LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

Alabama Department of Environmental Management
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Montgomery, Alabama 36130-1463
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MAY 6, 2020

DAVID THOMAS, PRESIDENT
SEQUATCHIE CONCRETE
250 PALMER ROAD
MADISON, AL 35758

RE: DRAFT PERMIT
NPDES PERMIT NUMBER AL0083259

Dear Mr. Thomas:

Transmitted herein is a draft of the referenced permit.

We would appreciate your comments on the permit within **30 days** of the date of this letter. Please direct any comments of a technical or administrative nature to the undersigned.

By copy of this letter and the draft permit, we are also requesting comments within the same time frame from EPA.

Our records indicate that you are currently utilizing the Department's web-based electronic environmental (E2) reporting system for submittal of discharge monitoring reports (DMRs). Your E2 DMRs will automatically update on the effective date of this permit, if issued.

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

If you have questions regarding this permit or monitoring requirements, please contact Rachel Stanaland by e-mail at **restanaland@adem.alabama.gov** or by phone at **(334) 279-3065.**

Sincerely,

Scott Ramsey, Chief
Industrial Section
Industrial/Municipal Branch
Water Division

Enclosure: Draft Permit

pc via website: Montgomery Field Office
EPA Region IV
U.S. Fish & Wildlife Service
AL Historical Commission
Advisory Council on Historic Preservation
Department of Conservation and Natural Resources

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

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

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

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

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: SEQUATCHIE CONCRETE SERVICE INC.

FACILITY LOCATION: 250 PALMER RD
MADISON, AL 35758

PERMIT NUMBER: AL0083259

RECEIVING WATERS: DSN001: UNNAMED TRIBUTARY TO MILL CREEK
DSN002: UNNAMED TRIBUTARY TO MILL CREEK

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

INDUSTRIAL SECTION
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

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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 the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0011: Storm water associated with the manufacture of concrete and concrete products 3/

Such discharge shall be limited and monitored by the permittee as specified below:

	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS 1/		
EFFLUENT CHARACTERISTIC	Monthly Average	Daily Maximum	Daily Minimum	Monthly Average	Daily Maximum	Measurement Frequency 2/	Sample Type	Seasonal
pH	-	-	REPORT S.U.	-	REPORT S.U.	Semi-Annually	Grab	-
Solids, Total Suspended	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-
Oil & Grease	-	-	-	-	15 mg/l	Semi-Annually	Grab	-
Iron, Total (As Fe)	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-
Manganese, Total (As Mn)	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-
Methyl Tert-Butyl Ether	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-
Toluene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-
Benzene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling 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 the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0011 (continued): : Storm water associated with the manufacture of concrete and concrete products 3/

Such discharge shall be limited and monitored by the permittee as specified below:

	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS 1/		
EFFLUENT CHARACTERISTIC	Monthly Average	Daily Maximum	Daily Minimum	Monthly Average	Daily Maximum	Measurement Frequency 2/	Sample Type	Seasonal
Ethylbenzene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-
Naphthalene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-
Flow, In Conduit or Thru Treatment Plant	-	-	-	-	REPORT MGD	Semi-Annually	Grab	-
Xylene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	-

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling 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 the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0021: Equipment wash water, water from wetting aggregates, and stormwater associated with the manufacture of concrete and concrete products 3/

Such discharge shall be limited and monitored by the permittee as specified below:

	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS 1/				
EFFLUENT CHARACTERISTIC	Monthly Average	Daily Maximum	Daily Minimum	Monthly Average	Daily Maximum	Measurement Frequency 2/	Sample Type	Seasonal
Oxygen, Dissolved (DO)	-	-	6.0 mg/l	-	-	2X Monthly	Grab	-
pH	-	-	6.0 S.U.	-	8.5 S.U.	2X Monthly	Grab	-
Solids, Total Suspended	-	-	-	-	50 mg/l	2X Monthly	Grab	-
Oil & Grease	-	-	-	-	15 mg/l	2X Monthly	Grab	-
Nitrogen, Ammonia Total (As N)	-	-	-	2.4 mg/l	3.6 mg/l	2X Monthly	Grab	-
Nitrogen, Kjeldahl Total (As N)	-	-	-	-	REPORT mg/l	Monthly	Grab	April - September
Nitrite Plus Nitrate Total 1 Det. (As N)	-	-	-	-	REPORT mg/l	Monthly	Grab	April - September
Phosphorus, Total (As P)	-	-	-	-	1.0 mg/l	2X Monthly	Grab	-

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling 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 the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0021 (continued): Equipment wash water, water from wetting aggregates, and stormwater associated with the manufacture of concrete and concrete products 3/

Such discharge shall be limited and monitored by the permittee as specified below:

	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS 1/				
EFFLUENT CHARACTERISTIC	Monthly Average	Daily Maximum	Daily Minimum	Monthly Average	Daily Maximum	Measurement Frequency 2/	Sample Type	Seasonal
Iron, Total (As Fe)	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-
Manganese, Total (As Mn)	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-
Thallium, Total (As Tl)	-	-	-	0.274 ug/l	0.411 ug/l	2X Monthly	Grab	-
Selenium, Total (As Se)	-	-	-	0.005 mg/l	0.0075 mg/l	2X Monthly	Grab	-
Methyl Tert-Butyl Ether	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-
Toluene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-
Benzene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-
Ethylbenzene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling 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 the following point source(s) outfall(s), described more fully in the permittee's application:

DSN0021 (continued): Equipment wash water, water from wetting aggregates, and stormwater associated with the manufacture of concrete and concrete products 3/

Such discharge shall be limited and monitored by the permittee as specified below:

	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS 1/		
EFFLUENT CHARACTERISTIC	Monthly Average	Daily Maximum	Daily Minimum	Monthly Average	Daily Maximum	Measurement Frequency 2/	Sample Type	Seasonal
Naphthalene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-
Flow, In Conduit or Thru Treatment Plant	-	-	-	-	REPORT MGD	2X Monthly	Estimate	-
Chlorine, Total Residual 5/	-	-	-	0.011 mg/l	0.019 mg/l	2X Monthly	Grab	-
BOD, Carbonaceous 05 Day, 20C	-	-	-	10.0 mg/l	15.0 mg/l	2X Monthly	Grab	-
Xylene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	-

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling Requirements.

5/ A measurement of Total Residual Chlorine below 0.05 mg/L shall be considered in compliance with the permit limitations above and should be reported as NODI=B or *B on the discharge monitoring reports.

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 the following point source(s) outfall(s), described more fully in the permittee's application:

DSN002T:Equipment wash water, water from wetting aggregates, and stormwater associated with the manufacture of concrete and concrete 3/

Such discharge shall be limited and monitored by the permittee as specified below:

	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS 1/		
EFFLUENT CHARACTERISTIC	Monthly Average	Daily Maximum	Daily Minimum	Monthly Average	Daily Maximum	Measurement Frequency 2/	Sample Type	Seasonal
Toxicity, Ceriodaphnia Chronic	-	0 pass(0)/fail(1)	-	-	-	Semi-Annually	Composite	-
Toxicity, Pimephales Chronic	-	0 pass(0)/fail(1)	-	-	-	Semi-Annually	Composite	-

THE DISCHARGE SHALL HAVE NO SHEEN, AND THERE SHALL BE NO DISCHARGE OF VISIBLE OIL, FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

1/ Samples collected to comply with the monitoring requirements specified above shall be collected at the following location: At the nearest accessible location just prior to discharge and after final treatment. Unless otherwise specified, composite samples shall be time composite samples collected using automatic sampling equipment or a minimum of eight (8) equal volume grab samples collected over equal time intervals. All composite samples shall be collected for the total period of discharge not to exceed 24 hours.

2/ If only one sampling event occurs during a month, the sample result shall be reported on the discharge monitoring report as both the monthly average and daily maximum value for all parameters with a monthly average limitation.

3/ See Part IV.A for Best Management Practices (BMP) Plan Requirements.

4/ See Part IV.B for Stormwater Measurement and Sampling Requirements.

B. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge and shall be in accordance with the provisions of this permit.

2. 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 and guidelines published pursuant to Section 304(h) of the FWPCA, 33 U.S.C. Section 1314(h). 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 pollutants 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 A and B above 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.

3. 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;

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.

4. Records Retention and Production

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 the permit, and records of all data used to complete the above reports or the application for this permit, for a period of at least three years from the date of the sample 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 and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director or his designee, the permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records shall not be submitted unless requested.

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

5. 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.

C. DISCHARGE REPORTING REQUIREMENTS

1. Reporting of Monitoring Requirements

a. The permittee shall conduct the required monitoring in accordance with the following schedule:

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.

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 it should be submitted with the last DMR due for the quarter, i.e., (March, June, September and December DMR's).

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 calendar semiannual 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 submitted with the last DMR for the month of the semiannual period, i.e. (June and December DMR's).

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 submitted with the December DMR.

b. The permittee shall submit discharge monitoring reports (DMRs) on the forms provided by the Department and in accordance with the following schedule:

REPORTS OF MORE FREQUENTLY THAN MONTHLY AND MONTHLY TESTING shall be submitted on a **monthly** basis. The first report is due on the **28th day of (MONTH, YEAR).** The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

REPORTS OF SEMIANNUAL TESTING shall be submitted on a semiannual basis. The reports are due on the 28th day of JANUARY and the 28th day of JULY. The reports shall be submitted so that they are received by the Department no later than the 28th day of the month following the reporting period.

c. Except as allowed by Provision I.C.1.c.(1) or (2), the permittee shall submit all Discharge Monitoring Reports (DMRs) required by Provision I.C.1.b by utilizing the Department's web-based Electronic Environmental (E2) Reporting System.

(1) If the permittee is unable to complete the electronic submittal of DMR data due to technical problems originating with the Department's E2 Reporting system (this could include entry/submittal issues with an entire set of DMRs or individual parameters), the permittee is not relieved of their obligation to submit DMR data to the Department by the date specified in Provision I.C.1.b, unless otherwise directed by the Department.

If the E2 Reporting System is down on the 28th day of the month in which the DMR is due or is down for an extended period of time, as determined by the Department, when a DMR is required to be submitted, the permittee 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 5 calendar days of the E2 Reporting System resuming operation, the permittee shall enter the data into the E2 Reporting System, unless an alternate timeframe is approved by the Department. An attachment should be included with the E2 DMR submittal verifying the

original submittal date (date of the fax, copy of the dated e-mail, or hand-delivery stamped date), if applicable.

(2) The permittee may submit a request to the Department for a temporary electronic reportiug 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 Provision I.C.1.e.

(3) If a permittee is allowed to submit a hard copy DMR, the DMR must be legible and bear an original signature. Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this permit.

(4) If the permittee, using approved analytical methods as specified in Provision I.B.2, monitors any discharge from a point source for a limited substance identified in Provision I.A. of this permit 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 and the increased frequency shall be indicated on the DMR.

(5) In the event no discharge from a point source identified in Provision I.A. 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.

d. All reports and forms required to be submitted by this permit, the AWPCA and the Department's Rules, shall be electronically signed (or, if allowed by the Department, traditionally signed) by a "responsible official" of the permittee as defined in ADEM Administrative Code Rule 335-6-5-.14 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-5-.14 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 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."

e. Discharge Monitoring Reports required by this permit, the AWPCA, and the Department's Rules that are being submitted in hard copy shall be addressed to:

Alabama Department of Environmental Management
Permits and Services Division
Environmental Data Section
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail containing Discharge Monitoring Reports shall be addressed to:

Alabama Department of Environmental Management
Permits and Services Division
Environmental Data Section
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2400

f. All other correspondence and reports required to be submitted by this permit, the AWPCA, and the Department's Rules shall be addressed to:

Alabama Department of Environmental Management
Water Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

Certified and Registered Mail shall be addressed to:

Alabama Department of Environmental Management
Water Division

1400 Coliseum Boulevard
Montgomery, Alabama 36110-2400

g. If this permit is a re-issuance, 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.C.1.b above.

2. Noncompliance Notification

a. 24-Hour Noncompliance Reporting

The permittee shall report to the Director, within 24-hours of becoming aware of the noncompliance, any noncompliance which may endanger health or the environment. This shall include but is not limited to the following circumstances:

(1) does not comply with any daily minimum or maximum discharge limitation for an effluent characteristic specified in Provision I. A. of this permit which is denoted by an "(X)";

(2) threatens human health or welfare, fish or aquatic life, or water quality standards;

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

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

(5) exceeds any discharge limitation for an effluent characteristic as a result of an unanticipated bypass or upset; and

(6) is an unpermitted direct or indirect discharge of a pollutant to a water of the state (unpermitted discharges properly reported to the Department under any other requirement are not required to be reported under this provision).

The permittee shall orally report the occurrence and circumstances 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 report, the permittee shall submit to the Director or Designee a written report as provided in Part I.C.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 to the Director or Designee a written report as provided in Part I.C.2.c below, such report shall be submitted with the next Discharge Monitoring Report required to be submitted by Part I.C.1 of this permit after becoming aware of the occurrence of such noncompliance.

c. Any written report required to be submitted to the Director or Designee by Part I.C.2 a. or b. shall be submitted using a copy of the Noncompliance Notification Form provided with this permit and shall include the following information:

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

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

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

D. 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 in Provision I. A. of this permit have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for modification or termination of the permit.

3. Updating Information

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

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

4. Duty to Provide Information

   The permittee shall furnish to the Director, within a reasonable time, any information which the Director or his designee may request to determine whether cause exists for modifying, revoking and re-issuing, suspending, or terminating this permit, in whole or in part, or to determine compliance with this permit.

5. Cooling Water and Boiler Water Additives

   a. The permittee shall notify the Director in writing not later than thirty (30) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in a cooling or boiler system, not identified in the application for this permit, from which discharge is allowed by this permit. Notification is not required for additives that do not contain a heavy metal(s) as an active ingredient and that pass through a wastewater treatment system prior to discharge nor is notification required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the permittee. Such notification shall include:

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

      (2) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach;

      (2) quantities to be used;

      (3) frequencies of use;

      (4) proposed discharge concentrations; and

      (6) EPA registration number, if applicable.

   b. The use of a biocide or additive containing tributyl tin, tributyl tin oxide, zinc, chromium or related compounds in cooling or boiler system(s), from which a discharge regulated by this permit occurs, 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.

6. Permit Issued Based On Estimated Characteristics

   a. If this permit was issued based on estimates of the characteristics of a process discharge reported on an EPA NPDES Application Form 2D (EPA Form 3510-2D), the permittee shall complete and submit an EPA NPDES Application Form 2C (EPA Form 3510-2C) no later than two years after the date that discharge begins. Sampling required for completion of the Form 2C shall occur when a discharge(s) from the process(s) causing the new or increased discharge is occurring. If this permit was issued based on estimates concerning the composition of a stormwater discharge(s), the permittee shall perform the sampling required by EPA NPDES Application Form 2F (EPA Form 3510-2F) no later than one year after the industrial activity generating the stormwater discharge has been fully initiated.

   b. This permit shall be reopened if required to address any new information resulting from the completion and submittal of the Form 2C and or 2F.

E. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the discharge limitations specified in Provision I. A. in accordance with the following schedule:

IN ACCORDANCE WITH THE INSTRUCTIONS FOR EPA FORM 2D, A COMPLETED EPA FORM 2C SHALL BE SUBMITTED NO LATER THAN TWO YEARS AFTER THE PROPOSED FACILITY BEGINS DISCHARGING.

COMPLIANCE SHALL BE ATTAINED ON THE EFFECTIVE DATE OF THIS PERMIT

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Maintenance

The permittee shall at all times properly 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 the 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 the permit.

2. Best Management Practices

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

b. The permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 C.F.R. Section 112 if required thereby.

c. The permittee shall prepare, submit for approval and implement a Best Management Practices (BMP) Plan for containment of any or all process liquids or solids, in a manner such that these materials do not present a significant potential for discharge, if so required by the Director or his designee. 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.

3. Spill Prevention, Control, and Management

The permittee shall provide spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a water of the state or a publicly or privately owned treatment works. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and which shall prevent the contamination of groundwater and such containment system shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided.

B. OTHER RESPONSIBILITIES

1. Duty to Mitigate Adverse Impacts

The permittee shall promptly take all reasonable steps to mitigate and minimize or prevent any adverse impact on human health or the environment resulting from noncompliance with any discharge limitation specified in Provision I. A. of this permit, including such accelerated or additional monitoring of the discharge and/or the receiving waterbody as necessary to determine the nature and impact of the noncomplying discharge.

2. Right of Entry and Inspection

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

a. enter upon the permittee's premises where a regulated facility or activity or point source 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 the permit;

c. inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

d. sample or monitor, for the purposes of assuring permit compliance or as otherwise authorized by the AWPCA, any substances or parameters at any location.

C. BYPASS AND UPSET

1. Bypass

a. Any bypass is prohibited except as provided in b. and c. below:

b. A bypass is not prohibited if:

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

(2) It enters the same receiving stream as the permitted outfall; and

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

c. A bypass is not prohibited and need not meet the discharge limitations specified in Provision 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 adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment 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 prior to the anticipated bypass (if possible), the permittee is granted such authorization, and the permittee complies with any conditions imposed by the Director to minimize any adverse impact on human health or the environment resulting from the bypass.

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

2. Upset

a. A discharge which results from an upset need not meet the discharge limitations specified in Provision I. A. of this permit if:

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

(2) No later than five (5) days after becoming aware of the occurrence of the upset, the permittee furnishes the Director with evidence, including properly signed, contemporaneous operating logs, 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 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 on human health or the environment resulting from the upset.

b. The permittee has the burden of establishing that each of the conditions of Provision II. C.2.a. of this permit have been met to qualify for an exemption from the discharge limitations specified in Provision I.A. of this permit.

D. DUTY TO COMPLY WITH PERMIT, RULES, AND STATUTES

1. Duty to Comply

a. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the AWPCA 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 necessity to halt or reduce production or other activities in order to maintain compliance with the conditions of the permit shall not be a defense for a permittee in an enforcement action.

c. 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.

d. 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.

e. Nothing in this permit shall be construed to preclude and negate the permittee's responsibility or liability to apply for, obtain, or comply with other ADEM, Federal, State, or Local Government permits, certifications, licenses, or other approvals.

2. Removed Substances

Solids, sludges, filter backwash, or any other pollutant or other waste removed in the course of treatment or control of wastewaters shall be disposed of in a manner that complies with all applicable Department Rules.

3. Loss or Failure of Treatment Facilities

Upon the loss or failure of any treatment facilities, 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 Provision I. A. of this permit, or any other terms or conditions of this permit, cease, reduce, or otherwise control production and/or all discharges until treatment is restored. If control of discharge during loss or failure of the primary source of power is to be accomplished by means of alternate power sources, standby generators, or retention of inadequately treated effluent, the permittee must furnish to the Director within six months a certification that such control mechanisms have been installed.

4. Compliance with Statutes and Rules

a. This permit has been issued under ADEM Administrative Code, Chapter 335-6-6. All provisions of this chapter, that are applicable to this permit, are hereby made a part of this permit. A copy of this chapter may be obtained for a small charge from the Office of General Counsel, Alabama Department of Environmental Management, 1400 Coliseum Blvd., Montgomery, AL 36130.

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.

E. PERMIT TRANSFER, MODIFICATION, SUSPENSION, REVOCATION, AND REISSUANCE

1. 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 a complete permit application for reissuance of this permit at least 180 days prior to its expiration. If the permittee does not intend to continue discharge beyond the expiration of this permit, the permittee shall submit written notification of this intent which shall be signed by an individual meeting the signatory requirements for a permit application as set forth in ADEM Administrative Code Rule 335-6-6-.09.

b. Failure of the permittee to apply for reissuance at least 180 days prior to permit expiration will void the automatic continuation of the expiring permit provided by ADEM Administrative Code Rule 335-6-6-.06 and should the permit not be reissued for any reason any discharge after expiration of this permit will be an unpermitted discharge.

2. Change in Discharge

a. The permittee shall apply for a permit modification at least 180 days in advance of any facility expansion, production increase, process change, or other action that could result in the discharge of additional pollutants or increase the quantity of a discharged pollutant such that existing permit limitations would be exceeded or that could result in an additional discharge point. This requirement applies to pollutants that are or 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 is known or there is reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(a) one hundred micrograms per liter;

(b) two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dini-trophenol; and one milligram per liter for antimony;

(c) five times the maximum concentration value reported for that pollutant in the permit application; or

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

(a) five hundred micrograms per liter;

(b) one milligram per liter for antimony;

(c) ten times the maximum concentration value reported for that pollutant in the permit application.

3. 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 the 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.

4. Permit Modification and Revocation

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

(1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to revoke and reissue this permit instead of terminating the permit;

(2) If a request to transfer this permit has been received, the Director may decide to revoke and reissue or to modify the permit; or

(3) If modification or revocation and reissuance is requested by the permittee and cause exists, the Director may grant the request.

b. This permit may be modified during its term for cause, including but not limited to, the following:

(1) If cause for termination under Provision II. E. 5. of this permit exists, the Director may choose to modify this permit instead of terminating this permit;

(2) There are 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;

(3) The Director has received new information that was not available at the time of permit issuance and that would have justified the application of different permit conditions at the time of issuance;

(4) A new or revised requirement(s) of any applicable standard or limitation is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA;

(5) Errors in calculation of discharge limitations or typographical or clerical errors were made;

(6) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued;

(7) To the extent allowed by ADEM Administrative Code, Rule 335-6-6-.17, permits may be modified to change compliance schedules;

(8) To agree with a granted variance under 30l(c), 30l(g), 30l(h), 30l(k), or 316(a) of the FWPCA or for fundamentally different factors;

(9) To incorporate an applicable 307(a) FWPCA toxic effluent standard or prohibition;

(10) When required by the reopener conditions in this permit;

(11) When required under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program);

(12) Upon failure of the state to notify, as required by Section 402(b)(3) of the FWPCA, another state whose waters may be affected by a discharge permitted by this permit;

(13) When required to correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions; or

(14) When requested by the permittee and the Director determines that the modification has cause and will not result in a violation of federal or state law, regulations or rules.

5. Permit Termination

This permit may be terminated during its term for cause, including but not limited to, the following:

a. Violation of any term or condition of this permit;

b. The permittee's misrepresentation or failure to disclose fully all relevant facts in the permit application or during the permit issuance process or the permittee's misrepresentation of any relevant facts at any time;

c. Materially false or inaccurate statements or information in the permit application or the permit;

d. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

e. The permittee's discharge threatens human life or welfare or the maintenance of water quality standards;

f. Permanent closure of the facility generating the wastewater permitted to be discharged by this permit or permanent cessation of wastewater discharge;

g. New or revised requirements of any applicable standard or limitation that is promulgated under Sections 301(b)(2)(C), (D), (E), and (F), and 307(a)(2) of the FWPCA that the Director determines cannot be complied with by the permittee; or

h. Any other cause allowed by the ADEM Administrative Code, Chapter 335-6-6.

6. Permit Suspension

This permit may be suspended during its term for noncompliance until the permittee has taken action(s) necessary to achieve compliance.

7. Request for Permit Action Does Not Stay Any Permit Requirement

The filing of a request by the permittee for modification, suspension or revocation of this permit, in whole or in part, does not stay any permit term or condition.

F. COMPLIANCE WITH TOXIC POLLUTANT 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 Section 307(a) of the FWPCA, 33 U.S.C. Section 1317(a), for a toxic pollutant discharged by the permittee and such standard or prohibition is more stringent than any discharge limitation on the pollutant specified in Provision I. A. of this permit, or controls a pollutant not limited in Provision I. A. of this permit, this permit shall be modified to conform to the toxic 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 pollutant effluent standard or prohibition before the effective date of such standard or prohibition, the permittee shall attain compliance with the requirements of the standard or prohibition within the time period required by the standard or prohibition and shall continue to comply with the standard or prohibition until this permit is modified or reissued.

G. DISCHARGE OF WASTEWATER GENERATED BY OTHERS

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

PART III OTHER PERMIT CONDITIONS

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 the permit shall, upon conviction, be subject to penalties as provided by the AWPCA.

2. False Statements

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

3. Permit Enforcement

a. Any NPDES permit issued or reissued by the Department is a permit for the purpose of the AWPCA and the FWPCA and as such any terms, conditions, or limitations of the permit are enforceable under state and federal law.

b. Any person required to have a NPDES permit pursuant to ADEM Administrative Code Chapter 335-6-6 and who discharges pollutants without said permit, who violates the conditions of said permit, who discharges pollutants in a manner not authorized by the permit, or who violates applicable orders of the Department or any applicable rule or standard of the Department, is subject to any one or combination of the following enforcement actions under applicable state statutes.

(1) An administrative order requiring abatement, compliance, mitigation, cessation, clean-up, and/or penalties;

(2) An action for damages;

(3) An action for injunctive relief; or

(4) An action for penalties.

c. If the permittee is not in compliance with the conditions of an expiring or expired permit the Director may choose to do any or all of the following provided the permittee has made a timely and complete application for reissuance of the permit:

(1) initiate enforcement action based upon the permit which has been continued;

(2) issue a notice of intent to deny the permit reissuance. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3) reissue the new permit with appropriate conditions; or

(4) take other actions authorized by these rules and AWPCA.

4. Relief from Liability

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

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

C. PROPERTY AND OTHER RIGHTS

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

D. AVAILABILITY OF REPORTS

Except for data determined to be confidential under Code of Alabama 1975, Section 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.

E. EXPIRATION OF PERMITS FOR NEW OR INCREASED DISCHARGES

1. If this permit was issued for a new discharger or new source, this permit shall expire eighteen months after the issuance date if construction of the facility has not begun during the eighteen-month period.

2. If this permit was issued or modified to allow the discharge of increased quantities of pollutants to accommodate the modification of an existing facility and if construction of this modification has not begun during the eighteen month period after issuance of this permit or permit modification, this permit shall be modified to reduce the quantities of pollutants allowed to be discharged to those levels that would have been allowed if the modification of the facility had not been planned.

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

   a. begun, or caused to begin as part of a continuous on-site construction program:

      (1) any placement, assembly, or installation of facilities or equipment; or

      (2) 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

   b. 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.

