on a tract of land devoted to the production of crops or raising of animals, including fish, which produced and sold, or normally would have produced and sold, \$1,000 or more of agricultural products during a year.

Fish and wildlife and sensitive environments means areas that may be identified by their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and State parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and State lands that are research national areas, heritage program areas, land trust areas, and historical and archaeological sites

and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

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

Loading/unloading rack means a fixed structure (such as a platform, gangway) necessary for loading or unloading a tank truck or tank car, which is located at a facility subject to the requirements of this part. A loading/unloading rack includes a loading or unloading arm, and may include any combination of the following: piping assemblages, valves, pumps, shut-off devices, overfill sensors, or personnel safety devices.

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

Mobile refueler means a bulk storage container onboard a vehicle or towed, that is designed or used solely to store and transport fuel for transfer into or from an aircraft, motor vehicle, locomotive, vessel, ground service equipment, or other oil storage container.

Motive power container means any onboard bulk storage container used primarily to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment. An onboard bulk storage container which is used to store or transfer oil for further distribution is not a motive power container. The definition of motive power container does not include oil drilling or workover equipment, including rigs.

Navigable waters of the United States means "navigable waters" as defined in section 502(7) of the FWPCA, and includes:

- (1) All navigable waters of the United States, as defined in judicial decisions prior to passage of the 1972 Amendments to the FWPCA (Pub. L. 92-500), and tributaries of such waters;
- (2) Interstate waters;
- (3) Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes; and
- (4) Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce.

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

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

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

Oil-filled operational equipment means equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device. Oil filled operational equipment is not considered a bulk storage container, and does not include oil-filled manufacturing equipment (flow-through process). Examples of oil-filled operational equipment include, but are not limited to, hydraulic systems, lubricating systems (e.g. , those for pumps, compressors and other rotating equipment, including pumpjack lubrication systems), gear boxes, machining coolant systems, heat transfer systems, transformers, circuit breakers, electrical switches, and other systems containing oil solely to enable the operation of the device.

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

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

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

Partially buried tank means a storage container that is partially inserted or constructed in the ground, but not entirely below grade, and not completely covered with earth, sand, gravel, asphalt, or other material. A partially buried tank is considered an aboveground storage container for purposes of this part.

Permanently closed means any container or facility for which:

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

Person includes an individual, firm, corporation, association, or partnership.

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

Produced water container means a storage container at an oil production facility used to store the produced water after initial oil/water separation, and prior to reinjection, beneficial reuse, discharge, or transfer for disposal.

Production facility means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flow lines or intra-facility gathering lines), or equipment (including but not limited to workover equipment, separation equipment, or auxiliary non-transportation-related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil (including condensate), or associated storage or measurement, and is located in an oil or gas field, at a facility. This definition governs whether such structures, piping, or equipment are subject to a specific section of this part.

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

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

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

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

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

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

Vegetable oil means a non-petroleum oil or fat of vegetable origin, including but not limited to oils and fats derived from plant seeds, nuts, fruits, and kernels. *Vessel* means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel.

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

Worst case discharge for an onshore non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions as determined using the worksheets in appendix D to this part (40 CFR 112).

APPENDIX III
FIVE-YEAR REVIEW LOG
AND
TECHNICAL AMENDMENT LOG

Five-Year Review Log

I have completed a review and evaluation of the SPCC Plan for this facility, and will/will not amend this Plan as a result.

[illegible]

Technical Amendment Log

Any technical amendments to this Plan will be re-certified in accordance with Section I of this Plan template.

[illegible]

APPENDIX IV

PAST DISCHARGE HISTORY AND DISCHARGE NOTIFICATION FORM

Past Discharge History

There have been no reportable spills at the Warrior Materials Quarry facility in the three years preceding Plan certification.

This page will be updated if a reportable discharge occurs.

<u>Description of Spill</u>	<u>Corrective Actions Taken</u>	<u>Plan for Preventing Recurrence</u>

Discharge Notification Form

In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center [also see the notification information provided in Section 10 of the Plan]:

Information provided to the National Response Center in the Event of a Discharge			
Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	☐ Soil
			☐ Water (specify)
			☐ Other (specify)
Actions taken			
Damage or injuries	☐ No ☐ Yes (specify)	Evacuation needed?	☐ No ☐ Yes (specify)
Organizations and individuals contacted	☐ National Response Center 800-424-8802 Time		
	☐ Cleanup contractor (Specify) Time		
	☐ Facility personnel (Specify) Time		
	☐ State Agency (Specify) Time		
	☐ Other (Specify) Time		

APPENDIX V
INSPECTION LOGS

General Inspection Log (conducted weekly)

Complete This Checklist During Inspections			
Yes	No	NA	
			Bulk Storage and Oil-Filled Equipment
			Is secondary containment provided for each bulk storage container of petroleum/chemical of 55 gallons or more? If not specify below which tank(s) do not have secondary containment.
			Are drain plugs/valves in containment units in place/closed? If not, specify which tank(s) below.
			Are containment units free of debris and oil residue? If not, specify which containment units below.
			Are there any signs of corrosion visible on the bulk storage tanks or above-ground piping? If so, specify which tank(s)/piping runs below.
			Spill Control
			Spill control material is properly located in the area and is in adequate supply.
			If a spill of petroleum/chemical product has occurred since the last inspection, was spilled material cleaned up to the extent practical, and stained soil removed?
			Best Management Practices
			Do any of the outfalls show sign of debris, oil, scum, suspended solids, turbidity, or evidence of chemical releases (foaming, color, sheen, etc.)?
			Is the yard clean and free of oil stains, debris, derelict equipment and scrap; are good housekeeping precautions being followed?
			Are all 55-gallon drums tightly sealed or otherwise protected from stormwater?
			Are erosion control measures effective?
			Are stormwater BMPs in place and effective?
Name and Title of Inspector		Signature	Date
Explain any deficiencies noted above, list corrective actions needed, and note the date of corrective actions.			

Monthly Aboveground Storage Tank (AST) Inspection Checklist

Month_____ Year_____

Instructions: This inspection record will be completed monthly. Place an X in the appropriate box for each item. If any response requires elaboration, descriptions or actions taken should be attached on a separate piece of paper, and added to the log book.

	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Inspector's Initials																				
Date																				
Fuel Storage Area ASTs																				
Evidence of fluid accumulation in the interstitial space																				
Tank surfaces show signs of leakage																				
Tank damaged or deteriorated																				
Tank supports are deteriorated or bulked																				
Tank foundations have eroded or settled																				
Valve seals or gaskets are leaking																				
Spilled product or staining in Fueling/Loading area																				
Loading connections are not capped																				
Fencing, gates or lighting is non-functional																				

APPENDIX VI
PERSONNEL TRAINING LOG

Personnel Training Log (updated as needed)

Date	Description / Scope	Attendees

APPENDIX VII

RECORD OF SECONDARY CONTAINMENT DRAINAGE

RECORD OF SECONDARY CONTAINMENT DRAINAGE

Instructions: This record will be completed when rainwater from the secondary containment area is drained or pumped. The drain valves normally should be locked closed and only opened and relocked following drainage under responsible supervision.

Facility Name: Warrior Materials Quarry, Vance, Alabama

[illegible]