F. COMPLIANCE WITH WATER QUALITY STANDARDS

1. 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 should assure compliance with the applicable water quality standards.

2. Compliance with permit terms and conditions notwithstanding, if the permittee's discharge(s) from point sources identified in Provision I. A. of this permit cause or contribute to a condition in contravention of state water quality standards, the Department may require abatement action to be taken by the permittee in emergency situations or modify the permit pursuant to the Department's Rules, or both.

3. If the Department determines, on the basis of a notice provided pursuant to 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 discharge until the permit has been modified.

G. GROUNDWATER

Unless specifically authorized under this permit, this permit does not authorize the discharge of pollutants 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.

H. DEFINITIONS

1. 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).

2. Average weekly discharge limitation - means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week (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).

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

4. AWPCA - means the Alabama Water Pollution Control Act.

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. 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.

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

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

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

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

13. Director - means the Director of the Department.

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

15. Discharge Monitoring Report (DMR) - means the form approved by the Director to accomplish reporting requirements of an NPDES permit.

16. DO – means dissolved oxygen.

17. 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.

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

19. FC – means the pollutant parameter fecal coliform.

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

21. FWPCA - means the Federal Water Pollution Control Act.

22. 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).

23. 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.

24. 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.

25. 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.

26. MGD – means million gallons per day.

27. Monthly Average – means, other than for fecal coliform bacteria, the arithmetic mean of the entire composite or grab samples taken for the daily discharges collected in one month period. The monthly average for fecal coliform 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.

28. 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. that did not commence the discharge of pollutants 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.

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

30. Permit application - means forms and additional information that is required by ADEM Administrative Code Rule 335-6-6-.08 and applicable permit fees.

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

32. Pollutant - includes for purposes of this permit, but is not limited to, those pollutants specified in Code of Alabama 1975, Section 22-22-1(b)(3) and those effluent characteristics specified in Provision I. A. of this permit.

33. 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".

34. Publicly Owned Treatment Works – 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.

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

36. 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.

37. Significant Source – means a source which discharges 0.025 MGD or more to a POTW or greater than five percent of the treatment work's capacity, or a source which is a primary industry as defined by the U.S. EPA or which discharges a priority or toxic pollutant.

38. Solvent – means any virgin, used or spent organic solvent(s) identified in the F-Listed wastes (F001 through F005) specified in 40 CFR 261.31 that is used for the purpose of solubilizing other materials.

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

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

41. TRC – means Total Residual Chlorine.

42. TSS – means the pollutant parameter Total Suspended Solids.

43. 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.

44. 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 reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

45. 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, Section 22-22-1(b)(2). Waters "include all navigable waters" as defined in Section 502(7) of the FWPCA, 22 U.S.C. Section 1362(7), which are within the State of Alabama.

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

47. 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.

I. 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.

PART IV ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. BEST MANAGEMENT PRACTICES (BMP) PLAN REQUIREMENTS

1. BMP Plan

The permittee shall develop and implement a Best Management Practices (BMP) Plan which prevents, or minimizes the potential for, the release of pollutants from ancillary activities, including material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations, and sludge and waste disposal areas, to the waters of the State through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

2. Plan Content

The permittee shall prepare and implement a best management practices (BMP) plan, which shall:

a. Establish specific objectives for the control of pollutants:

(1) Each facility component or system shall be examined for its potential for causing a release of significant amounts of pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.

(2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural condition (e.g. precipitation), or circumstances to result in significant amounts of pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.

b. Establish specific best management practices to meet the objectives identified under paragraph a. of this section, addressing each component or system capable of causing a release of significant amounts of pollutants to the waters of the State, and identifying specific preventative or remedial measures to be implemented;

c. Establish a program to identify and repair leaking equipment items and damaged containment structures, which may contribute to contaminated stormwater runoff. This program must include regular visual inspections of equipment, containment structures and of the facility in general to ensure that the BMP is continually implemented and effective;

d. Prevent the spillage or loss of fluids, oil, grease, gasoline, etc. from vehicle and equipment maintenance activities and thereby prevent the contamination of stormwater from these substances;

e. Prevent or minimize stormwater contact with material stored on site;

f. Designate by position or name the person or persons responsible for the day to day implementation of the BMP;

g. Provide for routine inspections, on days during which the facility is manned, of any structures that function to prevent stormwater pollution or to remove pollutants from stormwater and of the facility in general to ensure that the BMP is continually implemented and effective;

h. Provide for the use and disposal of any material used to absorb spilled fluids that could contaminate stormwater;

i. Develop a solvent management plan, if solvents are used on site. The solvent management plan shall include as a minimum lists of the solvents on site; the disposal method of solvents used instead of dumping, such as reclamation, contract hauling; and the procedures for assuring that solvents do not routinely spill or leak into the stormwater;

j. Provide for the disposal of all used oils, hydraulic fluids, solvent degreasing material, etc. in accordance with good management practices and any applicable state or federal regulations;

k. Include a diagram of the facility showing the locations where stormwater exits the facility, the locations of any structure or other mechanisms intended to prevent pollution of stormwater or to remove pollutants from stormwater, the locations of any collection and handling systems;

l. Provide control sufficient to prevent or control pollution of stormwater by soil particles to the degree required to maintain compliance with the water quality standard for turbidity applicable to the waterbody(s) receiving discharge(s) under this permit;

m. Provide spill prevention, control, and/or management sufficient to prevent or minimize contaminated stormwater runoff. 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. The containment system shall also be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided;

n. Provide and maintain curbing, diking or other means of isolating process areas to the extent necessary to allow segregation and collection for treatment of contaminated stormwater from process areas;

o. Be reviewed by plant engineering staff and the plant manager; and

p. Bear the signature of the plant manager.

3. Compliance Schedule

The permittee shall have reviewed (and revised if necessary) and fully implemented the BMP plan as soon as practicable but no later than six months after the effective date of this permit.

4. Department Review

a. When requested by the Director or his designee, the permittee shall make the BMP available for Department review.

b. The Director or his designee may notify the permittee at any time that the BMP is deficient and require correction of the deficiency.

c. The permittee shall correct any BMP deficiency identified by the Director or his designee within 30 days of receipt of notification and shall certify to the Department that the correction has been made and implemented.

5. Administrative Procedures

a. A copy of the BMP shall be maintained at the facility and shall be available for inspection by representatives of the Department.

b. A log of the routine inspection required above shall be maintained at the facility and shall be available for inspection by representatives of the Department. The log shall contain records of all inspections performed for the last three years and each entry shall be signed by the person performing the inspection.

c. The permittee shall provide training for any personnel required to implement the BMP and shall retain documentation of such training at the facility. This documentation shall be available for inspection by representatives of the Department. Training shall be performed prior to the date that implementation of the BMP is required.

d. BMP Plan Modification. The permittee shall amend the BMP plan whenever there is a change in the facility or change in operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

e. BMP Plan Review. The permittee shall complete a review and evaluation of the BMP plan at least once every three years from the date of preparation of the BMP plan. Documentation of the BMP Plan review and evaluation shall be signed and dated by the Plant Manager.

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS

1. The permittee shall perform short-term chronic toxicity tests on the wastewater discharges required to be tested for chronic toxicity by Part I of this permit.

a. Test Requirements

(1) The tests shall be performed using undiluted effluent.

(2) Any test result that shows a statistically significant reduction in survival, growth, or reproduction between the control and the test at the 95% confidence level indicate chronic toxicity and constitute noncompliance with this permit.

b. General Test Requirements

(1) A minimum of three (3) 24-hour composite samples shall be obtained for use in the above biomonitoring tests and collected every other day so that the laboratory receives water samples on the first, third, and fifth day of the seven-day test period. The holding time for each composite sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA 821-R-02-013 or the most current edition or another control water selected by the permittee and approved by the Department.

(2) Effluent toxicity tests in which the control survival is less than 80%, P. promelas dry weight per surviving control organism is less than 0.25 mg, Ceriodaphnia number of young per surviving control organism is less than 15, Ceriodaphnia reproduction where less than 60% of surviving control females produce three broods or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the permittee shall rerun the tests as soon as practical within the monitoring period.

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

c. Reporting Requirements

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

(2) Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 2 of this part, an effluent toxicity report containing the information in Section 2 shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month in which the tests were performed.

d. Additional Testing Requirements

(1) If chronic toxicity is indicated (noncompliance with permit limit), the permittee shall perform two additional valid chronic toxicity tests in accordance with these procedures to determine the extent and duration of the toxic condition. The toxicity tests shall run consecutively beginning on the first calendar week following the date on which the permittee became aware of the permit noncompliance and the results of these tests shall be submitted no later than 28 days following the month in which the tests were performed.

(2) After evaluation of the results of the follow-up tests, the Department will determine if additional action is appropriate and may require additional testing and/or toxicity reduction measures. The permittee may be required to perform a Toxicity Identification Evaluation (TIE) and/or a Toxicity Reduction Evaluation (TRE). The TIE/TRE shall be performed in accordance with the most recent protocols/guidance outlined by EPA (e.g., EPA/600/2-88/062, EPA/600/R-92/080, EPA/600/R-91-003, EPA/600/R-92/081, EPA/833/B-99/022 and/or EPA/600/6-91/005F, etc.)

e. Test Methods

(1) The tests shall be performed in accordance with the latest edition of the "EPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms". The Larval Survival and Growth Test, Methods 1000.0, shall be used for the fathead minnow (*Pimephales promelas*) test and the Survival and Reproduction Test, Method 1002.0, shall be used for the cladoceran (*Ceriodaphnia dubia*) test.

2. Effluent Toxicity Testing Reports

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

a. Introduction

(1) Facility name, location, and county

(2) Permit number

(3) Toxicity testing requirements of permit

(4) Name of receiving water body

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

(a) Name of firm
(b) Telephone number
(c) Address

(6) Objective of test

b. Plant Operation

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

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

(3) Design flow of treatment facility at time of sampling

c. Source of Effluent and Dilution Water

(1) Effluent samples

(a) Sampling point
(b) Sample collection dates and times (to include composite sample start and finish times)
(c) Sample collection method
(d) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)
(e) Lapsed time from sample collection to delivery
(f) Lapsed time from sample collection to test initiation
(g) Sample temperature when received at the laboratory

(2) Dilution Water

(a) Source
(b) Collection/preparation date(s) and time(s)
(c) Pretreatment (if applicable)
(d) Physical and chemical characteristics (water temperature, pH, alkalinity, hardness, specific conductance, etc.)

d. Test Conditions

(1) Toxicity test method utilized

(2) End point(s) of test

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

(4) Date and time test started

(5) Date and time test terminated

(6) Type and volume of test chambers

(7) Volume of solution per chamber

(8) Number of organisms per test chamber

(9) Number of replicate test chambers per treatment

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

(11) Specify if aeration was needed

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

(13) Specify if (and how) pH control measures were implemeuted

(14) Light intensity (mean)

e. Test Organisms

(1) Scientific name

(2) Life stage and age

(3) Source

(4) Disease(s) treatment (if applicable)

f. Quality Assurance

(1) Reference toxicant utilized and source

(2) Date and time of most recent chronic reference toxicant test(s), raw data and current control chart(s). The most recent chronic reference toxicant test shall be conducted within 30 days of the routine.

(3) Dilution water utilized in reference toxicant test

(4) Results of reference toxicant test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration response relationship and evaluate test sensitivity

(5) Physical and chemical methods utilized

g. Results

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

(2) Provide table of endpoints: NOECs, IC25s, PASS/FAIL, etc. (as required in the applicable NPDES permit)

(3) Indicate statistical methods used to calculate endpoints

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

(5) Results of test(s) (NOEC, IC25, PASS/FAIL, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD) calculated for sub-lethal endpoints determined by hypothesis testing.

h. Conclusions and Recommendations

(1) Relationship between test endpoints and permit limits

(2) Actions to be taken

1/ Adapted from "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", Fourth Edition, October 2002 (EPA 821-R-02-013), Section 10, Report Preparation

C. STORMWATER FLOW MEASUREMENT AND SAMPLING REQUIREMENTS

1. Stormwater Flow Measurement

a. All stormwater samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches.

b. The total volume of stormwater discharged for the event must be monitored, including the date and duration (in hours) and rainfall (in inches) for storm event(s) sampled. The duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event must be a minimum of 72 hours. This information must be recorded as part of the sampling procedure and records retained according to Part I.B. of this permit.

c. The volume may be measured using flow measuring devices, or estimated based on a modification of the Rational Method using total depth of rainfall, the size of the drainage area serving a stormwater outfall, and an estimate of the runoff coefficient of the drainage area. This information must be recorded as part of the sampling procedure and records retained according to Part I.B. of this permit.

2. Stormwater Sampling

a. A grab sample, if required by this permit, shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable); and a flow-weighted composite sample, if required by this permit, shall be taken for the entire event or for the first three hours of the event.

b. All test procedures will be in accordance with part I.B. of this permit.

ADEM PERMIT RATIONALE

PREPARED DATE: August 16, 2018
PREPARED BY: Rachel Stanaland

Permittee Name: Sequatchie Concrete Services

Facility Name: Sequatchie Concrete Palmer Rd

Permit Number: AL0083259

PERMIT IS INITIAL ISSUANCE

DISCHARGE SERIAL NUMBERS & DESCRIPTIONS:
DSN001: Storm water associated with the manufacture of concrete and concrete products
DSN002: Equipment wash water, water from wetting aggregates, and stormwater associated with the manufacture of concrete and concrete

INDUSTRIAL CATEGORY: NON CATEGORICAL

MAJOR: N

STREAM INFORMATION:

Receiving Stream:	Unnamed tributary to Mill Creek
Classification:	Fish and Wildlife
River Basin:	Tennessee River Basin
7Q10:	0 cfs
7Q2:	0 cfs
1Q10:	0 cfs
Annual Average Flow:	0.47 cfs
303(d) List:	NO
Impairment:	NONE
TMDL:	NO

DISCUSSION:

Sequatchie Concrete Service Inc. was covered under the general permit ALG110125. Due to the presence of coal cinders, the facility is no longer eligible to reapply for a general permit. Inside the facility cement, cinders, sand water and admixes are mixed, formed, and cured to become concrete blocks. The cinders products, sand products, rock, and concrete blocks are stored outside. The cement and fly ash are stored in silos. The facility also mixes the products in trucks to form concrete which is made into blocks. The excess concrete is dried and hauled off to be used a filler. The trucks have routine maintenance preformed on site.

ADEM Administrative Rule 335-6-10-.12 requires applicants to new or expanded discharges to Tier II waters demonstrate that the proposed discharge is necessary for important economic or social development in the area in which the waters are located. The application submitted by the facility is not for a new or expanded discharge. Therefore, the applicant is not required to demonstrate that the discharge is necessary for economic and social development.

EPA has not promulgated specific guidelines for the discharges covered under the proposed permit. Proposed permit limits are based on Best Professional Judgment. The proposed frequencies are based on a review of site specific conditions and an evaluation of similar facilities.

0011:

Parameter	Monthly Avg Loading	Daily Max Loading	Daily Min Concentration	Monthly Avg Concentration	Daily Max Concentration	Sample Frequency	Sample Type	Basis*
pH	-	-	REPORT S.U.	-	REPORT S.U.	Semi-Annually	Grab	BPJ
Solids, Total Suspended	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Oil & Grease	-	-	-	-	15 mg/l	Semi-Annually	Grab	BPJ
Iron, Total (As Fe)	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Manganese, Total (As Mn)	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Methyl Tert-Butyl Ether	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Toluene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Benzene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Ethylbenzene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Naphthalene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ
Flow, In Conduit or Thru Treatment Plant	-	-	-	-	REPORT MGD	Semi-Annually	Grab	BPJ
Xylene	-	-	-	-	REPORT mg/l	Semi-Annually	Grab	BPJ

0021:

Parameter	Monthly Avg Loading	Daily Max Loading	Daily Min Concentration	Monthly Avg Concentration	Daily Max Concentration	Sample Frequency	Sample Type	Basis*
Oxygen, Dissolved (DO)	-	-	6.0 mg/l	-	-	2X Monthly	Grab	WQBEL
pH	-	-	6.0 S.U.	-	8.5 S.U.	2X Monthly	Grab	WQBEL
Solids, Total Suspended	-	-	-	-	50 mg/l	2X Monthly	Grab	BPJ
Nitrogen, Ammonia Total (As N)	-	-	-	2.4 mg/l	3.6 mg/l	2X Monthly	Grab	WQBEL
Oil & Grease	-	-	-	-	15 mg/l	2X Monthly	Grab	BPJ
Nitrogen, Kjeldahl Total (As N) (1)	-	-	-	-	REPORT mg/l	Monthly	Grab	WQBEL
Nitrite Plus Nitrate Total 1 Det. (As N) (1)	-	-	-	-	REPORT mg/l	Monthly	Grab	WQBEL
Phosphorus, Total (As P)	-	-	-	-	1.0 mg/l	2X Monthly	Grab	BPJ
Iron, Total (As Fe)	-	-	-	-	REPORT mg/l	2X Monthly	Grab	BPJ
Manganese, Total (As Mn)	-	-	-	-	REPORT mg/l	2X Monthly	Grab	BPJ
Thallium, Total (As Tl)	-	-	-	0.274 ug/l	0.411 ug/l	Monthly	Grab	WQBEL
Selenium, Total (As Se)	-	-	-	0.005 mg/l	0.0075 mg/l	2X Monthly	Grab	WQBEL
Methyl Tert-Butyl Ether	-	-	-	-	REPORT mg/l	2X Monthly	Grab	BPJ
Toluene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	BPJ
Benzene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	BPJ
Ethylbenzene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	BPJ
Naphthalene	-	-	-	-	REPORT mg/l	2X Monthly	Grab	BPJ
Flow, In Conduit or Thru Treatment Plant	-	-	-	-	REPORT MGD	2X Monthly	Estimate	BPJ
Chlorine, Total Residual	-	-	-	0.011 mg/l	0.019 mg/l	2X Monthly	Grab	WQBEL
BOD, Carbonaceous 05 Day, 20C	-	-	-	10.0 mg/l	15.0 mg/l	2X Monthly	Grab	WQBEL
Xylene	-	-	-	-	REPORT mg/l	Monthly	Grab	BPJ

(1) Monitoring applies for the months of May, June, July, August, and September

001T:

Parameter	Monthly Avg Loading	Daily Max Loading	Daily Min Concentration	Monthly Avg Concentration	Daily Max Concentration	Sample Frequency	Sample Type	Basis*
Toxicity, Ceriodaphnia Chronic	-	0 pass(0)/fail(1)	-	-	-	Semi-Annually	Composite	BPJ
Toxicity, Pimephales Chronic	-	0 pass(0)/fail(1)	-	-	-	Semi-Annually	Composite	BPJ

*Basis for Permit Limitation

- BPJ – Best Professional Judgment
- WQBEL – Water Quality Based Effluent Limits
- EGL – Federal Effluent Guideline Limitations
- 303(d) – 303(d) List of Impaired Waters
- TMDL – Total Maximum Daily Load Requirement

Discussion

DSN0011

Best Professional Judgment (BPJ)
The parameters of concern for this facility are based on the parameters of concern listed in EPA form 2F and from the current permit. These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility. The parameters with specific limits are discussed below:

Oil & Grease
The daily maximum limit for Oil and Grease should prevent the occurrence of a visible sheen in the stream and has been shown to be achievable through the use of proper BMPs.

Benzene, Toluene, Ethylbenzene, Xylene, Naphthalene, Methyl Tert-Butyl Ether
Stormwater monitoring for benzene, toluene, ethylbenzene, xylene, naphthalene, and methyl tert-butyl Ether was monitored in the General Permit and shall continue in the individual due to the presence of fueling areas and the bulk storage of petroleum. Spills from petroleum handling areas have been shown to contain levels of volatile organics, specifically naphthalene, benzene, toluene, ethyl benzene, xylene (BTEX), and methyl tert-butyl ether.

Total Iron, Total Manganese, Total Suspended Solids
Based on the presence of coal cinders storage at the facility Total Iron, Total Manganese, and Total Suspended solids will be monitored in this permit issuance.

Best Management Practices (BMPs) are believed to be the most effective way to control the contamination of stormwater from areas of industrial activities. This facility is required to maintain a BMP plan. The requirements of the BMP plan call for minimization of stormwater contact with waste materials, products and by-products, and for prevention of spills or loss of fluids from equipment maintenance activities. The effectiveness of the BMPs will be measured through the monitoring of the pollutants of concern.

DSN0021

Best Professional Judgment (BPJ)
The parameters of concern for this facility are based on the parameters of concern listed in EPA form 2C and from the current permit. These parameters are consistent with similar facilities in the state and have been proven to be reflective of the operations at this facility. The parameters with specific limits are discussed below:

pH
ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09(5) – Specific Water Quality for Fish and Wildlife classified streams states: "Sewage, industrial waste or other wastes shall not cause the pH to deviate more than one unit from then normal or natural pH, nor be less than 6.0, nor greater than 8.5 standard units."

Oil & Grease
The daily maximum limit for Oil and Grease should prevent the occurrence of a visible sheen in the stream and has been shown to be achievable through the use of proper BMPs.

Benzene, Toluene, Ethylbenzene, Xylene, Naphthalene, Methyl Tert-Butyl Ether
Benzene, toluene, ethylbenzene, xylene, naphthalene, and methyl tert-butyl Ether shall be monitored due to the presence of fueling areas and the bulk storage of petroleum. Spills from petroleum handling areas have been shown to contain levels of volatile organics, specifically naphthalene, benzene, toluene, ethyl benzene, xylene (BTEX), and methyl tert-butyl ether.

Total Iron, Total Manganese
Based on the presence of coal cinders storage at the facility Total Iron, and Total Manganese will be monitored in this permit issuance.

Total Suspended Solids and Total Phosphorus
Monitoring for total suspended solids and phosphorus was required in the previous permit with limits of 50 mg/l and 1 mg/l. It is proposed to continue monitor with those limits.

Total Residual Chlorine
Due to the presence of chlorinated wash water, total residual chlorine shall be monitored. The Total Residual Chlorine (TRC) limits are based on the United States Environmental Protection Agency's (EPA) recommended water quality standard which considers the available dilution in the receiving stream. Because the receiving stream has a 7Q10 flow of 0 cfs, the limits are a monthly average of 0.011 mg/l and a daily maximum 0.19 mg/l. In accordance with a letter dated August 11, 1998 from EPA Headquarters and a 1991 memorandum from EPA Region 4's Environmental Services Division (ESD), due to testing and method detection limitations, a Total Residual Chlorine measurement below 0.05 mg/L shall be considered below detection for compliance purposes.

Acute Toxicity Biomonitoring
In view of the potential toxicity of the wastewater from synergistic effects, biomonitoring is required at this facility. Chronic Toxicity testing is proposed in the permit because the effluent flow is more than 1% of the 7Q10 of the receiving stream with no diffuser. The sampling and testing will be conducted at an In-Stream Waste Concentration (IWC) of 100 %. The IWC was determined using an assumed complete mix because the receiving stream 7Q10 is 0.0 cfs. The monitoring frequency shall be once per quarter.

Water Quality Based Effluent Limits (WQBEL)

Selenium, Thallium
The Department completed a reasonable potential analysis (RPA) of the discharge based on laboratory data provided in the Permittee's application. The RPA indicates whether pollutants in treated effluent have the potential to contribute to excursions of Alabama's in-stream water quality standards. Based on the analytical data available to the Department a reasonable potential exists to cause an in-stream water quality exceedance for Selenium and Thallium. As a result, the Department is imposing a daily maximum selenium limitation of 0.0075 mg/l and a monthly average of 0.005 mg/l, and a daily maximum thallium limitation of 0.411 ug/l and a monthly average of 0.274 ug/l,

Dissolved Oxygen (D.O.)
Based on a Waste Load Allocation performed by the Department's Water Quality Branch (see attached), a minimum Dissolved Oxygen of 6.0 mg/l is proposed.

Carbonaceous Biochemical Oxygen Demand (5 day) (CBOD5) and Ammonia-Nitrogen
Limits for cBOD5 and Ammonia-Nitrogen are based on a Waste Load Allocation performed by the Department's Water Quality Branch. The monthly average limits proposed by Water Quality of 10.0 mg/l CBOD5 and 2.4 mg/l Ammonia-Nitrogen were multiplied by a peaking factor of 1.5 to calculate a daily maximum limit.

Total Kjeldahl Nitrogen (TKN) and Nitrite Plus Nitrate
The monitor only requirement for Total Kjeldahl Nitrogen (TKN) and Nitrite Plus Nitrate during the growing season of April through September is based on the Waste Load Allocation performed by the Department's Water Quality Branch.

Receiving Stream
After a site visit from the ADEM Water Quality Branch it was determined that the receiving water body is an Unnamed Tributary to Mill Creek.

EPA Form 2C
In accordance with the instructions for EPA Form 2D, a completed EPA Form 2C shall be submitted no later than two years after the proposed facility begins discharging.

Facility Name: **Sequatchie 250 Parner Road**

NPDES No.: **AL0083259**

$$Q_d{*}C_d + Q_{d2}{*}C_{d2} + Q_s{*}C_s = Q_r{*}C_r$$

ID	Pollutant	Carcinogen "yes"	Type	Background from upstream source (C_{d2}) Daily Max	Background from upstream source (C_{d2}) Monthly Ave	Background Instream (C_s) Daily Max	Background Instream (C_s) Monthly Ave	Enter Max Daily Discharge as reported by Applicant (C_d) Max	Enter Avg Daily Discharge as reported by Applicant (C_d) Ave	Partition Coefficient (Stream / Lake)
				µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	
1	Antimony		Metals	0	0	0	0	0	0	-
2	**Arsenic*,****	YES	Metals	0	0	0	0	0	0	0.574
3	Beryllium		Metals	0	0	0	0	0	0	-
4	Cadmium**		Metals	0	0	0	0	0	0	0.238
5	Chromium / Chromium III**		Metals	0	0	0	0	43.6	43.6	0.210
6	Chromium / Chromium VI**		Metals	0	0	0	0	0	0	
7	Copper**		Metals	0	0	0	0	4.52	4.52	0.388
8	Lead**		Metals	0	0	0	0	0	0	0.467
9	Mercury**		Metals	0	0	0	0	0	0	0.302
10	Nickel**		Metals	0	0	0	0	2.95	2.95	0.505
11	Selenium		Metals	0	0	0	0	2.34	2.34	-
12	Silver		Metals	0	0	0	0	0	0	-
13	Thallium		Metals	0	0	0	0	2.34	2.34	-
14	Zinc**		Metals	0	0	0	0	41.2	41.2	0.330
15	Cyanide		Metals	0	0	0	0	0	0	-
16	Total Phenolic Compounds		Metals	0	0	0	0	0	0	-
17	Hardness (As CaCO3)		Metals	0	0	0	0	0	0	-
18	Acrolein		VOC	0	0	0	0	0	0	-
19	**Acrylonitrile***	YES	VOC	0	0	0	0	0	0	-
20	**Aldrin**	YES	VOC	0	0	0	0	0	0	-
21	**Benzene***	YES	VOC	0	0	0	0	0	0	-
22	**Bromoform***	YES	VOC	0	0	0	0	0	0	-
23	**Carbon Tetrachloride***	YES	VOC	0	0	0	0	0	0	-
24	**Chlordane**	YES	VOC	0	0	0	0	0	0	-
25	Clorobenzene		VOC	0	0	0	0	0	0	-
26	**Chlorodibromo-Methane***	YES	VOC	0	0	0	0	0	0	-
27	Chloroethane		VOC	0	0	0	0	0	0	-
28	2-Chloro-Ethylvinyl Ether		VOC	0	0	0	0	0	0	-
29	**ChloroForm***	YES	VOC	0	0	0	0	0	0	-
30	**4,4'-DDD**	YES	VOC	0	0	0	0	0	0	-
31	**4,4'-DDE**	YES	VOC	0	0	0	0	0	0	-
32	**4.4'-DDT**	YES	VOC	0	0	0	0	0	0	-
33	**Dichlorobromo-Methane***	YES	VOC	0	0	0	0	0	0	-
34	1, 1-Dichloroethane		VOC	0	0	0	0	0	0	-
35	**1, 2-Dichloroethane***	YES	VOC	0	0	0	0	0	0	-
36	Trans-1, 2-Dichloro-Ethylene		VOC	0	0	0	0	0	0	-
37	**1, 1-Dichloroethylene***	YES	VOC	0	0	0	0	0	0	-
38	1, 2-Dichloropropane		VOC	0	0	0	0	0	0	-
39	1, 3-Dichloro-Propylene		VOC	0	0	0	0	0	0	-
40	**Dieldrin**	YES	VOC	0	0	0	0	0	0	-
41	Ethylbenzene		VOC	0	0	0	0	0	0	-
42	Methyl Bromide		VOC	0	0	0	0	0	0	-
43	Methyl Chloride		VOC	0	0	0	0	0	0	-
44	**Methylene Chloride***	YES	VOC	0	0	0	0	0	0	-
45	**1, 1, 2, 2-Tetrachloro-Ethane***	YES	VOC	0	0	0	0	0	0	-
46	**Tetrachloro-Ethylene***	YES	VOC	0	0	0	0	0	0	-
47	Toluene		VOC	0	0	0	0	0	0	-
48	**Toxaphene**	YES	VOC	0	0	0	0	0	0	-
49	**Tributyltine (TBT)**	YES	VOC	0	0	0	0	0	0	-
50	1, 1, 1-Trichloroethane		VOC	0	0	0	0	0	0	-
51	**1, 1, 2-Trichloroethane***	YES	VOC	0	0	0	0	0	0	-
52	**Trichloroethylene***	YES	VOC	0	0	0	0	0	0	-
53	**Vinyl Chloride***	YES	VOC	0	0	0	0	0	0	-
54	P-Chloro-M-Cresol		Acids	0	0	0	0	0	0	-
55	2-Chlorophenol		Acids	0	0	0	0	0	0	-
56	2, 4-Dichlorophenol		Acids	0	0	0	0	0	0	-
57	2, 4-Dimethylphenol		Acids	0	0	0	0	0	0	-
58	4, 6-Dinitro-O-Cresol		Acids	0	0	0	0	0	0	-
59	2, 4-Dinitrophenol		Acids	0	0	0	0	0	0	-
60	**4,6-Dintro-2-methylophenol**	YES	Acids	0	0	0	0	0	0	-
61	**Diexin (2,3,7,8-TCDD)**	YES	Acids	0	0	0	0	0	0	-
62	2-Nitrophenol		Acids	0	0	0	0	0	0	-
63	4-Nitrophenol		Acids	0	0	0	0	0	0	-
64	**Pentachlorophenol***	YES	Acids	0	0	0	0	0	0	-
65	Phenol		Acids	0	0	0	0	0	0	-
66	**2, 4, 6-Trichlorophenol***	YES	Acids	0	0	0	0	0	0	-
67	Acenaphthene		Bases	0	0	0	0	0	0	-
68	Acenaphthylene		Bases	0	0	0	0	0	0	-
69	Anthracene		Bases	0	0	0	0	0	0	-
70	Benzidine		Bases	0	0	0	0	0	0	-
71	**Benzo(A)Anthracene***	YES	Bases	0	0	0	0	0	0	-
72	**Benzo(A)Pyrene***	YES	Bases	0	0	0	0	0	0	-
73	3, 4 Benzo-Fluoranthene		Bases	0	0	0	0	0	0	-
74	Benzo(GHI)Perylene		Bases	0	0	0	0	0	0	-
75	Benzo(K)Fluoranthene		Bases	0	0	0	0	0	0	-
76	Bis (2-Chloroethoxy) Methane		Bases	0	0	0	0	0	0	-
77	**Bis (2-Chloroethyl)-Ether***	YES	Bases	0	0	0	0	0	0	-
78	Bis (2-Chloroiso-Propyl) Ether		Bases	0	0	0	0	0	0	-
79	**Bis (2-Ethylhexyl) Phthalate***	YES	Bases	0	0	0	0	0	0	-
80	4-Bromophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
81	Butyl Benzyl Phthalate		Bases	0	0	0	0	0	0	-
82	2-Chloronaphthalene		Bases	0	0	0	0	0	0	-
83	4-Chlorophenyl Phenyl Ether		Bases	0	0	0	0	0	0	-
84	**Chrysene***	YES	Bases	0	0	0	0	0	0	-
85	Di-N-Butyl Phthalate		Bases	0	0	0	0	0	0	-
86	Di-N-Octyl Phthalate		Bases	0	0	0	0	0	0	-
87	**Dibenzo(A,H)Anthracene***	YES	Bases	0	0	0	0	0	0	-
88	1, 2-Dichlorobenzene		Bases	0	0	0	0	0	0	-
89	1, 3-Dichlorobenzene		Bases	0	0	0	0	0	0	-
90	1, 4-Dichlorobenzene		Bases	0	0	0	0	0	0	-
91	**3, 3-Dichlorobenzidine***	YES	Bases	0	0	0	0	0	0	-
92	Diethyl Phthalate		Bases	0	0	0	0	0	0	-
93	Dimethyl Phthalate		Bases	0	0	0	0	0	0	-
94	**2, 4-Dinitrotoluene***	YES	Bases	0	0	0	0	0	0	-
95	2, 6-Dinitrotoluene		Bases	0	0	0	0	0	0	-
96	1,2-Diphenylhydrazine		Bases	0	0	0	0	0	0	-
97	**Endosulfan (alpha)**	YES	Bases	0	0	0	0	0	0	-
98	**Endosulfan (beta)**	YES	Bases	0	0	0	0	0	0	-
99	**Endosulfan sulfate**	YES	Bases	0	0	0	0	0	0	-
100	**Endrin**	YES	Bases	0	0	0	0	0	0	-
101	**Endrin Aldeyhide**	YES	Bases	0	0	0	0	0	0	-
102	Fluoranthene		Bases	0	0	0	0	0	0	-
103	Fluorene		Bases	0	0	0	0	0	0	-
104	Heptochlor	YES	Bases	0	0	0	0	0	0	-
105	Heptachlor Epoxide	YES	Bases	0	0	0	0	0	0	-
106	**Hexachlorobenzene***	YES	Bases	0	0	0	0	0	0	-
107	**Hexachlorobutadiene***	YES	Bases	0	0	0	0	0	0	-
108	**Hexachlorocyclohexan (alpa)**	YES	Bases	0	0	0	0	0	0	-
109	**Hexachlorocyclohexan (beta)**	YES	Bases	0	0	0	0	0	0	-
110	**Hexachlorocyclohexan (gamma)**	YES	Bases	0	0	0	0	0	0	-
111	HexachlorocyclePentadiene		Bases	0	0	0	0	0	0	-
112	Hexachloroethane		Bases	0	0	0	0	0	0	-
113	**Indeno(1, 2, 3-CK)Pyrene***	YES	Bases	0	0	0	0	0	0	-
114	Isophorone		Bases	0	0	0	0	0	0	-
115	Naphthalene		Bases	0	0	0	0	0	0	-
116	Nitrobenzene		Bases	0	0	0	0	0	0	-
117	**N-Nitrosodi-N-Propylamine***	YES	Bases	0	0	0	0	0	0	-
118	**N-Nitrosodi-N-Methylamine***	YES	Bases	0	0	0	0	0	0	-
119	**N-Nitrosodi-N-Phenylamine***	YES	Bases	0	0	0	0	0	0	-
120	**PCB-1016**	YES	Bases	0	0	0	0	0	0	-
121	**PCB-1221**	YES	Bases	0	0	0	0	0	0	-
122	**PCB-1232**	YES	Bases	0	0	0	0	0	0	-
123	**PCB-1242**	YES	Bases	0	0	0	0	0	0	-
124	**PCB-1248**	YES	Bases	0	0	0	0	0	0	-
125	**PCB-1254**	YES	Bases	0	0	0	0	0	0	-
126	**PCB-1260**	YES	Bases	0	0	0	0	0	0	-
127	Phenanthrene		Bases	0	0	0	0	0	0	-
128	Pyrene		Bases	0	0	0	0	0	0	-
129	1, 2, 4-Trichlorobenzene		Bases	0	0	0	0	0	0	-

0.0003	Enter Q_d = wastewater discharge flow from facility (MGD)
0.00046417	Q_d = wastewater discharge flow (cfs) (this value is caluclated from the MGD)
0	Enter flow from upstream discharge Qd2 = background stream flow in MGD above point of discharge
0	Qd2 = background stream flow from upstream source (cfs)
0	Enter 7Q10, Q_s = background stream flow in cfs above point of discharge
0	Enter or estimated, 1Q10, Q_s = background stream flow in cfs above point of discharge (1Q10 estimated at 75% of 7Q10)
0.47	Enter Mean Annual Flow, Q_s = background stream flow in cfs above point of discharge
0	Enter 7Q2, Q_s = background stream flow in cfs above point of discharge (For LWF class streams)
Enter to Left	Enter C_s = background in-stream pollutant concentration in µg/l (assuming this is zero "0" unless there is data)
Q_s +Qd2+Q_d	Q_r = resultant in-stream flow, after discharge
Calculated on other	C_r = resultant in-stream pollutant concentration in µg/l in the stream (after complete mixing occurs)
100	Enter, Background Hardness above point of discharge (assumed 50 South of Birmingham and 100 North of Birmingham)
7.00 s.u.	Enter, Background pH above point of discharge
YES	Enter, Is discharge to a stream? "YES" Other option would be to a Lake. (This changes the partition coefficients for the metals)

** Using Partition Coefficients

April 30, 2020

Facility Name: Sequatchie 250 Parner Road

NPDES No.: AL0083259

Freshwater F&W classification.					Max Daily Discharge as reported by Applicant (C_{max})	Freshwater Acute (µg/l) Q_s =1Q10					Avg Daily Discharge as reported by Applicant (C_{avg})	Freshwater Chronic (µg/l) Q_s = 7Q10				Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background from upstream source (Cd2) Daily Max		Water Quality Criteria (C_c)	Draft Permit Limit (C_{draft})	20% of Draft Permit Limit	RP?	Background from upstream source (Cd2) Monthly Ave		Water Quality Criteria (C_c)	Draft Permit Limit (C_{draft})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_c)	Draft Permit Limit (C_{draft})	20% of Draft Permit Limit	RP?
1	Antimony			0	0	-	-	-	-	0	0	-	-	-	-	3.73E+02	3.73E+02	7.47E+01	No
2	Arsenic		YES	0	0	592.334	592.334	118.467	No	0	0	261.324	261.324	52.265	No	3.03E-01	3.07E+02	6.14E+01	No
3	Berylium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	8.533	8.533	1.707	No	0	0	1.042	1.042	0.208	No	-	-	-	-
5	Chromium/ Chromium III			0	43.6	2713.159	2713.159	542.632	No	0	43.6	352.926	352.926	70.585	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	16.000	3.200	No	0	0	11.000	11.000	2.200	No	-	-	-	-
7	Copper			0	4.52	34.837	34.837	6.927	No	0	4.52	23.062	23.062	4.616	No	-	-	-	-
8	Lead			0	0	138.290	138.290	27.658	No	0	0	5.389	5.389	1.078	No	-	-	-	-
9	Mercury			0	0	2.400	2.400	0.460	No	0	0	0.012	0.012	0.002	No	4.24E-02	4.24E-02	8.48E-03	No
10	Nickel			0	2.95	927.200	927.200	185.440	No	0	2.95	102.983	102.983	20.597	No	9.93E+02	9.93E+02	1.99E+02	No
11	Selenium	YES		0	2.34	20.000	20.000	4.000	No	0	2.34	5.000	5.000	1.000	Yes	2.43E+03	2.43E+03	4.86E+02	No
12	Silver			0	0	3.217	3.217	0.643	No	0	0	-	-	-	-	-	-	-	-
13	Thallium	YES		0	2.34	-	-	-	-	0	2.34	-	-	-	-	2.74E-01	2.74E-01	5.47E-02	Yes
14	Zinc			0	41.2	355.092	355.092	71.018	No	0	41.2	357.997	357.997	71.599	No	1.49E+04	1.49E+04	2.98E+03	No
15	Cyanide			0	0	22.000	22.000	4.400	No	0	0	5.200	5.200	1.040	No	9.33E+03	9.33E+03	1.67E+03	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
18	Acrolein			0	0	-	-	-	-	0	0	-	-	-	-	5.43E+00	5.43E+00	1.09E+00	No
19	Acrylonitrile		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.44E-01	1.46E+02	2.92E+01	No
20	Aldrin		YES	0	0	3.000	3.000	0.600	No	0	0	-	-	-	-	2.94E-05	2.98E-02	5.96E-03	No
21	Benzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.55E+01	1.57E+04	3.14E+03	No
22	Bromoform		YES	0	0	-	-	-	-	0	0	-	-	-	-	7.88E+01	7.98E+04	1.60E+04	No
23	Carbon Tetrachloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.57E-01	9.70E+02	1.94E+02	No
24	Chlordane		YES	0	0	2.400	2.400	0.480	No	0	0	0.0043	0.004	0.001	No	4.73E-04	4.79E-01	9.58E-02	No
25	Clorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	9.08E+02	9.06E+02	1.81E+02	No
26	Chlorodibromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	7.41E+00	7.51E+03	1.50E+03	No
27	Chloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
28	2-Chloro-Ethylvinyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
29	ChloroForm		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.02E+02	1.03E+05	2.07E+04	No
30	4,4' - DDD		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.81E-04	1.84E-01	3.68E-02	No
31	4,4' - DDE		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.29E-04	1.30E-01	2.60E-02	No
32	4,4' - DDT		YES	0	0	1.100	1.100	0.220	No	0	0	0.001	0.001	0.000	No	1.28E-04	1.30E-01	2.60E-02	No
33	Dichlorobromo-Methane		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.00E+01	1.02E+04	2.03E+03	No
34	1, 1-Dichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
35	1, 2-Dichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.14E+01	2.17E+04	4.33E+03	No
36	Trans-1, 2-Dichloro-Ethylene			0	0	-	-	-	-	0	0	-	-	-	-	5.91E+03	5.91E+03	1.18E+03	No
37	1, 1-Dichloroethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	4.17E+03	4.22E+06	8.45E+05	No
38	1, 2-Dichloropropane			0	0	-	-	-	-	0	0	-	-	-	-	8.49E+03	8.49E+00	1.70E+00	No
39	1, 3-Dichloro-Propylene			0	0	-	-	-	-	0	0	-	-	-	-	1.23E+01	1.23E+01	2.46E+00	No
40	Dieldrin		YES	0	0	0.240	0.240	0.048	No	0	0	0.056	0.056	0.011	No	3.12E-05	3.17E-02	6.33E-03	No
41	Ethylbenzene			0	0	-	-	-	-	0	0	-	-	-	-	1.24E+03	1.24E+03	2.49E+02	No
42	Methyl Bromide			0	0	-	-	-	-	0	0	-	-	-	-	8.71E+02	8.71E+02	1.74E+02	No
43	Methyl Chloride			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
44	Methylene Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.45E+02	3.50E+05	7.01E+04	No
45	1, 1, 2, 2-Tetrachloro-Ethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.30E+00	2.38E+03	4.73E+02	No
46	Tetrachloro-Ethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.82E+00	1.94E+03	3.89E+02	No
47	Toluene			0	0	-	-	-	-	0	0	-	-	-	-	8.72E+03	8.72E+03	1.74E+03	No
48	Toxaphene		YES	0	0	0.730	0.730	0.146	No	0	0	0.0002	0.000	0.000	No	1.62E-04	1.64E-01	3.28E-02	No
49	Tributyltin (TBT)		YES	0	0	0.460	0.460	0.092	No	0	0	0.072	0.072	0.014	No	-	-	-	-
50	1, 1, 1-Trichloroethane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
51	1, 1, 2-Trichloroethane		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.10E+00	9.22E+03	1.84E+03	No
52	Trichlorethylene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.75E+01	1.77E+04	3.54E+03	No
53	Vinyl Chloride		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.42E+00	1.44E+03	2.89E+02	No
54	P-Chloro-M-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
55	2-Chlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	8.71E+01	8.71E+01	1.74E+01	No
56	2, 4-Dichlorophenol			0	0	-	-	-	-	0	0	-	-	-	-	1.72E+02	1.72E+02	3.44E+01	No
57	2, 4-Dimethylphenol			0	0	-	-	-	-	0	0	-	-	-	-	4.98E+02	4.98E+02	9.95E+01	No
58	4, 6-Dinitro-O-Cresol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
59	2, 4-Dinitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	3.11E+03	3.11E+03	6.22E+02	No
60	4,6-Dinitro-2-methylphenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.65E+02	1.68E+05	3.35E+04	No
61	Dioxin (2,3,7,8-TCDD)		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.87E-08	2.70E-05	5.41E-06	No
62	2-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
63	4-Nitrophenol			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
64	Pentachlorophenol		YES	0	0	8.723	8.723	1.745	No	0	0	6.693	6.693	1.339	No	1.77E+00	1.79E+03	3.58E+02	No
65	Phenol			0	0	-	-	-	-	0	0	-	-	-	-	5.00E+05	5.00E+05	1.00E+05	No
66	2, 4, 6-Trichlorophenol		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.41E+00	1.43E+03	2.87E+02	No
67	Acenaphthene			0	0	-	-	-	-	0	0	-	-	-	-	5.79E+02	5.79E+02	1.16E+02	No
68	Acenaphthylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
69	Anthracene			0	0	-	-	-	-	0	0	-	-	-	-	2.33E+04	2.33E+04	4.67E+03	No
70	Benzidine			0	0	-	-	-	-	0	0	-	-	-	-	1.16E-04	1.16E-04	2.32E-05	No
71	Benzo(A)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.08E+01	2.16E+00	No
72	Benzo(A)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.08E+01	2.16E+00	No
73	Benzo(b)fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.07E-02	2.13E-03	No
74	Benzo(GHI)Perylene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
75	Benzo(K)Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.07E-02	2.13E-03	No
76	Bis (2-Chloroethoxy) Methane			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
77	Bis (2-Chloroethyl)-Ether		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.07E-01	3.12E+02	6.23E+01	No
78	Bis (2-Chloroiso-Propyl) Ether			0	0	-	-	-	-	0	0	-	-	-	-	3.78E+04	3.78E+04	7.56E+03	No
79	Bis (2-Ethylhexyl) Phthalate		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.28E+00	1.30E+03	2.60E+02	No
80	4-Bromophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
81	Butyl Benzyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	1.13E+03	1.13E+03	2.25E+02	No
82	2-Chloronaphthalene			0	0	-	-	-	-	0	0	-	-	-	-	9.24E+02	9.24E+02	1.85E+02	No
83	4-Chlorophenyl Phenyl Ether			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
84	Chrysene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.08E+01	2.16E+00	No
85	Di-N-Butyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	2.62E+03	2.62E+03	5.24E+02	No
86	Di-N-Octyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
87	Dibenzo(A,H)Anthracene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.08E+01	2.16E+00	No
88	1, 2-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	7.55E+02	7.55E+02	1.51E+02	No
89	1, 3-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	5.62E+02	5.62E+02	1.12E+02	No
90	1, 4-Dichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	1.12E+02	1.12E+02	2.25E+01	No
91	3, 3-Dichlorobenzidine		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.68E-02	1.68E+01	3.37E+00	No
92	Diethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	2.56E-04	2.56E+04	5.11E+03	No
93	Dimethyl Phthalate			0	0	-	-	-	-	0	0	-	-	-	-	6.48E+05	6.48E+05	1.30E+05	No
94	2, 4-Dinitrotoluene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.98E+00	2.01E+03	4.02E+02	No
95	2, 6-Dinitrotoluene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
96	1,2-Diphenylhydrazine			0	0	-	-	-	-	0	0	-	-	-	-	1.17E-01	1.17E-01	2.34E-02	No
97	Endosulfan (alpha)		YES	0	0	0.22	0.220	0.044	No	0	0	0.056	0.056	0.011	No	5.19E+01	5.26E+04	1.05E+04	No
98	Endosulfan (beta)		YES	0	0	0.22	0.220	0.044	No	0	0	0.056	0.056	0.011	No	5.19E+01	5.26E+04	1.05E+04	No
99	Endosulfan sulfate		YES	0	0	-	-	-	-	0	0	-	-	-	-	5.19E+01	5.26E+04	1.05E+04	No
100	Endrin		YES	0	0	0.086	0.086	0.017	No	0	0	0.036	0.036	0.007	No	3.53E-02	3.57E+01	7.15E+00	No
101	Endrin Aldeyhde		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.78E-01	1.79E+02	3.57E+01	No
102	Fluoranthene			0	0	-	-	-	-	0	0	-	-	-	-	8.12E+01	8.12E+01	1.62E+01	No
103	Fluorene			0	0	-	-	-	-	0	0	-	-	-	-	3.11E+03	3.11E+03	6.22E+02	No
104	Heptochlor		YES	0	0	0.52	0.520	0.104	No	0	0	0.0038	0.004	0.001	No	4.63E-06	4.69E-02	9.38E-03	No
105	Heptachlor Epoxide		YES	0	0	0.52	0.520	0.104	No	0	0	0.0038	0.004	0.001	No	2.29E-05	2.32E-02	4.64E-03	No
106	Hexachlorobenzene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.68E-04	1.70E-01	3.40E-02	No
107	Hexachlorobutadiene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.08E+01	1.09E+04	2.18E+03	No
108	Hexachlorocyclohexan (alpha)		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.86E-03	2.89E+00	5.78E-01	No
109	Hexachlorocyclohexan (beta)		YES	0	0	-	-	-	-	0	0	-	-	-	-	9.97E-03	1.01E+01	2.02E+00	No
110	Hexachlorocyclohexan (gamma)		YES	0	0	0.95	0.950	0.190	No	0	0	-	-	-	-	1.08E+00	1.09E+03	2.18E+02	No
111	HexachlorocyclopPentadiene			0	0	-	-	-	-	0	0	-	-	-	-	6.45E+02	6.45E+02	1.29E+02	No
112	Hexachloroethane			0	0	-	-	-	-	0	0	-	-	-	-	1.92E+00	1.92E+00	3.84E-01	No
113	Indeno(1, 2, 3-CK)Pyrene		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.07E-02	1.08E+01	2.16E+00	No
114	Isophorone			0	0	-	-	-	-	0	0	-	-	-	-	5.61E+02	5.61E+02	1.12E+02	No
115	Naphthalene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
116	Nitrobenzene			0	0	-	-	-	-	0	0	-	-	-	-	4.04E+02	4.04E+02	8.07E+01	No
117	N-Nitrosodi-N-Propylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	2.95E-01	2.99E+02	5.98E+01	No
118	N-Nitrosodimethylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	1.76E+00	1.78E+03	3.57E+02	No
119	N-Nitrosodiphenylamine		YES	0	0	-	-	-	-	0	0	-	-	-	-	3.50E+00	3.55E+03	7.10E+02	No
120	PCB-1016		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	3.79E-02	7.58E-03	No
121	PCB-1221		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	3.79E-02	7.58E-03	No
122	PCB-1232		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	3.79E-02	7.58E-03	No
123	PCB-1242		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	3.79E-02	7.58E-03	No
124	PCB-1248		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	3.79E-02	7.58E-03	No
125	PCB-1254		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	3.79E-02	7.58E-03	No
126	PCB-1260		YES	0	0	-	-	-	-	0	0	0.014	0.014	0.003	No	3.74E-05	3.79E-02	7.58E-03	No
127	Phenanthrene			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
128	Pyrene			0	0	-	-	-	-	0	0	-	-	-	-	2.33E+03	2.33E+03	4.67E+02	No
129	1, 2, 4-Trichlorobenzene			0	0	-	-	-	-	0	0	-	-	-	-	4.09E+01	4.09E+01	8.19E+00	No

SEQUATCHIE CONCRETE SERVICE
P.O. BOX 11869
Knoxville, Tennessee 37901

RECEIVED
DEC 29 2016
IND / MUN BRANCH

December 27, 2016

ADEM
1400 Coliseum Blvd.
Montgomery, Al 36110-2400

To whom it may concern:

Included are the Application packets that were requested for ALG110150 and ALG110125 for completion of the new individual permits for those sites. If anything more is needed please let me know, I can be reached at the letterhead address, by phone at 615-556-0731 or by email at echambers@seqconcrete.com.

Sincerely,

E. Chambers

Emily Chambers
EHS Director
Sequatchie Concrete Service, Inc.

Waste Load Allocation Summary

REQUEST INFORMATION **Request Number:** 3481

From:	Rachel Stanaland	**In Branch/Section**	Industrial		
Date Submitted	4/25/2018	**Date Required**	5/25/2018	**FUND Code**	605
Date Permit application received by NPDES program	11/7/2016				

Receiving Waterbody Unnamed Tributary to Mill Creek

Previous Stream Name

Facility Name Sequatchie Concrete Palmer Road (Name of Discharger-WQ will use to file)

Previous Discharger Name

River Basin Tennessee **Outfall Latitude** 34.692204 (decimal degrees)

***County** Madison **Outfall Longitude** -86.764875 (decimal degrees)

Permit Number **AL0083259** **Permit Type** New Discharge and Permit

Permit Status Proposed

Type of Discharger INDUSTRIAL

Do other discharges exist that may impact the model? ☐ Yes ☑ No

If yes, impacting dischargers names.

Impacting dischargers permit numbers.

Existing Discharge Design Flow 0.0003 **MGD**

Proposed Discharge Design Flow **MGD**

Note: The flow rates given should be those requested for modeling.

Comments included ☑ Yes ☐ No

Information Verified By JJM

Year File Was Created 2018

Response ID Number 1651

Lat/Long Method GPS

12 Digit HUC Code 060300020504

Use Classification F&W

Site Visit Completed? ☑ Yes ☐ No

Date of Site Visit 6/29/2018

Waterbody Impaired? ☐ Yes ☑ No

Date of WLA Response 8/2/2018

Antidegradation ☑ Yes ☐ No

Approved TMDL? ☐ Yes ☑ No

Waterbody Tier Level Tier II

Use Support Category 3

Approval Date of TMDL

Waste Load Allocation Information

Modeled Reach Length 2.18 **Miles**

Date of Allocation 7/9/2018

Name of Model Used SWQM

Allocation Type Annual

Model Completed by James Mooney

Type of Model Used Desk-top

Allocation Developed by Water Quality Branch

Waste Load Allocation Summary

Annual Effluent Limits		
Qw	0.0003	MGD
CBOD5	10	mg/L
NH3-N	2.4	mg/L
TKN		
D.O.	6	mg/L

Conventional Parameters					
Qw		MGD	Qw		MGD
Season			Season		
From			From		
Through			Through		
CBOD5			CBOD5		
NH3-N			NH3-N		
TKN			TKN		
D.O.			D.O.		

Other Parameters					
Qw		MGD	Qw		MGD
Season			Season		
From			From		
Through			Through		
TP			TP		
TN			TN		
TSS			TSS		

"Monitor Only" Parameters for Effluent:	Parameter	Frequency	Parameter	Frequency
	TP	Monthly(Apr-Oct)		
	NO2+NO3-N	Monthly(Apr-Sept)		
	TKN	Monthly(Apr-Sept)		

Water Quality Characteristics Immediately Upstream of Discharge

Parameter	Summer		Winter	
CBODu	2	mg/l		mg/l
NH3-N	0.11	mg/l		mg/l
Temperature	28	°C		°C
pH	7	su		su

Hydrology at Discharge Location

Drainage Area Qualifier	Drainage Area			Method Used to Calculate
Exact	Drainage Area	0.32	sq mi	
	Stream 7Q10	0	cfs	<5.0 sq mi - Bingham Equation
	Stream 1Q10	0	cfs	<5.0 sq mi - Bingham Equation
	Stream 7Q2	0	cfs	<5.0 sq mi - Bingham Equation
	Annual Average	0.47	cfs	ADEM Estimate w/USGS Gage Data

Comments and/or Notations

The receiving waterbody was originally listed as Unnamed Tributary to Bradford Creek. Based upon site visit, the receiving waterbody has been revised to an Unnamed Tributary to Mill Creek.

LANCE R. LEFLEUR
DIRECTOR

KAY IVEY
GOVERNOR

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

August 2, 2018
Memorandum:

To: Rachel Stanaland
Industrial/Municipal Branch
From: James Mooney
Water Quality Branch
RE: Sequatchie Concrete Palmer Road (NPDES # AL0083259)

The Water Quality Branch has completed the Waste Load Allocation (WLA) for the Sequatchie Concrete Palmer Road discharge to an Unnamed Tributary to Mill Creek. The Department's Spreadsheet Water Quality Model (SWQM) was utilized to evaluate the necessary effluent limitations. The use classification for the Unnamed Tributary to Mill Creek at the discharge location is Fish and Wildlife (F&W). Departmental regulations dictate the following in regards to applicable dissolved oxygen criteria for the Fish and Wildlife use classification: "*For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5 mg/l at all times" (335-6-10-.09)*. The table below depicts the necessary effluent limitations that are expected to be protective of water quality and maintain instream DO concentrations above 5 mg/l.

Sequatchie Concrete Palmer Road (AL0083259)
Qw= 0.0003 MGD

Parameter	Effluent Limit
$CBOD_5$ (mg/l):	10
NH_3-N [a] (mg/l):	2.4[a]
Minimum Dissolved Oxygen (mg/l)	6

a. Based upon Chronic Ammonia Toxicity

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

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

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

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

Waste Load Allocation Rationale

Facility: Sequatchie Concrete Palmer Road

Discharge Location: 34.692204, -86.764875

Receiving Waterbody: Unnamed Tributary to Mill Creek

Effluent Flow Rate: 0.0003 MGD

Date: August 2nd, 2018

Background

An annual WLA was requested by Rachel Stanaland of the NPDES Industrial Section on April 25th, 2018 for Sequatchie Concrete Palmer Road. Sequatchie Concrete manufactures ready mixed concrete in addition to concrete blocks. The source water of the effluent includes both water used to spray the aggregate piles and also water collected from washing out the concrete trucks. The use classification for the Unnamed Tributary to Mill Creek at the discharge location is Fish and Wildlife (F&W). Departmental regulations dictate the following in regards to applicable dissolved oxygen criteria for the Fish and Wildlife use classification: *"For a diversified warm water biota, including game fish, daily dissolved oxygen concentrations shall not be less than 5 mg/l at all times" (335-6-10-.09)*

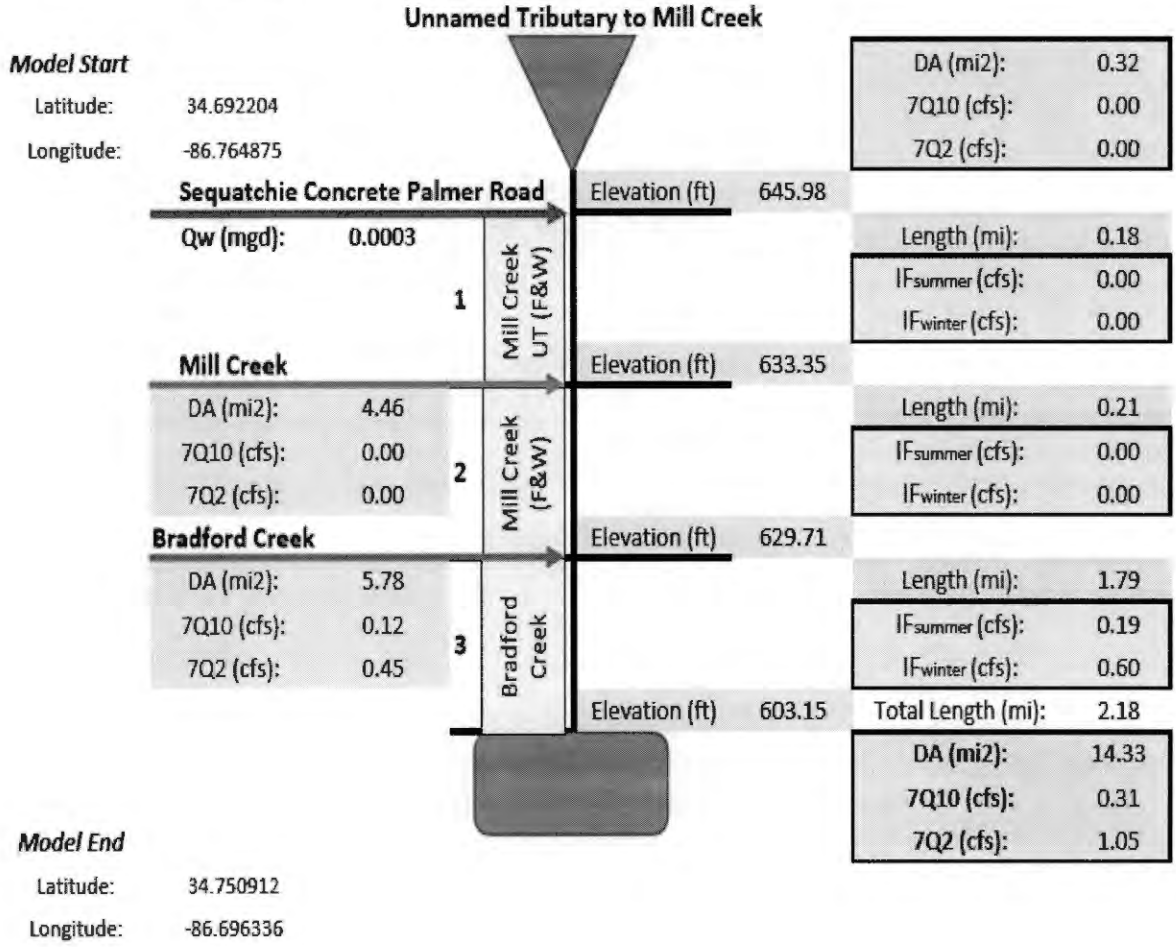
Modeled Reach Description

The evaluation of the allowable effluent limitations for the discharge to the Unnamed Tributary to Mill Creek consisted of utilizing the Department's Spreadsheet Water Quality Model (SWQM). The modeled reach consisted of 3 segments totaling 2.18 miles, beginning at the discharge location and terminating on Bradford Creek at the Interstate 565 stream crossing. A one meter Bare Earth DEM Lidar Elevation Dataset was downloaded from the NRCS data gateway and utilized in determining the elevations for the Sequatchie Concrete Palmer Road SWQM. The figure below illustrates the Unnamed Tributary to Mill Creek SWQM reach schematic.

Figure 1. Unnamed Tributary to Mill Creek SWQM Reach Schematic

Sequatchie Concrete Palmer Road WLA

Date: 7/9/2018



Low Flow Calculations:

The contributing watershed drainage area for both the Unnamed Tributary to Mill Creek at the discharge location and also Mill Creek at the confluence with the Unnamed Tributary were less than 5.0 mi^2, therefore, the low flow 7Q10 statistics were assumed to be zero. The Bingham equation was used to calculate the low flow statistics for Bradford Creek at the confluence with Mill Creek and also along Bradford Creek at the end of the modeled reach schematic. Incremental flow was not included in segments 1 and 2 because the receiving waterbody drainage area was less than 5.0 square miles; however, with the addition of Bradford Creek, incremental flow was included in segment 3.

Table 1. Bingham Equation Low Flow Statistics

Creek Name & Location:		**Bradford Creek at confluence with Mill Creek**
G =	50	Streamflow Recession Index
A =	5.78	Contributing Drainage Area in (sq. mi)
P =	57	Mean Annual Precipitation in (in.)
7Q10 =	0.12 cfs	7Q2 = 0.45 cfs

Creek Name & Location:		**Bradford Creek at Model End**
G =	50	Streamflow Recession Index
A =	14.33	Contributing Drainage Area in (sq. mi)
P =	57	Mean Annual Precipitation in (in.)
7Q10 =	0.31 cfs	7Q2 = 1.05 cfs

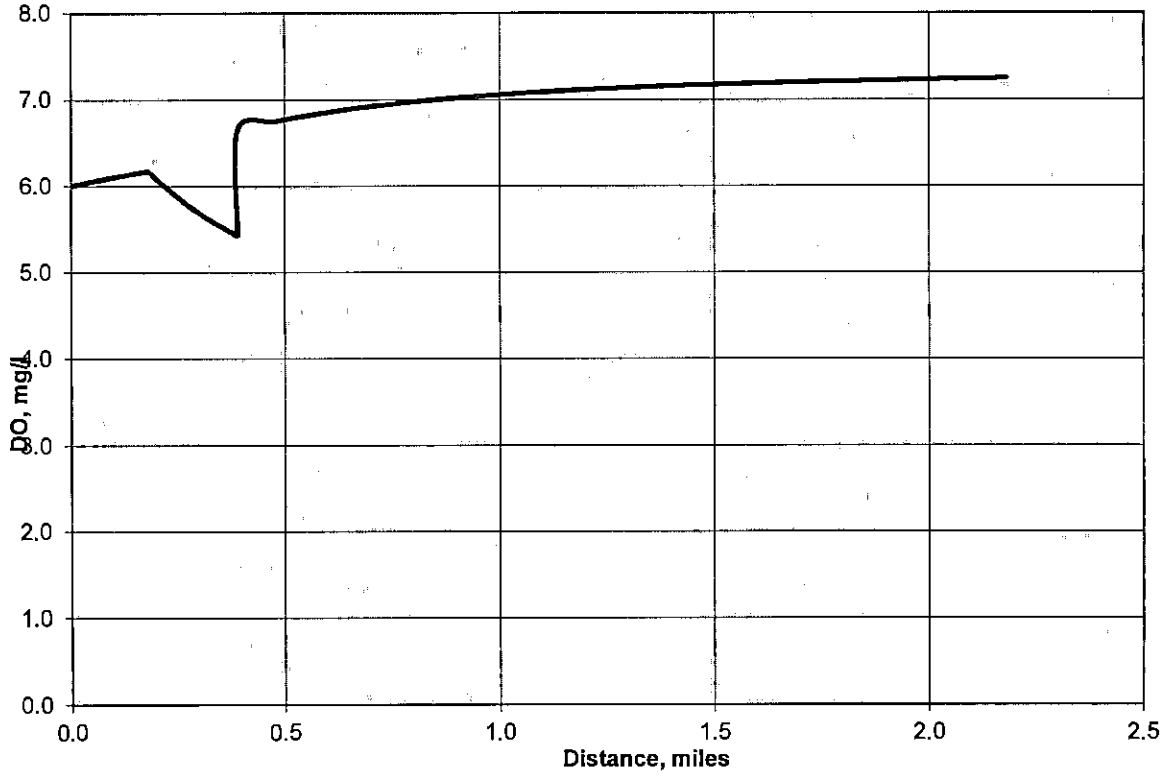
Application of Estimating Methods

The estimating methods consist of regression equations using a base flow recession index, drainage area, and mean annual precipitation. These methods can be used to estimate low flow in streams with drainage areas of 5 to 2,460 square miles. However, these methods should not be used where the low flow is significantly altered by activities of man, nor streams where the 7Q2 low flow is less than (0.3 cu. ft./s) and the 7Q10 low flow is less than (0.1 cu. ft./s)

Model Output Evaluation

Based upon the SWQM output, the predicted dissolved oxygen sag occurs in Mill Creek immediately prior to the confluence with the Bradford Creek. Based upon the allowable effluent limits for Sequatchie Creek Palmer Road, the minimum predicted dissolved oxygen concentration is 5.4285 mg/L. The figure below illustrates the predicted dissolved oxygen concentrations along the modeled reach:

Figure 2. Unnamed Tributary to Mill Creek SQWM - Dissolved Oxygen vs. Distance



Based upon an evaluation of model output, the following limits for the Sequatchie Concrete Palmer Road discharge to the Unnamed Tributary to Mill Creek are expected to be protective of water quality and maintain instream dissolved oxygen concentrations above 5.0 mg/l

Sequatchie Concrete Palmer Road (AL0083259)
Qw= 0.0003 MGD

Parameter	Effluent Limit
$CBOD_5$ (mg/l):	10
NH_3-N [a] (mg/l):	2.4 [a]
Minimum Dissolved Oxygen (mg/l)	6

a. Based upon Chronic Ammonia Toxicity

Spreadsheet Water Quality Model

Stream Name :	*Mill Creek UT*
River Basin :	*Tennessee*
County :	*Madison*

Modeled Reach :	Upstream Longitude	Upstream Latitude	Section	Township	Range
	-86.764875	34.692204			
	Downstream Longitude	Downstream Latitude	Section	Township	Range
	-86.696336	34.750912			
	Total Stream Length, miles	2.18			

Analysis Date :	August 2, 2018
Number of Sections :	3

Applicable Season:	Annual	Summer	Winter
		X	

Analysis Performed By :	JJM

Point Sources Included in the Model :	
Sequatchie	

Model Input :

Headwater Conditions :

CBODu, mg/l	NH3-N, mg/l	TON, mg/l	D.O., mg/l	Flow, cfs	Temp., °C
2.0000	0.1100	0.2200	6.65295	0.00	28

Tributary Conditions :

Section #	CBODu, mg/l	NH3-N, mg/l	TON, mg/l	D.O., mg/l	Flow, cfs	Temp., °C	Name
1	0.0000	0.0000	0.0000				
2	0.0000	0.0000	0.0000				
3	2.0000	0.1100	0.2200	6.65295	0.12	28.0	Bradford Ck
4	0.0000	0.0000	0.0000				
5	0.0000	0.0000	0.0000				
6	0.0000	0.0000	0.0000				
7	0.0000	0.0000	0.0000				
8	0.0000	0.0000	0.0000				
9	0.0000	0.0000	0.0000				
10	0.0000	0.0000	0.0000				
11	0.0000	0.0000	0.0000				
12	0.0000	0.0000	0.0000				
13	0.0000	0.0000	0.0000				
14	0.0000	0.0000	0.0000				
15	0.0000	0.0000	0.0000				
16	0.0000	0.0000	0.0000				
17	0.0000	0.0000	0.0000				
18	0.0000	0.0000	0.0000				
19	0.0000	0.0000	0.0000				
20	0.0000	0.0000	0.0000				
21	0.0000	0.0000	0.0000				
22	0.0000	0.0000	0.0000				
23	0.0000	0.0000	0.0000				
24	0.0000	0.0000	0.0000				

Model Input : Continued

Incremental Inflow Conditions :

Section #	CBODu, mg/l	NH3-N, mg/l	TON, mg/l	D.O., mg/l	Flow, cfs	Temp., °C
1	2.0000	0.1100	0.2200			
2	2.0000	0.1100	0.2200			
3	2.0000	0.1100	0.2200	6.65295	0.19	28.0
4	2.0000	0.1100	0.2200			
5	2.0000	0.1100	0.2200			
6	2.0000	0.1100	0.2200			
7	2.0000	0.1100	0.2200			
8	0.0000	0.0000	0.0000			
9	0.0000	0.0000	0.0000			
10	0.0000	0.0000	0.0000			
11	0.0000	0.0000	0.0000			
12	0.0000	0.0000	0.0000			
13	0.0000	0.0000	0.0000			
14	0.0000	0.0000	0.0000			
15	0.0000	0.0000	0.0000			
16	0.0000	0.0000	0.0000			
17	0.0000	0.0000	0.0000			
18	0.0000	0.0000	0.0000			
19	0.0000	0.0000	0.0000			
20	0.0000	0.0000	0.0000			
21	0.0000	0.0000	0.0000			
22	0.0000	0.0000	0.0000			
23	0.0000	0.0000	0.0000			
24	0.0000	0.0000	0.0000			

Model Input : Continued

Effluent Conditions :

Section #	Discharger	Flow, MGD	Flow, cfs	$CBOD_5$, mg/l	$CBODu/CBOD_5$	CBODu, mg/l	NH_3-N, mg/l	TON, mg/l	D.O., mg/l	Temp., °C
1	Sequatchie	0.0003	0.000	10	1.5	15.000	2.4	2.4	6	28.0
2			0.000			0.000				
3			0.000			0.000				
4			0.000			0.000				
5			0.000			0.000				
6			0.000			0.000				
7			0.000			0.000				
8			0.000			0.000				
9			0.000			0.000				
10			0.000			0.000				
11			0.000			0.000				
12			0.000			0.000				
13			0.000			0.000				
14			0.000			0.000				
15			0.000			0.000				
16			0.000			0.000				
17			0.000			0.000				
18			0.000			0.000				
19			0.000			0.000				
20			0.000			0.000				
21			0.000			0.000				
22			0.000			0.000				
23			0.000			0.000				
24			0.000			0.000				

Model Input : Continued

Section Characteristics :								*Dam Characteristics :*		
Section #	Length, miles	Upstream Elevation, feet	Downstream Elevation, feet	Average Elev., feet	Slope, ft/mile	Calculated Velocity or User Input Velocity?	User Input Velocity, feet/sec	Dam Height, feet	Water Quality Factor	Weir Coefficient
1	0.18	645.98	633.35	639.665	70.1667	Calculated				
2	0.21	633.35	629.71	631.53	17.3333	Calculated				
3	1.79	629.71	603.15	616.43	14.8380	Calculated				
4										
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6										
7										
8										
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22										
23										
24										

Model Input : Continued

Reaction Rates :

	Reaction Rates at 20° C					Reaction Rates at Ambient Temperature				
Section #	Kd, 1/day	K_{NH3}, 1/day	K_{TON}, 1/day	Computed Ka, 1/day	User Input Ka, 1/day	Ka, 1/day	Kd, 1/day	K_{NH3}, 1/day	K_{TON}, 1/day	Average Temp., °C
1	0.6	0.5	0.05	12.6300		15.2687	0.8664	0.8814	0.0722	28.0000
2	0.4	0.3	0.05	3.1200		3.7718	0.5776	0.5322	0.0722	28.0000
3	0.3	0.3	0.05	2.6708		3.2288	0.4332	0.5397	0.0722	28.0000
4										
5										
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24										

Model Input : Continued

Reaction Rates : Continued (OPTIONAL)							
		Reaction Rates at 20° C			Reaction Rates at Ambient Temperature		
Section #	Stream Depth, feet	SOD, gm-O_2/ft^2/day	$CBOD_{settling}$, 1/day	$TON_{settling}$, 1/day	SOD, gm-O_2/ft^2/day	$CBOD_{settling}$, 1/day	$TON_{settling}$, 1/day
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
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23							
24							

Model Output:

Minimum Dissolved Oxygen:	*5.4546 mg/l*
The Minimum DO occurs at:	*0.3900 miles*

Section Number	Increment Number	Distance, miles	Flow, cfs	Velocity, feet/sec	Total Travel Time, days	CBODu, mg/l	NH_3-N, mg/l	TON, mg/l	D.O., mg/l	Temp., °C
1	1	0.0000	0.0005	0.1000	0.0000	15.0000	2.4000	2.4000	6.0000	28.0000
1	2	0.0090	0.0005	0.1000	0.0055	14.9287	2.3893	2.3990	6.0121	28.0000
1	3	0.0180	0.0005	0.1000	0.0110	14.8577	2.3787	2.3981	6.0238	28.0000
1	4	0.0270	0.0005	0.1000	0.0165	14.7871	2.3682	2.3971	6.0352	28.0000
1	5	0.0360	0.0005	0.1000	0.0220	14.7168	2.3577	2.3962	6.0461	28.0000
1	6	0.0450	0.0005	0.1000	0.0275	14.6468	2.3472	2.3952	6.0567	28.0000
1	7	0.0540	0.0005	0.1000	0.0330	14.5772	2.3368	2.3943	6.0670	28.0000
1	8	0.0630	0.0005	0.1000	0.0385	14.5079	2.3264	2.3933	6.0770	28.0000
1	9	0.0720	0.0005	0.1000	0.0440	14.4389	2.3161	2.3924	6.0867	28.0000
1	10	0.0810	0.0005	0.1000	0.0495	14.3703	2.3058	2.3914	6.0962	28.0000
1	11	0.0900	0.0005	0.1000	0.0550	14.3020	2.2955	2.3905	6.1054	28.0000
1	12	0.0990	0.0005	0.1000	0.0605	14.2340	2.2854	2.3895	6.1144	28.0000
1	13	0.1080	0.0005	0.1000	0.0660	14.1663	2.2752	2.3886	6.1233	28.0000
1	14	0.1170	0.0005	0.1000	0.0715	14.0990	2.2651	2.3876	6.1319	28.0000
1	15	0.1260	0.0005	0.1000	0.0770	14.0319	2.2551	2.3867	6.1404	28.0000
1	16	0.1350	0.0005	0.1000	0.0825	13.9652	2.2450	2.3857	6.1487	28.0000
1	17	0.1440	0.0005	0.1000	0.0880	13.8988	2.2351	2.3848	6.1568	28.0000
1	18	0.1530	0.0005	0.1000	0.0935	13.8328	2.2252	2.3839	6.1649	28.0000
1	19	0.1620	0.0005	0.1000	0.0990	13.7670	2.2153	2.3829	6.1727	28.0000
1	20	0.1710	0.0005	0.1000	0.1045	13.7016	2.2055	2.3820	6.1805	28.0000
1	21	0.1800	0.0005	0.1000	0.1100	13.6364	2.1957	2.3810	6.1882	28.0000
2	1	0.1800	0.0005	0.1000	0.1100	13.6364	2.1957	2.3810	6.1882	28.0000
2	2	0.1905	0.0005	0.1000	0.1164	13.5860	2.1893	2.3799	6.1391	28.0000
2	3	0.2010	0.0005	0.1000	0.1228	13.5357	2.1829	2.3788	6.0916	28.0000
2	4	0.2115	0.0005	0.1000	0.1293	13.4856	2.1766	2.3777	6.0455	28.0000
2	5	0.2220	0.0005	0.1000	0.1357	13.4358	2.1703	2.3766	6.0009	28.0000
2	6	0.2325	0.0005	0.1000	0.1421	13.3861	2.1641	2.3755	5.9577	28.0000
2	7	0.2430	0.0005	0.1000	0.1485	13.3365	2.1579	2.3744	5.9158	28.0000
2	8	0.2535	0.0005	0.1000	0.1549	13.2872	2.1517	2.3733	5.8753	28.0000
2	9	0.2640	0.0005	0.1000	0.1613	13.2380	2.1455	2.3722	5.8361	28.0000
2	10	0.2745	0.0005	0.1000	0.1678	13.1891	2.1394	2.3711	5.7981	28.0000
2	11	0.2850	0.0005	0.1000	0.1742	13.1403	2.1333	2.3700	5.7613	28.0000
2	12	0.2955	0.0005	0.1000	0.1806	13.0917	2.1272	2.3689	5.7257	28.0000
2	13	0.3060	0.0005	0.1000	0.1870	13.0432	2.1212	2.3678	5.6913	28.0000
2	14	0.3165	0.0005	0.1000	0.1934	12.9950	2.1152	2.3667	5.6581	28.0000
2	15	0.3270	0.0005	0.1000	0.1998	12.9469	2.1092	2.3656	5.6259	28.0000
2	16	0.3375	0.0005	0.1000	0.2063	12.8990	2.1033	2.3645	5.5948	28.0000
2	17	0.3480	0.0005	0.1000	0.2127	12.8513	2.0973	2.3634	5.5648	28.0000
2	18	0.3585	0.0005	0.1000	0.2191	12.8037	2.0914	2.3623	5.5358	28.0000
2	19	0.3690	0.0005	0.1000	0.2255	12.7564	2.0856	2.3612	5.5078	28.0000
2	20	0.3795	0.0005	0.1000	0.2319	12.7092	2.0797	2.3601	5.4807	28.0000
2	21	0.3900	0.0005	0.1000	0.2383	12.6622	2.0739	2.3591	5.4546	28.0000
3	1	0.3900	0.1205	0.1000	0.2383	2.0411	0.1176	0.2282	6.6483	28.0000
3	2	0.4795	0.1300	0.1000	0.2930	1.9904	0.1145	0.2267	6.7505	28.0000

Section Number	Increment Number	Distance, miles	Flow, cfs	Velocity, feet/sec	Total Travel Time, days	CBODu, mg/l	NH_3-N, mg/l	TON, mg/l	D.O., mg/l	Temp., °C
3	3	0.5690	0.1395	0.1000	0.3477	1.9444	0.1118	0.2254	6.8318	28.0000
3	4	0.6585	0.1490	0.1000	0.4024	1.9023	0.1093	0.2242	6.8971	28.0000
3	5	0.7480	0.1585	0.1000	0.4571	1.8635	0.1070	0.2230	6.9504	28.0000
3	6	0.8375	0.1680	0.1000	0.5118	1.8274	0.1049	0.2220	6.9944	28.0000
3	7	0.9270	0.1775	0.1000	0.5665	1.7936	0.1030	0.2210	7.0310	28.0000
3	8	1.0165	0.1870	0.1000	0.6212	1.7619	0.1012	0.2201	7.0620	28.0000
3	9	1.1060	0.1965	0.1000	0.6759	1.7319	0.0995	0.2192	7.0883	28.0000
3	10	1.1955	0.2060	0.1000	0.7306	1.7034	0.0979	0.2184	7.1111	28.0000
3	11	1.2850	0.2155	0.1000	0.7853	1.6763	0.0964	0.2176	7.1309	28.0000
3	12	1.3745	0.2250	0.1000	0.8400	1.6504	0.0950	0.2168	7.1483	28.0000
3	13	1.4640	0.2345	0.1000	0.8947	1.6256	0.0936	0.2161	7.1638	28.0000
3	14	1.5535	0.2440	0.1000	0.9494	1.6017	0.0923	0.2154	7.1777	28.0000
3	15	1.6430	0.2535	0.1000	1.0041	1.5788	0.0911	0.2147	7.1903	28.0000
3	16	1.7325	0.2630	0.1000	1.0588	1.5567	0.0899	0.2141	7.2017	28.0000
3	17	1.8220	0.2725	0.1000	1.1134	1.5353	0.0888	0.2134	7.2122	28.0000
3	18	1.9115	0.2820	0.1000	1.1681	1.5147	0.0877	0.2128	7.2219	28.0000
3	19	2.0010	0.2915	0.1000	1.2228	1.4947	0.0867	0.2122	7.2309	28.0000
3	20	2.0905	0.3010	0.1000	1.2775	1.4752	0.0857	0.2116	7.2393	28.0000
3	21	2.1800	0.3105	0.1000	1.3322	1.4564	0.0847	0.2110	7.2472	28.0000

CHRONIC MASS BALANCE CALCULATION TO DETERMINE THE MAXIMUM ALLOWABLE EFFLUENT AMMONIA-NITROGEN CONCENTRATION			
0	Enter headwaters stream flow (in cfs) in the cell at the left (cell A4)*		
0.0003	Enter effluent wasteflow (in mgd) in the cell at the left (cell A6)		
0.11	Enter headwaters ammonia-nitrogen concentration (in mg/l) in the cell at the left (cell A8)**		
7	Enter the pH in the cell at the left (cell A10)		
28	Enter the temperature in the cell at the left (cell A12)		
The maximum allowable instream ammonia-nitrogen concentration is		**2.48**	**mg/l*** **
*The headwaters stream flow is typically the $7Q_{10}$ value for summer and the $7Q_2$ value for winter.			
**Unless actual data is available, the headwaters ammonia-nitrogen value is assumed to be 0.11 mg/l. ***This is the CCC ammonia-nitrogen value determined from revised ammonia toxicity criteria.			
The maximum allowable effluent ammonia-nitrogen concentration is		**2.48**	**mg/l**
CPR: 9/18/00			

ACUTE MASS BALANCE CALCULATION TO DETERMINE THE MAXIMUM ALLOWABLE EFFLUENT AMMONIA-NITROGEN CONCENTRATION			
0	Enter headwaters stream flow (in cfs) in the cell at the left (cell A4)*		
0.0003	Enter effluent wasteflow (in mgd) in the cell at the left (cell A6)		
0.11	Enter headwaters ammonia-nitrogen concentration (in mg/l) in the cell at the left (cell A8)**		
7	Enter the pH in the cell at the left (cell A10)		
The maximum allowable instream ammonia-nitrogen concentration is		**36.09**	**mg/l*** **
*The headwaters stream flow is typically the $1Q_{10}$ value (except for A&I streams, in which case it is the $7Q_{10}$ value).			
**Unless actual data is available, the headwaters ammonia-nitrogen value is assumed to be 0.11 mg/l.			
***This is the CMC ammonia-nitrogen value determined from revised ammonia toxicity criteria.			
The maximum allowable effluent ammonia-nitrogen concentration is		**36.09**	**mg/l**
CPR: 9/18/00			

Site Visit Information

Facilities:	Sequatchie Concrete Palmer Road (AL0083259)
Contact:	Doug Towles
Contact Phone:	256-608-1229
Basin:	Tennessee
County:	Madison
Discharge Coordinates:	34.692204, -86.764875
Receiving Waterbody:	Unnamed Tributary to Mill Creek
Effluent Flowrate:	0.0003 MGD

Summary:

On Friday, June 29th, 2018, Keosha Powell and I (James Mooney) conducted a site visit to Sequatchie Concrete Palmer Road. The weather conditions during the site visit were warm and partly cloudy. Sequatchie Concrete Palmer Road manufactures ready mixed concrete in addition to concrete blocks. Currently, the facility washes out their concrete trucks onsite and also sprays down their piles of aggregate to reduce dust. The wastewater produced from both activities is diverted to two settling ponds located within the confines of the facility. Discharge from the settling pond is entirely rain event driven (i.e. there is not pumping of wastewater). During the site visit, the manager mentioned that it takes a very big rain event to cause any effluent discharge from the settling ponds. When there is a sufficient rain event to cause a discharge, the effluent flows across the facility and enters a stormwater inlet drain located along a road on the western boundary of the facility. The effluent then appears to flow north for a short distance before being diverted to an unnamed tributary to Mill Creek. Upon leaving the facility, we traveled to several road crossings downstream of Sequatchie Concrete to observe stream reach conditions.

Figure 1. Sequatchie Concrete Palmer Road

Figure 2. Sequatchie Concrete Palmer Road Settling Pond

Figure 3. Sequatchie Concrete Palmer Road Effluent Drainage Pathway

Figure 4. Unnamed Tributary to Mill Creek (Downstream) @ Stormwater Discharge

Figure 5. Confluence of Unnamed Tributary to Mill Creek (concrete pipe) with Mill Creek

Figure 6. Mill Creek (Upstream) at confluence with Unnamed Tributary to Mill Creek

Figure 7. Mill Creek (Downstream) at confluence with Unnamed Tributary to Mill Creek

Figure 8. Bradford Creek (Upstream) at Short Pike Rd SW (Downstream of confluence w/ Mill Creek)

Figure 9. Bradford Creek (Downstream) at Short Pike Rd SW (Downstream of confluence w/ Mill Creek)

ORIGINAL FILE COPY

Waste Load Allocation/MZ Request Form

MEMORANDUM

request number: 3481

To: **Chief, Technical Support Section**

From: (Responsible Engineer) Rachel Stanaland | In Branch/Section Industrial

Date Submitted 4/25/2018 | **5/25/2018** Date Required | FUND Code 605

General Information

Receiving Waterbody	Unnamed Tributary to Bradford Creek	**River Basin**	Tennessee
Previous Stream Name			
***County**	Madison	**Outfall Latitude**	34.689889 (decimal degrees)
		Outfall Longitude	-86.762778 (decimal degrees)

Modeling Information

Facility Name	Sequatchie Concrete Palmer Road	(Name of Discharger-WQ will use to file)
Applicant Name	Sequatchie Concrete Service, Inc.	
		Previous Discharger Name
MasterID	11028	
Contact Name	Emily Chambers	
Phone Number	(615) 556-0731	
Permit Number	**AL0083259**	
Model request submitted as part of permit application?	☑ Yes ☐ No	
Date Permit application received by NPDES program	11/7/2016	
Date Permit Expires		
Permit Type	New Discharge and Permit	
Permit Status	Proposed	
Type of Discharger	INDUSTRIAL	

RECEIVED
April 25, 2018
Water Quality Branch

Type of Modeling being requested:

- Modeling with Data Collection (10 stations) ☐
- Modeling with Data Collection (5 stations) ☐
- WLA Modeling Review Only (per season) ☐
- MZ CORMIX Modeling Review Only ☐
- Desktop Model ☑
- Mixing Zone Model (CORMIX) ☐
- HCR Model Analysis ☐
- Additional Season (Desktop and/or/CORMIX Mod ☐

Current Permit Limits (mg/L)

CBOD5 summer:		CBOD5 winter:	
BOD5 summer:		BOD5 winter:	
NH3-N summer:		NH3-N winter:	
TON summer:		TON winter:	
TKN summer:		TKN winter:	
MinDO summer:		MinDO winter:	

Seasonal limits requested? ☐ Yes ☑ No | **Number of Seasons Requested**

Existing Discharge Design Flow 0.0003 **MGD**

Proposed Discharge Design Flow **MGD**

Note: The flow rates given should be those requested for modeling.

Waste Load Allocation/MZ Request Form (Cont)

Do other discharges exist that may impact the model? ☐ Yes ☑ No

If yes, impacting dischargers names.		**Impacting dischargers permit numbers.**	

Note: ADEM form 455 must be submitted with all mixing zone requests. This information is usually furnished by the applicant and/or consultant. The form can be printed using the link below. It can also be found on the ADEM web site under the "ADEM Forms" link.

http://www.adem.state.al.us/DeptForms/Form455.pdf

Attachments:

Photocopy of 7.5 minute series topographic map included with (discharge location marked)? ☐ Yes ☐ No

Comments

Stanaland, Rachel E

From:	Sowell, Jo Ellen
Sent:	Wednesday, August 15, 2018 4:26 PM
To:	Stanaland, Rachel E
Cc:	Minton, Kimberly; Mooney, James J
Subject:	Sequatchie Concrete Palmer Road / Unnamed Tributary to Mill Creek - Waste Load Allocation (#3481)
Attachments:	060300020504 AL0083259 WLA 08-02-2018 DESKTP TRB JES UT TO MILL CREEK-SEQUATCHIE CONCRETE PALMER RD.pdf

Good Afternoon,

Attached is the *Waste Load Allocation* for:

Facility Name:	*Sequatchie Concrete Palmer Road*
Receiving Waterbody:	*Unnamed Tributary to Mill Creek*
Per Request #:	*3481*

If you have any questions, please do not hesitate to let us know.

Thanks,

Jo Ellen Sowell
Administrative Support Assistant II
Water Quality Branch, Water Division
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, AL 36130-1463
(334) 270-5604 Fax: (334) 270-5604
adem.alabama.gov
jsowell@adem.alabama.gov

ADEM

Stanaland, Rachel E

From: Emily Chambers <echambers@seqconcrete.com>
Sent: Friday, August 17, 2018 8:21 AM
To: Stanaland, Rachel E
Subject: Re: 250 Palmer Road Facility Sequatchie Concrete AL0083259

Yes that is correct.

Thanks,
Emily Chambers
Sequatchie Concrete Service, inc.

Sent from my iPhone

On Aug 17, 2018, at 8:42 AM, Stanaland, Rachel E <restanaland@adem.alabama.gov> wrote:

Emily,

I got the model back from our water quality branch and I'm finishing up the draft. I wanted to confirm that the analysis that was provided last year for the metals, is the concentrations in mg/l?

Thanks,

Rachel Stanaland
Industrial Section
Industrial/Municipal Branch
Water Division
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

Work: (334) 279-3065
Fax: (334) 279-3065
Email: restanaland@adem.alabama.gov

<image001.jpg>

Did you know you can submit your DMRs online using our newly enhanced E2 DMR Reporting System? To sign up and learn more, please visit the Department's E2 Reporting System webpage here.

From: Emily Chambers [mailto:echambers@seqconcrete.com]
Sent: Friday, September 15, 2017 1:01 PM
To: Stanaland, Rachel E <restanaland@adem.alabama.gov>
Subject: RE: 250 Palmer Road Facility Sequatchie Concrete AL0083259

Ms. Stanaland,

Here are the metals results from our process water. Please let me know if you need additional information.

Thanks so much,

<image003.jpg>

Emily Chambers
***EHS Director*, Sequatchie Concrete Service, Inc.**
M: (615) 556-0731 F: (865) 321-8909
www.seqconcrete.com

From: Stanaland, Rachel E [mailto:restanaland@adem.alabama.gov]
Sent: Tuesday, August 8, 2017 4:47 PM
To: Emily Chambers <echambers@seqconcrete.com>
Subject: 250 Palmer Road Facility Sequatchie Concrete AL0083259

Emily,

I just wanted to let you know that the 656 Palmer Road Facility draft has been sent out. However, the 250 Palmer Road draft has hit a snag. My supervisor wants to know what is exactly in the process wash water outfall particularly what makes up the fly ash. He is concerned about the metals that could be in the fly ash and the aggregates.

The link below is EPA form 2C. Part V has an analysis portion on Part V (page 18 of the pdf) to use as a guide.

https://www3.epa.gov/npdes/pubs/3510-2C.pdf

We would like to know the metals in the wastewater. The metals in Form 2c are Items O-X (Total Aluminum, Total Barium, Total Boron, Total Cobalt, Total Iron, Total Magnesium, Total Molybdenum, Total Manganese, Total Tin, Total Titanium) on Page V-2 and 1M-14 (Total Antimony, Total Arsenic, Total Beryllium, Total Cadmium, Total Chromium, Total Copper, Total Lead, Total Mercury, Total Nickle, Total Selenium, Total Silver, Total Thallium, Total Zinc, Total Cyanide) on page V-3.

Please do an analysis on the process water for metals and anything else that might be in the process water.

Thanks,

Rachel Stanaland
Industrial Section
Industrial/Municipal Branch
Water Division
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, Alabama 36130-1463

Work: (334) 279-3065
Fax: (334) 279-3065
Email: restanaland@adem.alabama.gov

<image001.jpg>

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PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (*use the same format*) instead of completing these pages.
SEE INSTRUCTIONS.

EPA I.D. NUMBER (*copy from Item I of Form I*)

V. INTAKE AND EFFLUENT CHARACTERISTICS (*continued from page 3 of Form 2-C*) | OUTFALL NO.

PART A –You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT							3. UNITS (*specify if blank*)		4. INTAKE (*optional*)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (*BOD*)	50.6											
b. Chemical Oxygen Demand (*COD*)	232											
c. Total Organic Carbon (*TOC*)	70.9											
d. Total Suspended Solids (*TSS*)	54.2											
e. Ammonia (*as N*)	ND											
f. Flow	VALUE N/A		VALUE		VALUE					VALUE		
g. Temperature (*winter*)	VALUE ambient		VALUE		VALUE			°C		VALUE		
h. Temperature (*summer*)	VALUE ambient		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 12.12	MAXIMUM	MINIMUM	MAXIMUM				STANDARD UNITS				

PART B – Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (*if available*)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)														
b. Chlorine, Total Residual														
c. Color														
d. Fecal Coliform														
e. Fluoride (16984-48-8)														
f. Nitrate-Nitrite (*as N*)														

ammonia - ND
Total phosphorus - ND
HEM - ND

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)														
h. Oil and Grease		✓	ND											
i. Phosphorus (as P), Total (7723-14-0)			ND											
j. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium, Total														
(4) Radium 226, Total														
k. Sulfate (as SO_4) (14808-79-8)														
l. Sulfide (as S)														
m. Sulfite (as SO_3) (14265-45-3)														
n. Surfactants														
o. Aluminum, Total (7429-90-5)														
p. Barium, Total (7440-39-3)														
q. Boron, Total (7440-42-8)														
r. Cobalt, Total (7440-48-4)														
s. Iron, Total (7439-89-6)														
t. Magnesium, Total (7439-95-4)														
u. Molybdenum, Total (7439-98-7)														
v. Manganese, Total (7439-96-5)														
w. Tin, Total (7440-31-5)														
x. Titanium, Total (7440-32-6)														

CONTINUE ON PAGE V-3

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	OUTFALL NUMBER

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (*all 7 pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (*if available*)	2. MARK "X"			3. EFFLUENT							4. UNITS		5. INTAKE (*optional*)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (*if available*)		c. LONG TERM AVRG. VALUE (*if available*)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)				ND	>.002										
2M. Arsenic, Total (7440-38-2)				ND	>.002										
3M. Beryllium, Total (7440-41-7)				ND	>.002										
4M. Cadmium, Total (7440-43-9)				ND	>.002										
5M. Chromium, Total (7440-47-3)				.0436											
6M. Copper, Total (7440-50-8)				.00452											
7M. Lead, Total (7439-92-1)				ND	>.002										
8M. Mercury, Total (7439-97-6)				ND	>.0002										
9M. Nickel, Total (7440-02-0)				.00295											
10M. Selenium, Total (7782-49-2)				.00234											
11M. Silver, Total (7440-22-4)				ND	>.002										
12M. Thallium, Total (7440-28-0)				.00234											
13M. Zinc, Total (7440-66-6)				.0412											
14M. Cyanide, Total (57-12-5)				ND	>.01										
15M. Phenols, Total															
DIOXIN															
2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6)				DESCRIBE RESULTS											

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)														
h. Oil and Grease														
i. Phosphorus (as P), Total (7723-14-0)														
j. Radioactivity														
(1) Alpha, Total														
(2) Beta, Total														
(3) Radium, Total														
(4) Radium 226, Total														
k. Sulfate (as SO_4) (14808-79-8)														
l. Sulfide (as S)														
m. Sulfite (as SO_3) (14265-45-3)														
n. Surfactants														
o. Aluminum, Total (7429-90-5)			1.10											
p. Barium, Total (7440-39-3)			3.86											
q. Boron, Total (7440-42-8)			ND	>.100										
r. Cobalt, Total (7440-48-4)			ND	>.002										
s. Iron, Total (7439-89-6)			.598											
t. Magnesium, Total (7439-95-4)			ND	>1.0										
u. Molybdenum, Total (7439-98-7)			.0525											
v. Manganese, Total (7439-96-5)			.0119											
w. Tin, Total (7440-31-5)			ND	>.002										
x. Titanium, Total (7440-32-6)			.0562											

 CONTINUE ON PAGE V-3

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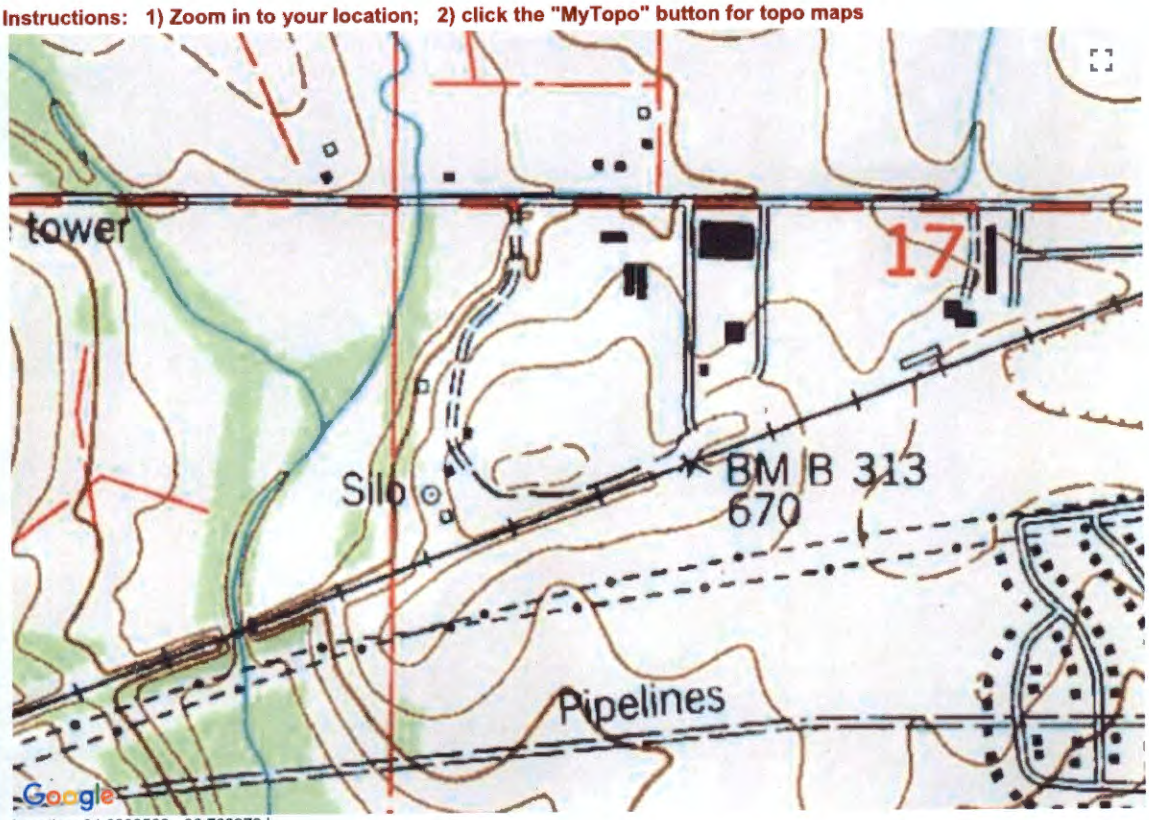

Location: 34.6939560, -86.763979 |

Print from your computer: **Landscape** | **Portrait**

Print link opens as a new .pdf window. Allow a few seconds to process. Note that the MyTopo U.S. map layer is the only one available for printing.

Thanks to MyTopo and Google for allowing us to use their maps!

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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT APPLICATION
SUPPLEMENTARY INFORMATION FOR INDUSTRIAL FACILITIES

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION – INDUSTRIAL SECTION
POST OFFICE BOX 301463
MONTGOMERY, ALABAMA 36130-1463

INSTRUCTIONS: APPLICATIONS SHOULD BE TYPED OR PRINTED IN INK AND SUBMITTED TO THE DEPARTMENT IN DUPLICATE TO THE ADDRESS ABOVE. IF INSUFFICIENT SPACE IS AVAILABLE TO ADDRESS ANY ITEM, PLEASE CONTINUE ON AN ATTACHED SHEET OF PAPER. PLEASE MARK N/A IN THE APPROPRIATE BOX WHEN AN ITEM IS NON-APPLICABLE TO THE APPLICANT.

PURPOSE OF THIS APPLICATION

- [ ] INITIAL PERMIT APPLICATION FOR NEW FACILITY
- [x] INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
- [ ] MODIFICATION OF EXISTING PERMIT
- [ ] REISSUANCE OF EXISTING PERMIT
- [ ] REVOCATION & REISSUANCE OF EXISTING PERMIT

1. Facility Name: Sequatchie Concrete Service, Inc. Madison Mix & Block
   a. Operator Name: Sequatchie Concrete Service, Inc
   b. Is the operator identified in 1.a., the owner of the facility? Yes [x] No [ ]
   If no, provide the name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.
2. NPDES Permit Number AL _ _ _ _ _ _ _
3. SID Permit Number (if applicable): IU _ _ - _ _ - _ _ _ _ _
4. NPDES General Permit Number (if applicable) ALG 1 1 0 1 2 5 _
5. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)
   Street: 250 Palmer Road
   City: Madison County: Madison State: AL Zip: 35758
   Facility (Front Gate) Latitude: 34.690762 Longitude: -86.763705
6. Facility Mailing Address (Street or Post Office Box): Same As physical
   City: State: Zip:

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DEC 29 2016
IND / MUN BRANCH

7. Responsible Official (as described on page 13 of this application):

Name and Title: Emily Chambers EHS Director

Address: P.O. Box 11869

City: Knoxville State: TN Zip: 37939

Phone Number: 615-556-0731

EMAIL Address: echambers@seqconcrete.com

8. Designated Facility Contact:

Name and Title: Wayne Holly

Phone Number: 256-990-4122

EMAIL Address: wholly@seqconcrete.com

9. Designated Discharge Monitoring Report Contact:

Name and Title: Emily Chambers EHS Director

Phone Number: 615-556-0731

EMAIL Address: echambers@seqconcrete.com

10. Type of Business Entity:

[x] Corporation [ ] General Partnership [ ] Limited Partnership

[ ] Sole Proprietorship [ ] Other (Please Specify) _____

11. Complete this section if the Applicant's business entity is a Corporation

a) Location of Incorporation:

Address: 406 S. Cedar Ave.

City: South Pittsburg County: Marion State: TN Zip: 37380

b) Parent Corporation of Applicant:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

c) Subsidiary Corporation(s) of Applicant:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

d) Corporate Officers:

Name: Jesse D Slaton, President

Address: 406 S. Cedar Ave

City: South Pittsburg State: TN Zip: 37380

Name: Mark A Williams, Secretary

Address: 406 S. Cedar Ave

City: South Pittsburg State: TN Zip: 37380

e) Agent designated by the corporation for purposes of service:

Name: Mark A Williams (TN)

Address: 406 S. Cedar Ave.

City: South Pittsburg State: TN Zip: 37380

AL: Joe M Dawson - 206 S. Broad St., Scottsboro, AL 35768

12. If the Applicant's business entity is a Partnership, please list the general partners.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

13. If the Applicant's business entity is a Proprietorship, please enter the proprietor's information.

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

14. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State of Alabama Environmental Permits presently held by the Applicant, its parent corporation, or subsidiary corporations within the State of Alabama:

Permit Name	Permit Number	Held By
NPDES	ALG110125	Sequatchie (For this location)

15. Identify all Administrative Complaints, Notices of Violation, Directives, Administrative Orders, or Litigation concerning water pollution, if any, against the Applicant, its parent corporation or subsidiary corporations within the State of Alabama within the past five years (attach additional sheets if necessary):

Facility Name	Permit Number	Type of Action	Date of Action
Madison Ready Mix & Block	ALG110125	Request for individual permit.	Applied for

SECTION B – BUSINESS ACTIVITY

1. Indicate applicable Standard Industrial Classification (SIC) Codes for all processes (If more than one applies, list in order of importance:

a. 3273 Concrete Ready Mix

b. 3272 Concrete Block

c. _____

d. _____

e. _____

2. If your facility conducts or will be conducting any of the processes listed below (regardless of whether they generate wastewater, waste sludge, or hazardous waste), place a check beside the category of business activity (check all that apply):

Industrial Categories

[ ] Aluminum Forming
[ ] Asbestos Manufacturing
[ ] Battery Manufacturing
[ ] Can Making
[ ] Canned and Preserved Fruit and Vegetables
[ ] Canned and Preserved Seafood
[ ] Cement Manufacturing
[ ] Centralized Waste Treatment
[ ] Carbon Black
[ ] Coal Mining
[ ] Coil Coating
[ ] Copper Forming
[ ] Electric and Electronic Components Manufacturing
[ ] Electroplating
[ ] Explosives Manufacturing
[ ] Feedlots
[ ] Ferroalloy Manufacturing
[ ] Fertilizer Manufacturing
[ ] Foundries (Metal Molding and Casting)
[ ] Glass Manufacturing
[ ] Grain Mills
[ ] Gum and Wood Chemicals Manufacturing
[ ] Inorganic Chemicals
[ ] Iron and Steel
[ ] Leather Tanning and Finishing
[ ] Metal Finishing
[ ] Meat Products
[ ] Metal Molding and Casting
[ ] Metal Products
[ ] Nonferrous Metals Forming
[ ] Nonferrous Metals Manufacturing
[ ] Oil and Gas Extraction
[ ] Organic Chemicals Manufacturing
[ ] Paint and Ink Formulating
[ ] Paving and Roofing Manufacturing
[ ] Pesticides Manufacturing
[ ] Petroleum Refining
[ ] Phosphate Manufacturing
[ ] Photographic
[ ] Pharmaceutical
[ ] Plastic & Synthetic Materials
[ ] Plastics Processing Manufacturing
[ ] Porcelain Enamel
[ ] Pulp, Paper, and Fiberboard Manufacturing
[ ] Rubber
[ ] Soap and Detergent Manufacturing
[ ] Steam and Electric
[ ] Sugar Processing
[ ] Textile Mills
[ ] Timber Products
[ ] Transportation Equipment Cleaning
[ ] Waste Combustion
[✓] Other (specify) Concrete block Ready mix

A facility with processes inclusive in these business areas may be covered by Environmental Protection (EPA) categorical standards. These facilities are termed "categorical users" and should skip to question 2 of Section C.

3. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary):

Block: Inside cement, cinders, sand, water and admixtures are mixed, formed and cured to become concrete block. Cinders and sand products are stored outside. Cement in silos. Cured Block are also stored outside.

Ready Mix: Sand and Rock are stored outside. Cement and fly ash are stored in silos. Admixtures are stored inside. All products are mixed in trucks. returned concrete is used to make barrier block. excess is dried and hauled off as fill material.

Shop: Block and Readmix trucks have general services performed inside shop. Oil and antifreeze are stored in tanks inside.

SECTION C – WASTEWATER DISCHARGE INFORMATION

Facilities that checked activities in question 2 of Section B and are considered Categorical Industrial Users should skip to question 2 of this section.

1. **For Non-Categorical Users Only**: Provide wastewater flows for each of the processes or proposed processes. Using the process flow schematic (Figure 1, pg 14), enter the description that corresponds to each process. [New facilities should provide estimates for each discharge.]

Process Description	Last 12 Months (gals/day) Highest Month Avg. Flow	Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow	Discharge Type (batch, continuous, intermittent)
Wash water - contains concrete materials			

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

a. Number of batch discharges: _____ per day

b. Average discharge per batch: _____ (GPD)

c. Time of batch discharges _____ (days of week) at _____ (hours of day)

d. Flow rate: _____ gallons/minute

e. Percent of total discharge: _____

Max 300 gal A DAY. Continuous flow when a discharge does occur.

Non-Process Discharges (e.g. non-contact cooling water)	Last 12 Months (gals/day) Highest Month Avg. Flow	Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow

2. **Complete this Section only if you are subject to Categorical Standards and plan to directly discharge the associated wastewater to a water of the State.** If Categorical wastewater is discharged exclusively via an indirect discharge to a public or privately-owned treatment works, check "Yes" in the appropriate space below and proceed directly to part 2.c .

[ ] Yes

For Categorical Users: Provide the wastewater discharge flows or production (whichever is applicable by the effluent guidelines) for each of your processes or proposed processes. Using the process flow schematic (Figure 1, pg 14), enter the description that corresponds to each process. [New facilities should provide estimates for each discharge.]

2a.

Regulated Process	Applicable Category	Applicable Subpart	Type of Discharge Flow (batch, continuous, intermittent)

2b.

Process Description	Last 12 Months (gals/day) Highest Month Average*	Highest Flow Year of Last 5 (gals/day) Monthly Average*	Discharge Type (batch, continuous, intermittent)

*** Reported values should be expressed in units of the applicable Federal production-based standard. For example, flow (MGD), production (pounds per day), etc.**

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

a. Number of batch discharges: _____ per day

b. Average discharge per batch: _____ (GPD)

c. Time of batch discharges _____ at _____
(days of week) (hours of day)

d. Flow rate: _____ gallons/minute

Percent of total discharge: _____

2c.

Non categorical Process Description	Last 12 Months (gals/day) Highest Month Avg. Flow	Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow	Discharge Type (batch, continuous, intermittent)

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

a. Number of batch discharges: _____ per day

b. Average discharge per batch: _____ (GPD)

c. Time of batch discharges _____ at _____
(days of week) (hours of day)

d. Flow rate: _____ gallons/minute

Percent of total discharge: _____

2d.

Non-Process Discharges (e.g. non-contact cooling water)	Last 12 Months (gals/day) Highest Month Avg. Flow	Highest Flow Year of Last 5 (gals/day) Monthly Avg. Flow

All Applicants must complete Questions 3 – 5.

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Flow Metering	Yes	☐	No	☑	N/A	☐
Sampling Equipment	Yes	☐	No	☑	N/A	☐

If so, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics? Yes ☐ No ☑ (If no, skip Question 5)

Briefly describe these changes and their anticipated effects on the wastewater volume and characteristics:

We are trying to eliminate all process water discharges

5. List the trade name and chemical composition of all biocides and corrosion inhibitors used:

N/A

Trade Name	Chemical Composition

For each biocide and/or corrosion inhibitor used, please include the following information:

(1) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach,
(2) quantities to be used,
(3) frequencies of use,
(4) proposed discharge concentrations, and
(5) EPA registration number, if applicable

SECTION D – WATER SUPPLY

Water Sources (check as many as are applicable):

[ ] Private Well
[ ] Municipal Water Utility (Specify City): Madison
[ ] Surface Water
[ ] Other (Specify): _____

IF MORE THAN ONE WELL OR SURFACE INTAKE, PROVIDE DATA FOR EACH ON AN ATTACHMENT

City:_____ *MGD Well:_____ *MGD Well Depth:____ Ft. Latitude:_____ Longitude:_____

Surface Intake Volume: _____*MGD Intake Elevation in Relation to Bottom _____Ft.

Intake Elevation: _____ Ft. Latitude: _____ Longitude: _____

Name of Surface Water Source: _____

*** MGD – Million Gallons per Day**

Cooling Water Intake Structure Information N/A

Complete questions 1 and 2 if your water supply is provided by an outside source and not by an onsite water intake structure? (e.g., another industry, municipality, etc...)

1. Does the provider of your source water operate a surface water intake? Yes [ ] No [ ]
   (If yes, continue, if no, go to Section E.)

   a) Name of Provider _____ b)Location of Provider _____

   c) Latitude: _____ Longitude: _____

2. Is the provider a public water system (defined as a system which provides water to the public for human consumption or which provides only treated water, not raw water)? Yes [ ] No [ ]
   (If yes, go to Section E, if no, continue.)

Only to be completed if you have a cooling water intake structure or the provider of your water supply uses an intake structure and does not treat the raw water.

3. Is any water withdrawn from the source water used for cooling? Yes [ ] No [ ]

4. Using the average monthly measurements over any 12-month period, approximately what percentage of water withdrawn is used exclusively for cooling purposes? _____%

5. Does the cooling water consist of treated effluent that would otherwise be discharged? Yes [ ] No [ ]
   (If yes, go to Section E, if no, complete questions 6 – 17.)

6. a. Is the cooling water used in a once-through cooling system? Yes [ ] No [ ]
   b. Is the cooling water used in a closed cycle cooling system? Yes [ ] No [ ]

7. When was the intake installed?
   (Please provide dates for all major construction/installation of intake components including screens)

8. What is the maximum intake volume?
   (maximum pumping capacity in gallons per day)

9. What is the average intake volume?
   (average intake pump rate in gallons per day average in any 30-day period)

10. What is the actual intake flow (AIF) as defined in 40 CFR §125.92(a)? _____MGD

11. How is the intake operated? (e.g., continuously, intermittently, batch)

12. What is the mesh size of the screen on your intake?

13. What is the intake screen flow-through area?

14. What is the through-screen design intake flow velocity? _____ft/sec

15. What is the through-screen actual velocity (in ft/sec)? _____ft/sec

16. What is the mechanism for cleaning the screen? (e.g., does it rotate for cleaning)

17. Do you have any additional fish detraction technology on your intake? Yes [ ] No [ ]

18. Have there been any studies to determine the impact of the intake on aquatic organisms? Yes [ ] No [ ] (If yes please provide.)

19. Attach a site map showing the location of the water intake in relation to the facility, shoreline, water depth, etc.

SECTION E – WASTE STORAGE AND DISPOSAL INFORMATION

Provide a description of the location of all sites involved in the storage of solids or liquids that could be accidentally discharged to a water of the state, either directly or indirectly via such avenues as storm water drainage, municipal wastewater systems, etc., which are located at the facility for which the NPDES application is being made. Where possible, the location should be noted on a map and included with this application:

Description of Waste	Description of Storage Location
No waste products on site	
Used oil and Antifreeze > Recycled	

Provide a description of the location of the ultimate disposal sites of solid or liquid waste by-products (such as sludges) from any wastewater treatment system located at the facility.

Description of Waste	Quantity (lbs/day)	Disposal Method*

***Indicate which wastes identified above are disposed of at an off-site treatment facility and which are disposed of on-site. If any wastes are sent to an off-site centralized waste treatment facility, identify the waste and the facility.**

SECTION F – COASTAL ZONE INFORMATION N/A

Is the discharge(s) located within 10-foot elevation of Mobile or Baldwin County?

Yes [ ] No [ ] If yes, then complete items A through M below:

	YES	NO
A. Does the project require new construction?	[ ]	[ ]
B. Will the project be a source of new air emissions?	[ ]	[ ]
C. Does the project involve dredging and/or filling?	[ ]	[ ]
Has the Corps of Engineers (COE) permit been received?	[ ]	[ ]
Corps Project Number _____		
D. Does the project involve wetlands and/or submersed grassbeds?	[ ]	[ ]
E. Are oyster reefs located near the project site? (Include a map showing project and discharge location with respect to oyster reefs)	[ ]	[ ]
F. Does the project involve the siting, construction and operation of an energy facility as defined in ADEM Admin. Code R. 335-8-1-.02(bb)?	[ ]	[ ]
G. Does the project involve shoreline erosion mitigation?	[ ]	[ ]
H. Does the project involve construction on beaches and dunes?	[ ]	[ ]
I. Will the project interfere with public access to coastal waters?	[ ]	[ ]
J. Does the project lie within the 100-year floodplain?	[ ]	[ ]
K. Does the project involve the registration, sale, use, or application of pesticides?	[ ]	[ ]
L. Does the project propose to construct a new well or alter an existing well to pump more than 50 GPD?	[ ]	[ ]
M. Has the applicable permit been obtained?	[ ]	[ ]

SECTION G – ANTI-DEGRADATION EVALUATION

In accordance with 40 CFR 131.12 and the Alabama Department of Environmental Management Administrative Code, Section 335-6-10-.04 for antidegradation, the following information must be provided, if applicable. It is the applicant's responsibility to demonstrate the social and economic importance of the proposed activity. If further information is required to make this demonstration, attach additional sheets to the application.

1. Is this a new or increased discharge that began after April 3, 1991? Yes [ ] No [✓]
   If yes, complete question 2 below. If no, go to Section H.

2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in question 1? Yes [ ] No [ ]

If yes, do not complete this section.
If no, and the discharge is to a Tier II waterbody as defined in ADEM Admin. Code r. 335-6-10-.12(4), complete questions A through F below and ADEM forms 311 and 313 (attached). Form 313 must be provided for each alternative considered technically viable.

Information required for new or increased discharges to high quality waters:

A. What environmental or public health problem will the discharger be correcting?

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

C. How much reduction in employment will the discharger be avoiding?

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

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

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

SECTION H – EPA Application Forms

All Applicants must submit EPA permit application forms. More than one application form may be required from a facility depending on the number and types of discharges or outfalls found there. The EPA application forms are found on the Department's website at http://www.adem.state.al.us/. The EPA application forms must be submitted in duplicate as follows:

1. All applicants must submit Form 1.
2. Applicants for existing industrial facilities (including manufacturing facilities, commercial facilities, mining activities, and silvicultural activities) which discharge process wastewater must submit Form 2C.
3. Applicants for new industrial facilities which propose to discharge process wastewater must submit Form 2D.
4. Applicants for new and existing industrial facilities which discharge only non-process wastewater (i.e., non-contact cooling water and/or sanitary wastewater) must submit Form 2E.
5. Applicants for new and existing facilities whose discharge is composed entirely of storm water associated with industrial activity must submit Form 2F, unless exempted by § 122.26(c)(1)(ii). If the discharge is composed of storm water and non-storm water, the applicant must also submit Forms 2C, 2D, and/or 2E, as appropriate (in addition to Form 2F).

SECTION I – ENGINEERING REPORT/BMP PLAN REQUIREMENTS
See ADEM 335-6-6-.08(i) & (j)

SECTION J– RECEIVING WATERS

Receiving Water(s)	303(d) Segment? (Y / N)	Included in TMDL?* (Y / N)
Unnamed trib to Bradford Creek	(N)	

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

SECTION K – APPLICATION CERTIFICATION

THE INFORMATION CONTAINED IN THIS FORM MUST BE CERTIFIED BY A RESPONSIBLE OFFICIAL AS DEFINED IN ADEM ADMINISTRATIVE RULE 335-6-6-.09 "SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS" (SEE BELOW).

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

SIGNATURE OF RESPONSIBLE OFFICIAL: Emily Chambers DATE SIGNED: 12/27/16

(TYPE OR PRINT)
NAME OF RESPONSIBLE OFFICIAL: Emily Chambers

TITLE OF RESPONSIBLE OFFICIAL: EHS Director

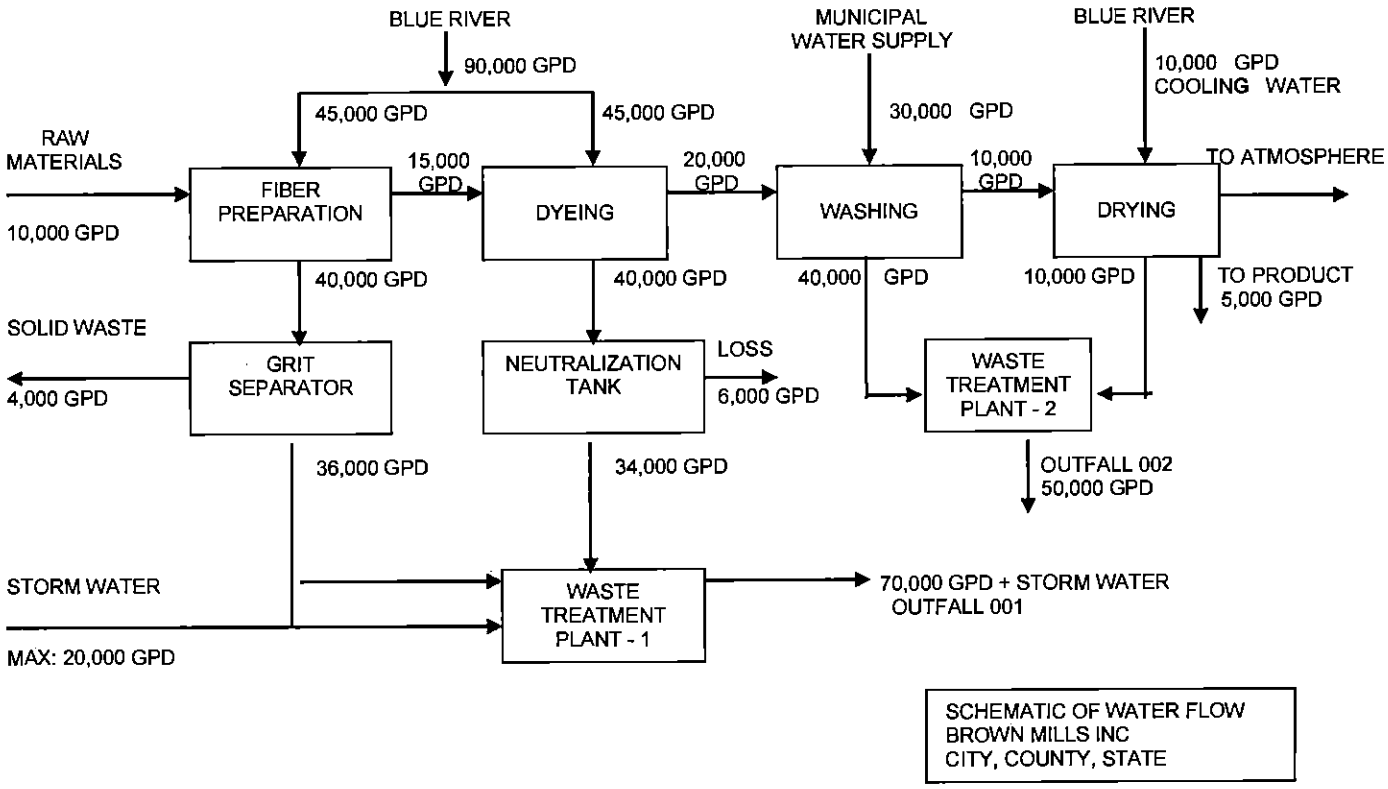
MAILING ADDRESS: P.O. Box 11869

CITY, STATE, ZIP: Knoxville TN 37939 PHONE: 615-556-0731

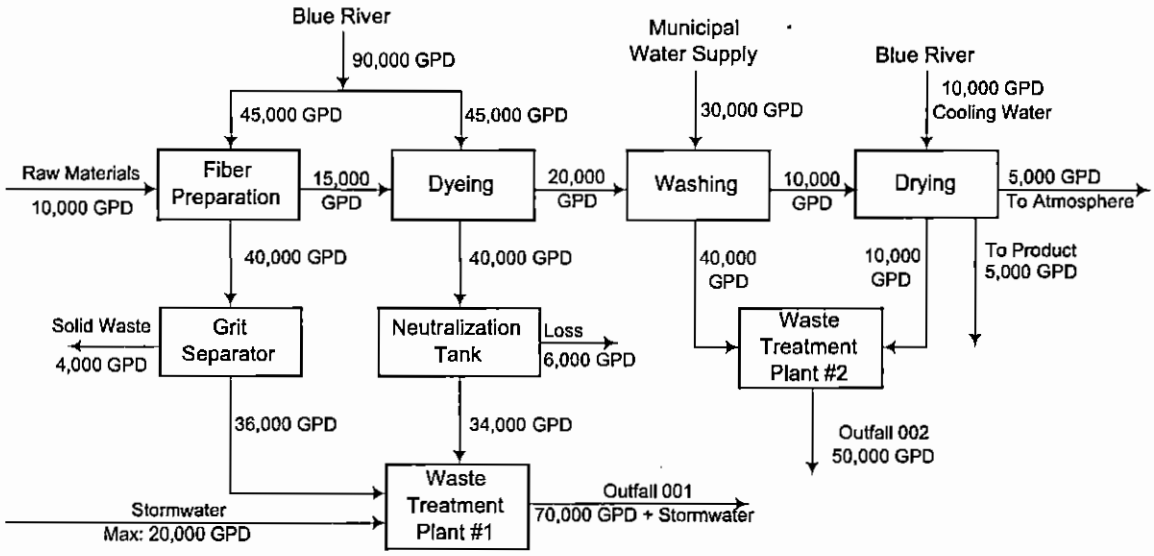
335-6-6-.09 SIGNATORIES TO PERMIT APPLICATIONS AND REPORTS.

(1) The application for an NPDES permit shall be signed by a responsible official, as indicated below:
(a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;
(b) In the case of a partnership, by a general partner;
(c) In the case of a sole proprietorship, by the proprietor; or
(d) In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official.

FIGURE 1


BLUE RIVER
90,000 GPD
45,000 GPD
45,000 GPD
MUNICIPAL WATER SUPPLY
30,000 GPD
BLUE RIVER
10,000 GPD COOLING WATER
RAW MATERIALS
10,000 GPD
FIBER PREPARATION
15,000 GPD
DYEING
20,000 GPD
WASHING
10,000 GPD
DRYING
TO ATMOSPHERE
40,000 GPD
40,000 GPD
40,000 GPD
10,000 GPD
TO PRODUCT 5,000 GPD
SOLID WASTE
4,000 GPD
GRIT SEPARATOR
NEUTRALIZATION TANK
LOSS
6,000 GPD
WASTE TREATMENT PLANT - 2
36,000 GPD
34,000 GPD
OUTFALL 002 50,000 GPD
STORM WATER
MAX: 20,000 GPD
WASTE TREATMENT PLANT - 1
70,000 GPD + STORM WATER OUTFALL 001
SCHEMATIC OF WATER FLOW
BROWN MILLS INC
CITY, COUNTY, STATE

LINE DRAWING



Schematic of Water Flow
Brown Mills, Inc.
City, County, State

Figure 2D-1

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
GENERAL INFORMATION
Consolidated Permits Program
(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F D

LABEL ITEMS	
I. EPA I.D. NUMBER	PLEASE PLACE LABEL IN THIS SPACE
III. FACILITY NAME	
V. FACILITY MAILING ADDRESS	
VI. FACILITY LOCATION	

GENERAL INSTRUCTIONS
If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms.**

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)		X		B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge to waters of the U.S.**? (FORM 2B)		X	
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)		X		D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)	X		✓ 20 acre
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP Sequatchie Concrete Service, Inc - Madison Rmx & Block

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*: 2 Emily Chambers EHS Director

B. PHONE *(area code & no.)*: 615-556-0131

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 P.O. Box 11869

B. CITY OR TOWN: 4 Knoxville, TN 37939

C. STATE

D. ZIP CODE

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VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 250 Palmer Rd.

B. COUNTY NAME: Madison

C. CITY OR TOWN: 6 Madison

D. STATE: AL

E. ZIP CODE: 35758

F. COUNTY CODE *(if known)*

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250 Palmer Rd.

EPA ID Number (*copy from Item 1 of Form 1*)

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

VII. Discharge Information *(Continued from page 3 of Form 2F)*

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease	<1 mg	N/A			1	
Biological Oxygen Demand (BOD5)	109 mg					
Chemical Oxygen Demand (COD)	70 mg				(11)	
Total Suspended Solids (TSS)	12 mg					
Total Nitrogen	2.6 mg					
Total Phosphorus	.206 mg					
pH	Minimum 8.47	Maximum 8.47	Minimum	Maximum		

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

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Continue on Reverse

TMC

Technical Micronics Control, Inc.

CHEMICAL ANALYSIS

TO: Sequatchie Concrete
252 Palmer Road
Madison, Alabama 35758

Attention: Emily Chambers

ANALYTICAL REPORT NO: 325587
DATE RECEIVED: 06-19-17
DATE REPORTED: 06-26-17
COLLECTOR: Client
COLLECTION DATE: 06-19-17
COLLECTION TIME: 7:00 a.m.

SAMPLE INFORMATION: One (l) Stormwater Sample for Chemical Analysis ***(DSN002-1)***

ANALYSIS REQUESTED	ANALYSIS METHOD	DETECTION LIMIT (mg/l)	RESULTS OF INVESTIGATION	ANALYSIS DATE / TIME
325588-2 ***(DSN002-1)***				
Rainfall	--		1.23 inches	06-19-17 7:10 a.m.
pH	SM4500-H+	--	8.47 S.U.	06-19-17 9:10 a.m.
Total Suspended Solids	SM2540D	2 mg/l	12 mg/l	06-19-17 12:50 p.m.
Biochemical Oxygen Demand	SM5210B	3.5 mg/l	109 mg/l	06-20-17 3:10 p.m. 06-25-17 3:10 p.m.
Total Nitrogen (TKN + NO3 + NO2)	SM4500N-B, HACH 8171/8507	--	2.6 mg/l	06-21-17 3:15 p.m.
Chemical Oxygen Demand	HACH 8000	1 mg/l	70 mg/l	06-26-17 9:15 a.m.
Total Phosphorus	SM4500-P	.06 mg/l	0.206 mg/l	06-20-17 12:30 p.m.
Oil & Grease	EPA1664	1 mg/l	<1 mg/l	06-26-17 9:15 a.m.

Analysis performed by: M. Hinton, P. Schrader

Approved for distribution: Paul M. Schrader

Paul M. Schrader
Laboratory Manager

210 Wynn Drive NW ▪ Huntsville, Alabama 35805-1909 USA ▪ Telephone 256.837.4430 ▪ Facsimile 256.721.9066 ▪ www.tmccorp.com

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086.

FORM 1 GENERAL

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

S		T/A	C
F			D
1	2 — 13	14	15

LABEL ITEMS	PLEASE PLACE LABEL IN THIS SPACE
I. EPA I.D. NUMBER	
III. FACILITY NAME	
V. FACILITY MAILING ADDRESS	
VI. FACILITY LOCATION	

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of **bold-faced terms**.

SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED	SPECIFIC QUESTIONS	Mark "X" YES	NO	FORM ATTACHED
A. Is this facility a **publicly owned treatment works** which results in a **discharge** to **waters of the U.S.**? (FORM 2A)	16	17	18	B. Does or will this facility *(either existing or proposed)* include a **concentrated animal feeding operation** or **aquatic animal production facility** which results in a **discharge** to **waters of the U.S.**? (FORM 2B)	19	20	21
C. Is this a facility which currently results in **discharges** to **waters of the U.S.** other than those described in A or B above? (FORM 2C)	22	23	24	D. Is this a proposed facility *(other than those described in A or B above)* which will result in a **discharge** to **waters of the U.S.**? (FORM 2D)	25	26	27
E. Does or will this facility treat, store, or dispose of **hazardous wastes**? (FORM 3)	28	29	30	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	31	32	33
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	34	35	36	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	37	38	39
I. Is this facility a proposed **stationary source** which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	40	41	42	J. Is this facility a proposed **stationary source** which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an **attainment area**? (FORM 5)	43	44	45

III. NAME OF FACILITY

C 1 SKIP Sequatchie Concrete Service, Inc - Madison Rmx & Block

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*: C 2 Emily Chambers EHS Director

B. PHONE *(area code & no.)*: 615-556-0731

V. FACILTY MAILING ADDRESS

A. STREET OR P.O. BOX: C 3 P.O. Box 11869

B. CITY OR TOWN: C 4 Knoxville, TN 37939

C. STATE:

D. ZIP CODE:

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: C 5 250 Palmer Rd.

B. COUNTY NAME: Madison

C. CITY OR TOWN: C 6 Madison

D. STATE: AL

E. ZIP CODE: 35758

F. COUNTY CODE *(if known)*:

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CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES *(4-digit, in order of priority)*

A. FIRST	B. SECOND
C 7 3273 (specify) Ready Mix	C 7 3272 (specify) Concrete Block

C. THIRD	D. FOURTH
C 7 (specify)	C 7 (specify)

VIII. OPERATOR INFORMATION

A. NAME: C 8 Sequatchie Concrete Service, Inc

B. Is the name listed in Item VIII-A also the owner? ☑ YES ☐ NO

C. STATUS OF OPERATOR *(Enter the appropriate letter into the answer box: if "Other," specify.)*

F = FEDERAL
S = STATE
P = PRIVATE
M = PUBLIC *(other than federal or state)*
O = OTHER *(specify)*

P (specify)

D. PHONE *(area code & no.)*: C A

E. STREET OR P.O. BOX: 406 S Cedar Avenue

F. CITY OR TOWN: C B South Pittsburg

G. STATE: TN

H. ZIP CODE: 37380

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☑ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES *(Discharges to Surface Water)*	D. PSD *(Air Emissions from Proposed Sources)*
C T I 9 N AIG110125	C T I 9 P

B. UIC *(Underground Injection of Fluids)*	E. OTHER *(specify)*
C T I 9 U	C T I 9 (specify)

C. RCRA *(Hazardous Wastes)*	E. OTHER *(specify)*
C T I 9 R	C T I 9 (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS *(provide a brief description)*

Ready Mix Concrete
Block manufacturing
Truck Stop for Hauling Vehicles

XIII. CERTIFICATION *(see instructions)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE *(type or print)*	B. SIGNATURE	C. DATE SIGNED
Emily Chambers EHS Director	Emily Chambers	10/13/16

COMMENTS FOR OFFICIAL USE ONLY

C

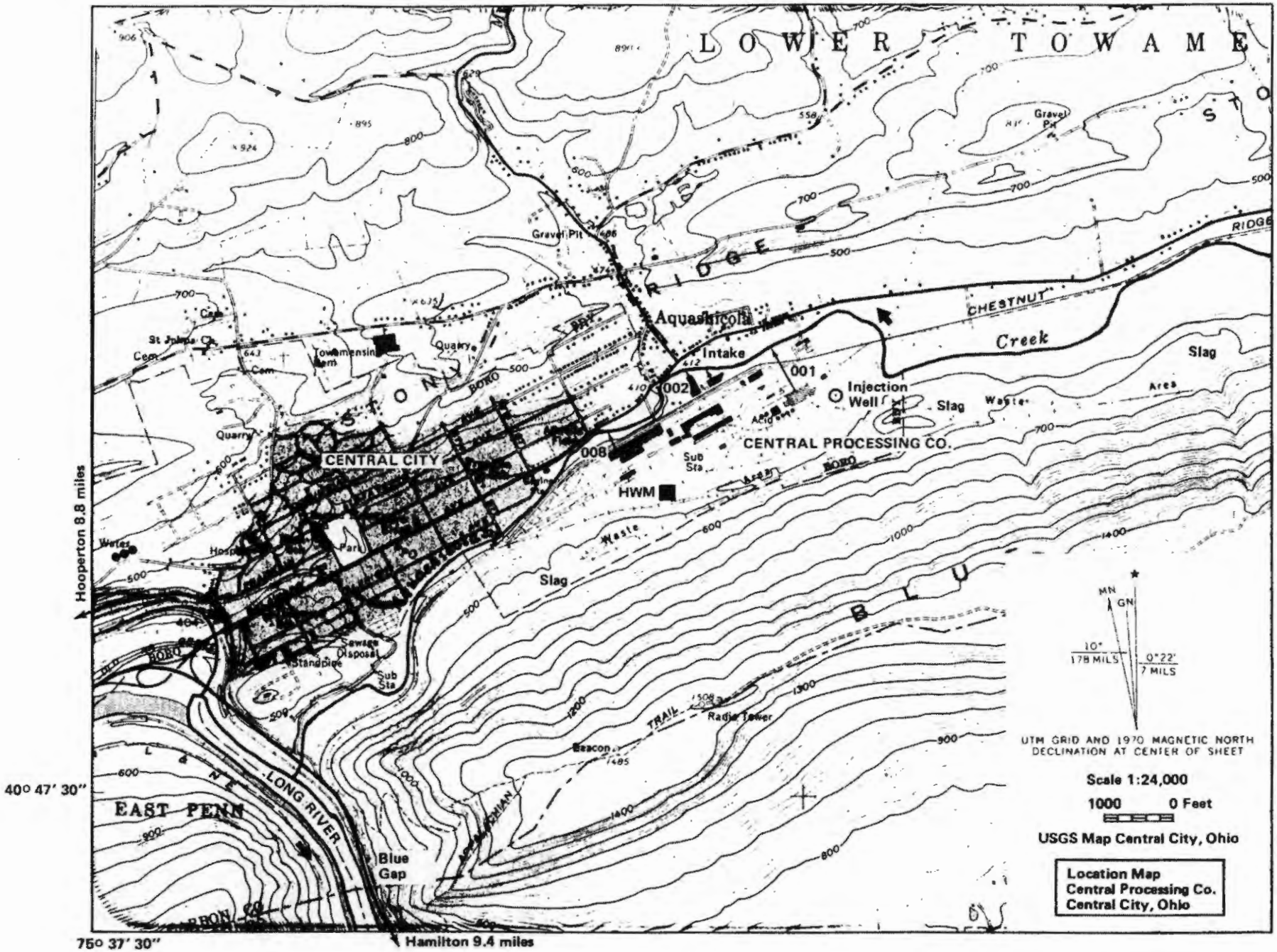
LOWER TOWAME
STONY RIDGE
CHESTNUT RIDGE
Creek
Aquashicola
Intake
001
002
008
Injection Well
Slag
Waste
Area
CENTRAL PROCESSING CO.
CENTRAL CITY
HWM
Sub Sta
Gravel Pit
Quarry
Cem
St Johns Ch
Towamensing Cem
Park
Hospital
Water
Sewage Disposal
Standpipe
Slag
Waste
BLUE
TRAIL
Radio Tower
Beacon
APPALACHIAN
LONG RIVER
EAST PENN
Blue Gap
Hooperton 8.8 miles
Hamilton 9.4 miles
40° 47' 30"
75° 37' 30"
MN
GN
10°
178 MILS
0°22'
7 MILS
UTM GRID AND 1970 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET
Scale 1:24,000
1000 0 Feet
USGS Map Central City, Ohio
Location Map
Central Processing Co.
Central City, Ohio

FIGURE 1-1

Form Approved. OMB No. 2040-0086. Approval expires 8-31-98.

Please print or type in the unshaded areas only

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)

Form **2D** NPDES

EPA

New Sources and New Dischargers Application for Permit to Discharge Process Wastewater

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

Outfall Number (*list*)	Latitude			Longitude			Receiving Water (*name*)
	Deg.	Min.	Sec.	Deg.	Min.	Sec.	
001	34°	41'	23.60"	86°	45'	46.66"	unnamed trib to bradford creek

II. Discharge Date (When do you expect to begin discharging?)

We do not plan to discharge process water but at this time this is not a zero discharge site

III. Flows, Sources of Pollution, and Treatment Technologies

A. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

Outfall Number	1. Operations Contributing Flow (*List*)	2. Average Flow (*Include Units*)	3. Treatment (*Description or List codes from Table 2D-1*)
001	wash water, water from	up to 300 gallons	acids as necessary
	wetting aggregates (potable	a day	
	water and recycled wash water)		
	storm water		

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B. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item III-A. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C. Except for storm runoff, leaks, or spills, will any of the discharges described in Items III-A be intermittent or seasonal?

☑ YES (*complete the following table*) ☐ NO (*go to Section IV*)

Outfall Number	1. Frequency		2. Flow		
	a. Days Per Week (*specify average*)	b. Months Per Year (*specify average*)	a. Maximum Daily Flow Rate (*in mgd*)	b. Maximum Total Volume (*specify with units*)	c. Duration (*in days*)
001	VARIES	Varies		300 gallons per day max average	

Discharge onsite has more to do with stormwater effecting compacity of process water pits. It is impossible to identify when and how much will discharge per day/month.

IV. Production

If there is an applicable production-based effluent guideline or NSPS, for each outfall list the estimated level of production (projection of actual production level, not design), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	A. Quantity Per Day	B. Units Of Measure	c. Operation, Product, Material, etc. (*specify*)
N/A			

CONTINUE ON NEXT PAGE

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	Outfall Number 001 process water

V. Effluent Characteristics

A and B: These items require you to report estimated amounts (*both concentration and mass*) of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions *(See table 2D-2 for Pollutants)*
Each part of this item requests you to provide an estimated daily maximum and average for certain pollutants and the source of information. Data for all pollutants in Group A, for all outfalls, must be submitted unless waived by the permitting authority. For all outfalls, data for pollutants in Group B should be reported only for pollutants which you believe will be present or are limited directly by an effluent limitations guideline or NSPS or indirectly through limitations on an indicator pollutant.

1. Pollutant	2. Maximum Daily Value *(include units)*	3. Average Daily Value *(include units)*	4. Source *(see instructions)*
fly ash			
Cement			Amounts of Pollutants
small amounts of Admixture			vary greatly
sand			
fiber			

CONTINUED FROM THE FRONT	EPA I.D. NUMBER (*copy from Item 1 of Form 1*)	

C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant	2. Reason for Discharge
fly ash, cement sand fiber admixtures	These are all comporets of concrete wash water will have some amounts of each of these items. due to settling time the amounts in discharge water will vary.

VI. Engineering Report on Wastewater Treatment

A. If there is any technical evaluation concerning your wastewater treatment, including engineering reports or pilot plant studies, check the appropriate box below.

☐ Report Available ☑ No Report

B. Provide the name and location of any existing plant(s) which, to the best of your knowledge resembles this production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name	Location
this Plant A16110125 Ready Mix Portion.	Please Note: this outfall will not be impacted by the cinders on site.

EPA I.D. NUMBER (*copy from Item 1 of Form 1*)

VII. Other Information *(Optional)*

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

VIII. 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.

A. Name and Official Title (*type or print*)	B. Phone No.
Emily Chambers EHS Director	615-556-0731
C. Signature	**D. Date Signed**
Emily Chambers	10/13/16

EPA ID Number (*copy from Item 1 of Form 1*)

Please print or type in the unshaded areas only.

Form Approved. OMB No. 2040-0086
Approval expires 5-31-92

FORM 2F NPDES

EPA

U.S. Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information, or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number (*list*)	B. Latitude			C. Longitude			D. Receiving Water (*name*)
001	34°	41'	31.4592"	86°	45'	46.944"	Unnamed tributary to Bradford creek

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.

B: You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfalls(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage of disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which received storm water discharges from the facility.

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Continue on Page 2

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of imperious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*	Outfall Number	Area of Impervious Surface *(provide units)*	Total Area Drained *(provide units)*
001	~ 5 acres	Paved site			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas, and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

Exposed to stormwater: Rock, sand, block, metal such as rebar, fueling area, Cinders for aggregate in block manufacturing.

Possibly cement and flyash.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
001	hay bales to stop solids from leaving site. replaced as needed. scraping site done regularly to remove solids.	

V. Nonstormwater Discharges

A. I certify under penalty of law hat the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharged from these outfall(s) are identified in either an accompanying Form 2C or From 2E application for the outfall.

Name and Official Title *(type or print)*	Signature	Date Signed
Emily Chambers Ehs Director	Emily Chambers	10/13/16

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

Visual observation. Due to the topography of the site the process water outfall would not drain to this area.

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

No leaks or spills known

 Continue on Page 3

Continued from Page 2

EPA ID Number *(copy from Item 1 of Form 1)*

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Table VII-A, VII-B, VII-C are included on separate sheets numbers VII-1 and VII-2.

E. Potential discharges not covered by analysis – is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ Yes (*list all such pollutants below*) ☐ No (*go to Section IX*)

NONE of the items in the lists should be present in the storm water.

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (*list all such pollutants below*) ☑ No (*go to Section IX*)

IX. Contract Analysis Information

Were any of the analyses reported in Item VII performed by a contract laboratory or consulting firm?

☐ Yes (*list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below*) ☐ No (*go to Section X*)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
NO Analysis have been done other than what was required by the AIG110125 permit			

X. 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.

A. Name & Official Title (*Type Or Print*)	B. Area Code and Phone No.
Emily Chambers EHS Director	615-556-0731
C. Signature	**D. Date Signed**
Emily Chambers	10/13/16

EPA ID Number (*copy from Item 1 of Form 1*)

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Approval expires 5-31-92

VII. Discharge information *(Continued from page 3 of Form 2F)*

Part A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		
Oil and Grease		N/A				
Biological Oxygen Demand (BOD5)						
Chemical Oxygen Demand (COD)						
Total Suspended Solids (TSS)						
Total Nitrogen						
Total Phosphorus						
pH	Minimum	Maximum	Minimum	Maximum		

Part B – List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Continue on Reverse

Continued from the Front

Part C - List each pollutant shown in Table 2F-2, 2F-3, and 2F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number *(if available)*	Maximum Values *(include units)*		Average Values *(include units)*		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 20 Minutes	Flow-Weighted Composite		

Part D – Provide data for the storm event(s) which resulted in the maximum values for the flow weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event *(in minutes)*	3. Total rainfall during storm event *(in inches)*	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event *(gallons/minute or specify units)*	6. Total flow from rain event *(gallons or specify units)*

7. Provide a description of the method of flow measurement or estimate.

○ Approximate Location of Indicated Outfall

→ Surface Water Flow Direction

N

NO.	DATE	REVISION NOTE	BY

Drawn By:	Project #
Checker	Date
Project	File Name

TITLE

Site Aeriall Map
250 Palmer Rd
Madison, Alabama

Stormwater 34°41'3 KA 459 R#12-23943 P#236484
86° 45' 46.926 S# 110217 F# 6776

NOTICE OF INTENT – GENERAL PERMIT NUMBER ALG110000

DISCHARGES ASSOCIATED WITH CONCRETE AND CONCRETE PRODUCTS MANUFACTURING (NOT INCLUDING STORM WATER OR PROCESS WASTEWATER FROM CEMENT MANUFACTURING).

#770

Mail to: Alabama Department of Environmental Management
Permits and Services Division
Post Office Box 301463
Montgomery, Alabama 36130-1463

FOR OFFICE USE ONLY

NPDES PERMIT NUMBER ALG110125

FACILITY NUMBER _____

READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY BEFORE FILLING OUT THIS FORM - ANSWER ALL QUESTIONS IN APPLICABLE SECTIONS. PLEASE MARK THE NOT APPLICABLE BOX IF A SECTION IS NOT APPLICABLE. INCOMPLETE OR WRONG ANSWERS COULD RESULT IN MORE STRINGENT PERMIT REQUIREMENTS. IF SPACE IS INSUFFICIENT TO ADDRESS ANY ITEM BELOW PLEASE CONTINUE ANSWER ON AN ATTACHED SHEET OF PAPER.

FACILITY IDENTIFICATION INFORMATION

A. Name of Facility to be shown on Permit: Sherman Industries LLC - Madison Plant

Name of permittee if different from above: _____

B. Mailing Address of Facility: – PO Box or Street Route 400 Riverhills Business Park, Suite 405

City, State and Zip Code Birmingham, AL 35242

C. Location (STREET ADDRESS) of Facility: 250 Palmer Road

City, County: Madison, Madison

D. Facility Contact Person and Title: Bobby Patterson - Plant Manager

Telephone Number: (256) 772-8045

E. Standard Industrial Code (SIC) (Names and Codes): (Ready-Mixed Concrete) 3273

F. Description of industrial activity and land use at the facility: Ready Mix Concrete & Block Plant

G. Has the facility been issued an NPDES **INDIVIDUAL** wastewater permit?

Yes [ ] No [✓] NPDES Permit No. AL00 _____

Do you intend to replace your individual permit with this General Permit? Yes [ ] No [ ]

H. Has the facility been issued a State Indirect Discharge (SID) Permit?

Yes [ ] No [✓] SID Permit No. IU _____

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I. Is this Notice of Intent for (Check one):

[ ] First time issuance of a **GENERAL** Permit Yes [ ] No [ ]
[ ] Has there ever been an industrial operation at this location? Yes [ ] No [ ]
If yes, name of facility: _____

[✓] Renewal of **GENERAL** Permit No. ALG 110125

[ ] Modification of **GENERAL** Permit No. ALG _____

J. Are any of the discharges that you intend to be covered by this permit going to a municipal storm or sanitary sewer? Yes [✓] No [ ]

K. Name of surface water to which the municipal storm sewer discharges: Bradford Creek

L. Have you notified the municipality by letter as required by 40 CFR 122.26(a)(4)? Yes [✓] No [ ]

M. Date facility started or will start operations: 12/01/1997

N. Is this a temporary concrete batch plant? Yes [ ] No [✓]
A temporary concrete batch plant means a non-permanent structure operating on an existing plant site for **less than 730 days cumulatively** during the period of coverage under the General Permit.

O. What is the size of the site in acres? 18 Acres

DSN011 – PROCESS WASTEWATER FROM NEW CONCRETE BATCH PLANTS OR NEW SOURCES

Process wastewater from new concrete batch plants or new sources may **ONLY** be discharged during or immediately after (within 24 hours) a 7.5 inch or greater storm event.

NOT APPLICABLE [✓]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream. Also include the type(s) of discharges exiting at each point: process wastewater and washdown, vehicle and equipment washwater, noncontact cooling water, cooling tower and boiler blowdown, and/or demineralizer wastewater

1. Latitude ( )° ( )' ( )" N Longitude ( )° ( )' ( )" W

   Receiving Stream _____

   Type(s) of Discharge _____

2. Latitude ( )° ( )' ( )" N Longitude ( )° ( )' ( )" W

   Receiving Stream _____

   Type(s) of Discharge _____

3. Latitude ( )° ( )' ( )" N Longitude ( )° ( )' ( )" W

   Receiving Stream _____

   Type(s) of Discharge _____

B. Check the type of process water generated at the facility and complete applicable sections associated with the type checked:

- __ Washdown/process water associated with the manufacture of concrete/concrete products
- __ Non-contact cooling water
- __ Cooling tower blowdown
- __ Boiler Blowdown
- __ Demineralizer wastewater
- __ Vehicle and equipment wash water

C. This General NPDES Permit requires the development and implementation of a Best Management Practice (BMP) Plan and a Stormwater Pollution Prevention (SPP) Plan. New sources and new facilities shall have in place and operational an impermeable containment and reclamation procedure/system for all process wastewater produced. Does the facility have a BMP Plan, SPP Plan, impermeable containment, and reclamation procedure/system in place? Yes [ ] No [ ]

D. Were there any past industrial activities on the site that would contribute to storm water contamination? Yes [ ] No [ ] If yes, please explain: _____

E. Are vehicles/equipment washed on site? Yes [ ] No [ ]
If yes, please give a detailed description of wash water use, additives, location, ultimate disposal, etc.

F. Are the interiors of tank railcars or tank trailers washed out? Yes [ ] No [ ]
If yes, the facility cannot be covered under this General Permit. Please contact the Industrial Section of ADEM before proceeding.

G. How are spent oil, hydraulic fluids and any other potential pollutants that are handled on site disposed?

G. Is diesel equipment or diesel fuel used on site? Yes [ ] No [ ]

H. Are organic or petroleum based solvents used in washing operations on site? Yes [ ] No [ ] N/A [ ]
If yes, the facility cannot be covered under this general permit. Please contact the Industrial Section of ADEM before proceeding.

For the following questions, check N/A [ ] if that discharge does not apply to your facility:

I. Is the non-contact cooling water and the cooling tower blowdown discharge less than 100,000 gallons per day (GPD)? Yes [ ] No [ ] N/A [ ]

If no, please include the estimated gallons per day of discharge: _____ GPD

J. Does surface water intake total 2 million gal/day or more? Yes [ ] No [ ] N/A [ ]

K. Is 25% or more of the intake used for cooling purposes? Yes [ ] No [ ] N/A [ ]

L. Do you use biocides in your cooling or blowdown water? Yes [ ] No [ ] N/A [ ]
If yes, please submit a list of them with this NOI.

* **BIOCIDES THAT CONTAIN TRIBUTYL TIN, TRIBUTYL TIN OXIDE, ZINC AND/OR CHROMIUM ARE PROHIBITED BY THIS PERMIT**

M. Is your discharge located in the Tennessee or Cahaba River Basin or on the Tallapoosa River between Thurlow Dam at Tallassee and the junction of the Coosa River and Tallapoosa River? Yes [ ] No [ ]

N. Is the boiler blowdown discharge less than 5,000 gallons per day (GPD)? Yes [ ] No [ ] N/A [ ]
If no, please include the estimated gallons per day of discharge _____ GPD

O. Is shock chlorination used at the facility? Yes [ ] No [ ]

P. Is any source water chlorinated? Yes [ ] No [ ] If so, explain use and list outfall number(s) from A. in this section.

Complete this section only if applicable

COOLING WATER MONITORING OPTIONS

NOT APPLICABLE [✓]

A. Is cooling/blowdown water chlorine free from the time it enters your facility until it is discharged (city water usually contains chlorine)? Yes [ ] No [ ]

IF ANSWER IS YES, DO NOT COMPLETE THIS SECTION

B. If answer is no, which outfall(s) listed above under DSN004 and DSN005 are chlorinated AND are over 2,500 feet from point of discharge from the facility to the point of entry into the receiving stream?

If you listed any outfalls in question B. you may avoid monitoring for chlorine at that outfall by:

1. Submitting lab data with the Notice of Intent (NOI) that demonstrates that the chlorine concentration at the point the discharge enters the impacted stream is 0.011 mg/l or less, **AND**

2. Submitting a site drawing showing the distance from the discharge point to the point the effluent enters the impacted stream.

C. For outfalls listed in B. do you intend to exercise the no monitoring chlorine option? Yes [ ] No [ ]

For which outfall(s)?_____

If your answer is yes to question C. you are certifying by signing this form, that the conditions are as stated above in this Section (Cooling Water Monitoring Options) and you are certifying that you understand that you are required to notify ADEM if these conditions change during the term of the permit.

DSN002– STORM WATER DISCHARGE INFORMATION ASSOCIATED WITH THE MANUFACTURE OF CONCRETE AND CONCRETE PRODUCTS FROM CONCRETE BATCH PLANTS

NOT APPLICABLE [ ]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream.

1. Latitude (34)° (41)' (31.57)" N Longitude (86)° (45)' (47.02)" W

   Receiving Stream Unnamed Tributary to Bradford Creek

2. Latitude ( )° ( )' ( )" N Longitude ( )° ( )' ( )" W

   Receiving Stream _____

3. Latitude ( )° ( )' ( )" N Longitude ( )° ( )' ( )" W

   Receiving Stream _____

B. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Yes [✓] No [ ]
If yes, attach a copy of analysis.

C. Storm water runoff discharges to:
- [x] Surface water
- [ ] Seeps into the ground
- [ ] Municipal storm sewer

D. The General NPDES Concrete Permit requires the development and implementation of a Best Management Practice (BMP) Plan and Stormwater Pollution Prevention (SPP) Plan. Does the facility have a BMP Plan and SPP Plan in place? Yes [✓] No [ ]

E. Are there any known impacts on receiving water? Yes [ ] No [✓]
If yes, to what extent? _____

F. Are any raw materials, finished products, waste products or chemicals exposed to storm water currently or in the last three years? Yes [✓] No [ ]

If yes, please list: raw materials (sand & stone)

G. Were there any past industrial activities on the site that would contribute to storm water contamination? Yes [ ] No [✓]

If yes, please explain: _____

H. Do you manufacture cement from raw materials? Yes [ ] No [✓] If yes, the facility cannot be covered under this general permit. Please contact the Industrial Section of ADEM before proceeding.

DSN008 – STORM WATER FROM PETROLEUM BULK STORAGE AND FUELING AREAS

NOT APPLICABLE [ ]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream:

1. Latitude (34)°(41)'(31.57)" N Longitude (86)°(45)'(47.02)" W

   Receiving Stream Unnamed Tributary to Bradford Creek

2. Latitude ( )°( )'( )" N Longitude ( )°( )'( )" W

   Receiving Stream _____

3. Latitude ( )°( )'( )" N Longitude ( )°( )'( )" W

   Receiving Stream _____

4. Latitude ( )°( )'( )" N Longitude ( )°( )'( )" W

   Receiving Stream _____

	Number	Size
B. List number and size of above ground storage tanks.	4	(10,000 500 250 250)
List number and size of underground storage tanks.	0	

C. Has storm water runoff from the facility been analyzed for presence of any known pollutants? Yes [ ] No [✓]
If yes, attach a copy of analysis.

D. Storm water runoff discharges to (Checkone):
- [✓] Surface water
- [ ] Seeps into ground
- [ ] Municipal storm sewer

E. This permit requires the development and implementation of a Best Management Practice (BMP) Plan. Does the facility have any of the following other control measures to prevent pollution? Yes [✓] No [ ]

[✓] Structural control measures (basins, etc.)
[ ] Treatment of groundwater (retention, aeration)
[✓] Other. If so, please describe. Double walled tank

F. Known impact on receiving water? Yes [ ] No [✓] If yes, to what extent?

G. Have any leaks, spills or other instances of storm water contamination occurred within the last 3 years? Yes [ ] No [✓] If yes, what occurred and how did it happen?

H. Are all tanks that contain a possible pollutant diked? Yes [ ] No [✓]

I. Can dikes contain 110% of the contents of the largest tank in the dike? Yes [✓] No [ ]

J. Are the walls and floors of the dikes relatively impermeable to the stored substance? Yes [ ] No [ ]

K. From which outfalls in A. (this section) is uncontaminated storm water from secondary containment (for above ground storage tanks only) areas discharged? Non double-walled tanks are located inside shop building not exposed to storm water.

L. Is treated or untreated water from tank bottoms or water draws discharged on site? Yes [ ] No [✓] If yes, this particular discharge cannot be covered under this permit. Please contact the Industrial Section of ADEM before proceeding.

M. Were there any past industrial activities on the site that would contribute to the present storm water pollution? Yes [ ] No [✓]

N. Does the facility handle leaded fuels? Yes [ ] No [✓]

O. Does the facility handle aviation fuel, jet fuel, or diesel fuel? Yes [✓] No [ ]

P. Is hydrostatic testing of petroleum handling equipment done on site? Yes [ ] No [✓] If yes, this particular discharge cannot be covered under this permit. Please contact the Industrial Section of ADEM before proceeding.

Q. Is chlorine present in any source water (i.e., city or well water) used for hydrostatic testing? Yes [ ] No [✓]

R. Are any trucks or equipment fueled at this facility? Yes [✓] No [ ] Is your fueling area protected from storm water including flowing water? Yes [ ] No [✓] If yes, please explain.

S. Is storm water/wash down water from the fueling/loading area treated (oil/water separator, etc.) prior to discharge? Yes [ ] No [✓]

T. Does the facility comply with 40 CFR Part 112? Yes [✓] No [ ]
SPCC Plan date: January 2012

U. Is storm water from fueling areas allowed to mix with storm water from other industrial activities? Yes [✓] No [ ]

V. Does any discharge or runoff from the facility reach a public water supply stream segment as defined by ADEM Administrative Code R. 335-6-11-.02? Yes [ ] No [✓]

Note: DSN008 requires that the permittee submit an annual petroleum certification by January 28th that all discharges during the preceding year were in accordance with the conditions of the permit. If the Department deems it necessary to require monitoring, then the facility may have additional testing under DSN002.

DSN012 – PROCESS WASTEWATER FROM EXISTING OR TEMPORARY CONCRETE BATCH PLANTS

An existing facility is a facility that was constructed and began operation prior to September 1, 2007. A temporary concrete batch plant means a non-permanent structure operating on an existing plant site for **less than 730 days cumulatively** during the period of coverage under the General Permit.

NOT APPLICABLE [ ]

A. List latitude and longitude (to seconds) of the point where each discharge exits your property and name of receiving stream. Also include the type(s) of discharges exiting at each point: process wastewater and washdown, vehicle and equipment washwater, noncontact cooling water, cooling tower and boiler blowdown, and/or demineralizer wastewater

1. Latitude (34)°(41)'(23.24)" N Longitude (86)°(45)'(46.54)" W

   Receiving Stream Unnamed Tributary to Bradford Creek

   Type(s) of Discharge process wastewater and washdown

2. Latitude ( )°( )'( )" N Longitude ( )°( )'( )" W

   Receiving Stream

   Type(s) of Discharge

3. Latitude ( )°( )'( )" N Longitude ( )°( )'( )" W

   Receiving Stream

   Type(s) of Discharge

B. Check the type of process water generated at the facility and complete applicable sections associated with the type checked:

- [✓] Washdown/process water associated with the manufacture of concrete/concrete products
- [ ] Non-contact cooling water
- [ ] Cooling tower blowdown
- [ ] Boiler Blowdown
- [ ] Demineralizer wastewater
- [✓] Vehicle and equipment wash water

C. Has process water discharged from the facility? Yes [ ] No [✓]
If yes, has it been analyzed for presence of any known pollutants? Yes [ ] No [ ]
If yes, please attach a copy of the analysis.

D. The General NPDES Concrete Permit requires the development and implementation of a Best Management Practice (BMP) Plan and a Stormwater Pollution Prevention (SPP) Plan. Does the facility have a BMP Plan and SPP Plan in place?
Yes [✓] No [ ]

E. Were there any past industrial activities on the site that would contribute to storm water contamination?
Yes [ ] No [✓] If yes, please explain:

F. Are vehicles/equipment washed on site? Yes [✓] No [ ]
If yes, please give detailed description of wash water use, additives, location, ultimate disposal, etc.
Concrete batch trucks washed out, truck bodies rinsed with acid solution: Water captured & treated with process water.

G. Are the interiors of tank railcars or tank trailers washed out? Yes [ ] No [✓]
If yes, the facility cannot be covered under this General Permit. Please contact the Industrial Section of ADEM before proceeding.

H. How are spent oil, hydraulic fluids and any other potential pollutants that are handled on site disposed?
waste oil & petroleum products generated are recycled

I. Is diesel equipment or diesel fuel used on site? Yes [✓] No [ ]

J. Are organic or petroleum based solvents used in washing operations on site? Yes [ ] No [✓] N/A [ ]
If yes, the facility cannot be covered under this general permit. Please contact the Industrial Section of ADEM before proceeding.

For the following questions, check N/A [ ] if that discharge does not apply to your facility:

K. Is the non-contact cooling water and the cooling tower blowdown discharge less than 100,000 gallons per day (GPD)?
Yes [ ] No [ ] N/A [✓]

If no, please include the estimated gallons per day of discharge: _____ GPD

L. Does surface water intake total 2 million gal/day or more? Yes [ ] No [ ] N/A [✓]

M. Is 25% or more of the intake used for cooling purposes? Yes [ ] No [ ] N/A [✓]

N. Do you use biocides in your cooling or blowdown water? Yes [ ] No [ ] N/A [✓]
If yes, please submit a list of them with this NOI.

- **BIOCIDES THAT CONTAIN TRIBUTYL TIN, TRIBUTYL TIN OXIDE, ZINC AND/OR CHROMIUM ARE PROHIBITED BY THIS PERMIT**

O. Is your discharge located in the Tennessee or Cahaba River Basin or on the Tallapoosa River between Thurlow Dam at Tallassee and the junction of the Coosa River and Tallapoosa River? Yes [✓] No [ ]

P. Is the boiler blowdown discharge less than 5,000 gallons per day (GPD)? Yes [ ] No [ ] N/A [✓]
If no, please include the estimated gallons per day of discharge _____ GPD

Q. Is shock chlorination used at the facility? Yes [ ] No [✓]

R. Is any source water chlorinated? Yes [✓] No [ ] If so, explain use and list outfall number(s) from A. in this section.

S. Is demineralizer wastewater discharged? Yes [ ] No [✓] N/A [ ]

Complete this section only if applicable

COOLING WATER MONITORING OPTIONS

NOT APPLICABLE [✓]

Is cooling/blowdown water chlorine free from the time it enters your facility until it is discharged (city water usually contains chlorine)? Yes [ ] No [ ]

IF ANSWER IS YES, DO NOT COMPLETE THIS SECTION

If answer is no, which outfall(s) listed above under DSN004 and DSN005 are chlorinated AND are over 2,500 feet from point of discharge from the facility to the point of entry into the receiving stream?

If you listed any outfalls in question B. you may avoid monitoring for chlorine at that outfall by:

1. Submitting lab data with the Notice of Intent (NOI) that demonstrates that the chlorine concentration at the point the discharge enters the impacted stream is 0.011 mg/l or less, **AND**

2. Submitting a site drawing showing the distance from the discharge point to the point the effluent enters the impacted stream.

For outfalls listed in B. do you intend to exercise the no monitoring chlorine option? Yes [ ] No [ ]

For which outfall(s)?_____

If your answer is yes to question C. you are certifying by signing this form, that the conditions are as stated above in this Section (Cooling Water Monitoring Options) and you are certifying that you understand that you are required to notify ADEM if these conditions change during the term of the permit.

GENERAL INFORMATION

Have you included a check for the application fee? Yes [✓] No [ ]

DO NOT SUBMITAPPLICATION AND PERMIT FEE SEPARATELY

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 or imprisonment for knowing violations.

SIGNATURES

Signature: Bill Moore Date Signed: 5/31/2012

Name and Official title (type or print): Bill Moore V.P./General Manager

NOTE: This Notice of Intent must be signed by the official representative of the facility who is: the owner, the sole proprietor of a sole proprietorship, a general partner for a partnership, or by a ranking elected official or other duly authorized representative for a unit of government or an executive officer of **at least the level of vice president** for a corporation, having overall responsibility for the operation of the facility. If the Notice of Intent is not signed, or is found to be incomplete, it will be returned.

Address: Sherman Industries 400 Riverhills Business Park, Suite 405 Birmingham AL 35242

Phone Number: (205) 314-5125

PLEASE COMPLETE IF NOI IS PREPARED BY A CONSULTANT OR SOMEONE OTHER THAN AN EMPLOYEE OF THE FACILITY

Name of Individual (type or print): _____

Name of Firm: _____

Address: _____

Phone Number: ( ) _____

Please attach or in the space below draw a map showing the location of the facility including major highways and/or landmarks.

SHERMAN INDUSTRIES

NOTICE OF INTENT – GENERAL PERMIT # ALG11000

ADDITIONAL INFORMATION

DSN012 – Process Wastewater From Existing Concrete Batch Plants

R. Is any source of water chlorinated? Yes (X)
The water utilized to manufacture the concrete is supplies by the local municipal water system and is chlorinated. As a result, the process water outfall DSN012-01 could contain chlorinated waste water.

ENERSOLV
a Solutions Company

October 12, 2009

Greg Willingham
Sherman Industries Inc.
PO Box 646
Madison, AL 35758

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Sample ID Number	Sample Description	Date Collected	Date Submitted
AA97571	Madison Site DSN002	10/7/09	10/7/09
AA97572	Huntsville Site DSN002	10/7/09	10/7/09

ENERSOLV maintains a quality system compliant with **ISO 17025:2005** and meets the relevant quality system requirements of **ISO 9001:2000**. Although not all tests performed by *ENERSOLV* are covered by this quality system, all tests have been conducted in accordance with *ENERSOLV* Standard Operating Procedures and Quality Control Program using, where applicable, U.S.E.P.A. approved methodology.

This cover page is an integral part of your report. *ENERSOLV* considers this report your official record. This information shall remain in *ENERSOLV*'s active database for a period of one (1) calendar year before archiving. Any replacement of this information after archiving may result in an administrative fee to cover the cost of retrieval.

If you have any questions or would like more information regarding these analyses, please call us at (256) 350-0846.

Reviewed by:

William D. Holbrman, Ph. D.
Vice President Technical Services

P.O. Box 1646 • Decatur, Alabama 35602 • (256) 350-0846 • Fax: (256) 350-0686

ENERSOLV
a Solutions Company

Report Date: 9/14/09
Report Time: 12:37

SAMPLE RESULTS REPORT

REPORT TO
Greg Willingham Sherman Industries Inc. PO Box 646 Madison, AL 35758

ENERSOLV maintains A2LA accreditation to ISO/IEC 17025:2005 for the specific tests listed in A2LA Certificate #2198-01. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

Cert. No. 2198-01
ISO 17025

This report may contain information that is confidential and/or proprietary. This information is intended for the addressee only and may not be copied or disseminated without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
Sample Point: Treated Water		**Collected: 09/08/2009**		**Submitted: 09/09/2009**	
AA94864	*Total Suspended Solids	8.11	mg/l		
Sample Point: Stormwater		**Collected: 09/08/2009**		**Submitted: 09/09/2009**	
AA94865	*Total Suspended Solids	7.67	mg/l		

Data Qualifiers: N: Non target analyte. The analyte is a tentatively identified compound (using mass spectrometry)
J: Estimated - the analyte was positively identified; the quantitation is an estimation (e.g. matrix interference, outside calibration range, tentatively identified compound, incorrect preservation)
Q: One or more quality control criteria (LCS, surrogate spike recovery, continued calibration, etc.) failed due to sample matrix interference. Data may be estimated or biased.

Analysis Information

Sample ID	Analysis	Method	Analyst	Analysis Start Date/Time		BOD/CBOD Analysis End Date/Time
AA94864	Total Suspended Solids	USGS I-3765-85	DOG	09/09/2009	13:15	
AA94865	Total Suspended Solids	USGS I-3765-85	DOG	09/09/2009	13:15	

ENERSOLV
a Solutions Company

Report Date: 10/12/09
Report Time: 9:15

SAMPLE RESULTS REPORT

REPORT TO

Greg Willingham
Sherman Industries Inc.
PO Box 646
Madison, AL 35758

ENERSOLV maintains A2LA accreditation to ISO/IEC 17025:2005 for the specific tests listed in A2LA Certificate #2198-01. Some tests included in this report may not be covered by this accreditation. Tests within the scope of this accreditation are indicated by an asterisk (*).

Cert. No. 2198-01
ISO 17025

This report may contain information that is confidential and/or proprietary. This information is intended for the addressee only and may not be copied or disseminated without the express consent of ENERSOLV Corporation.

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
Sample Point: Madison Site DSN002		**Collected: 10/07/2009**		**Submitted: 10/07/2009**	
AA97571	*Total Suspended Solids	23.5	mg/l		
Sample Point: Huntsville Site DSN002		**Collected: 10/07/2009**		**Submitted: 10/07/2009**	
AA97572	*Total Suspended Solids	<2.50	mg/l		

Data Qualifiers: N: Nontarget analyte. The analyte is a tentatively identified compound (using mass spectrometry)
J: Estimated - the analyte was positively identified; the quantitation is an estimation (e.g. matrix interference, outside calibration range, tentatively identified compound, incorrect preservation)
Q: One or more quality control criteria (LCS, surrogate spike recovery, continued calibration, etc.) failed due to sample matrix interference. Data may be estimated or biased.

Analysis Information

Sample ID	Analysis	Method	Analyst	Analysis Start Date/Time		BOD/CBOD Analysis End Date/Time
AA97571	Total Suspended Solids	USGS I-3765-85	JLP	10/08/2009	13:30	
AA97572	Total Suspended Solids	USGS I-3765-85	JLP	10/08/2009	13:30	

ENERSOLV
a Solutions Company

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
(256)-350-0848

COC NUMBER	86525
PAGE	1 of 1

COMPANY/CLIENT NAME	ACCOUNT NUMBER	QUOTE NUMBER	ENERSOLV PROJECT NUMBER
Sherman Ind.			
CLIENT POINT OF CONTACT	CLIENT PHONE		CLIENT P.O. NUMBER

CLIENT ADDRESS	CITY	STATE	ZIP CODE
250 Palmer Road	Madison	Al	35758

SAMPLE COLLECTED BY

EXPEDITED REPORT DELIVERY (SURCHARGE)

DATE DUE (REQUIRED)

REQUIRED ANALYSES

SAMPLE (USE ONE LINE PER CONTAINER)

ENERSOLV LAB NO.	DESCRIPTION	DATE	TIME	GRAB	COMP
AA97571	Storm water Madison	10/7/09			
572	Storm water Huntsville	10/7/09			

Comments:

Debby
256 759-5628 Madison pH 11.41. Huntsville 10.91

Field Information

Sampler		pH su	NA	TRC mg/l	NA	DO mg/l	NA	Temp deg C	NA
Start Date	NA	Date	NA	Date	NA	Date	NA	Date	NA
Start Time	NA	Time	NA	Time	NA	Time	NA	Time	NA
Stop Date	NA	Analyst	NA	Analyst	NA	Analyst	NA	Analyst	NA
Stop Time	NA	SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	< 2	>12.5	Parameter

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
[signature]	10/7/09	1:09pm						
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS:
[signature]	10-7-09	1309	☒ Accepted ☐ Rejected ☐ Accepted with Exception

Enersolv Form FLD-020-SOP A rev. 4

May 04, 2012

Greg Willingham
Sherman Industries Inc.
PO Box 646
Madison, AL 35758

We appreciate the opportunity to provide our services to you on this project. Please find attached the data for the sample(s) listed below:

Sample ID Number	Sample Description	Date Collected	Time Collected	Date Submitted
AB89905	Madison Site DSN012	4/26/12	08:00	4/27/12

ENERSOLV maintains a quality system compliant with the **National Environmental Laboratory Accreditation Program (NELAP) and ISO 17025:2005** and meets the relevant quality system requirements of **ISO 9001:2000**. Although not all tests performed by *ENERSOLV* are covered by these quality systems, all tests have been conducted in accordance with *ENERSOLV* Standard Operating Procedures and Quality Control Program using, where applicable, U.S.E.P.A. approved methodology.

This cover page and the attached chain-of-custody record(s) are integral parts of your report. *ENERSOLV* considers this report your official record. This information shall remain in *ENERSOLV*'s active database for a period of one (1) calendar year before archiving. Any replacement of this information after archiving may result in an administrative fee to cover the cost of retrieval.

If you have any questions or would like more information regarding these analyses, please call us at (256) 350-0846.

Reviewed by:

Karen Sutton

Karen Sutton
Vice President Client Services

2220 [illegible] Road SW • Decatur, Alabama 35601
PO Box [illegible] • Decatur, Alabama 35602 • [illegible] • Fax: (256) 350-0850

Report Date: 5/4/12
Report Time: 9:36

SAMPLE RESULTS REPORT

REPORT TO
Greg Willingham Sherman Industries Inc. PO Box 646 Madison, AL 35758

NELAP Accredited
Florida DOH
#E871078

ENERSOLV maintains National Environmental Laboratory Accreditation Program (NELAP) accreditation through Florida Department of Health (#E871078). Some tests included in this report may not be covered by this accreditation.
ENERSOLV also maintains ISO/IEC 17025 accreditation through Laboratory Accreditation Bureau for the specific tests listed in L-A-B Certificate #L2239 Testing
Tests within the scope of accreditation are indicated by an asterisk (*)

LABORATORY ACCREDITATION BUREAU
Cert# L2239 Testing

EPA/ADEM Certification
No. 40160

This report may contain information that is confidential and or proprietary. This information is intended for the addressee only and may not be copied or disseminated except in full without the written consent of ENERSOLV Corporation

Sample ID	Analyte Name	Result	Units	Qual	Regulatory Limit
Sample Point: Madison Site DSN012		**Collected: 04/26/2012**		**Submitted: 04/27/2012**	
AB89905	*HEM (Oil and Grease)	<5.00	mg/l		
AB89905	pH	8.9	su	H	
AB89905	*Total Phosphorus CAS: 7723-14-0	<1.00	mg/l		
AB89905	*Total Suspended Solids	7.50	mg/l		

Data Qualifiers:
B: Estimated BOD/CBOD value - final dissolved oxygen value less than 1.0 mg/l.
D: Estimated BOD/CBOD value - sample dissolved oxygen depletion less than method required 2.0 mg/l.
G: Glucose/Glutamic Acid standard outside quality control criteria for BOD/CBOD.
H: Sample beyond accepted holding time.
J: Estimated value- the analyte was positively identified; the quantitation is an estimation (e.g. matrix interference, outside calibration range).
N: Presumptive evidence of presence (parameter tentatively identified based on mass spectral library search; quality control requirements confirmation was not met, i.e., presence of analyte was not confirmed by alternative procedure.)
Q: One or more quality control criteria (LCS, surrogate spike recovery, continued calibration, etc.) failed. Data may be estimated or biased.
Y: Analysis performed from improperly preserved sample.

Analysis Information

Sample ID	Analysis	Method	Analyst	Analysis Start Date/Time		BOD/CBOD/Fecal Analysis End Date/Time
AB89905	HEM (Oil and Grease)	EPA 1664A	DOG	05/01/2012	05:45	
AB89905	pH	SM 4500-H+	JLP	05/03/2012	11:55	
AB89905	Total Phosphorus	EPA 365.3	JW	05/01/2012	08:45	
AB89905	Total Suspended Solids	USGS I-3765-85	JLP	04/30/2012	11:55	

The results contained in this report are only representative of the sample(s) received.

ENERSOLV
a Solutions Company

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD
2220 BELTLINE ROAD SW DECATUR, ALABAMA 35601
(256)-350-0846

COC NUMBER	79717		
PAGE	1	of	1

COMPANY/CLIENT NAME	ACCOUNT NUMBER	QUOTE NUMBER	ENERSOLV PROJECT NUMBER
Sherman Industries			

CLIENT POINT OF CONTACT	CLIENT PHONE	CLIENT P.O. NUMBER
Greg Willingham	772-7490 (cell 759-8102)	

CLIENT ADDRESS	CITY	STATE	ZIP CODE
250 Palmer Road	Madison	AL	35758

SAMPLE COLLECTED BY: Bobby Patterson

EXPEDITED REPORT DELIVERY (SURCHARGE)

DATE DUE (REQUIRED)

REQUIRED ANALYSES

SAMPLE (USE ONE LINE PER CONTAINER)

ENERSOLV LAB NO.	DESCRIPTION	DATE	TIME	GRAB	COMP	pH	TSS	Oil & Grease	Phosphorus
4B4405	DSN0[redacted] Madison [redacted]	4/26/2012	8:00 am	AP	815	X	X	X	X

Comments:

pH 7.6 on Bottle

SAMPLE TEMP. REC'D @ 19.8°

Field Information

Sampler		pH su		TRC mg/l		DO mg/l		Temp deg C	
Start Date		Date		Date		Date		Date	
Start Time		Time		Time		Time		Time	
Stop Date		Analyst		Analyst		Analyst		Analyst	
Stop Time		SM 4500H+		SM 4500-Cl D		SM 4500-O G		SM 2550B	

Qty	Type	Vol.	Preserv.	< 2	>12.5	Parameter
1	Plastic	Quart	n/a	n/a	n/a	1 TSS,ph
						B phos
						C O&G

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
Rickey Slayton	4/27/2012	12:00						

RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME

RECEIVED FOR LABORATORY USE BY: (SIGNATURE)	DATE	TIME	SAMPLE STATUS
[illegible]	4-27-12	[illegible]	☒ Accepted ☐ Rejected ☒ Accepted with Exception

Enersolv Form FLD-020-SOP A rev. 4

SEQUATCHIE CONCRETE SERVICE
P.O. BOX 11869
Knoxville, Tennessee 37901

RECEIVED
NOV 07 2016
IND / MUN BRANCH

Oct 28, 2016

ADEM
1400 Coliseum Blvd.
Montgomery, Al 36110-2400

To Whom it may concern:

This letter is to respond to site inspection that was done back earlier this year for permit number ALG110125 located at 250 Palmer Road, Madison AL. In the inspection, it was noted that due to the storage of coal cinders we would no longer be eligible for the general permit and must apply for an individual permit. Nothing on site has changed from when the original application for the general water permit was applied for and granted. It is also included as a reference.

Please note that no storm water testing as noted as a request in the application has been taken as we have had no storm events that could be sampled. I have coordinated for those items to be tested for with a third-party testing company who will come out when the next rain event occurs.

Please let me know if you need any additional information. I can be reached at the letterhead address, by phone at 615-556-0731 or by email at echambers@seqconcrete.com.

Sincerely,

Emily Chambers

Emily Chambers
EHS Director
Sequatchie Concrete Service, Inc.