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

MAR 2 6 2020

MICHAEL BARNES, GENERAL MANAGER
HYCO ALABAMA LLC
PO BOX 70
ARAB AL 35016

RE: DRAFT PERMIT
NPDES PERMIT NUMBER AL0065111

Dear Mr. Barnes:

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 Lounsberry 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)

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: HYCO ALABAMA LLC

FACILITY LOCATION: 218 ARAD THOMPSON RD
ARAB, AL 35016

PERMIT NUMBER: AL0065111

RECEIVING WATERS: 002: SHOAL CREEK
003: SHOAL 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

TABLE OF CONTENTS

PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the expiration date of this permit, the permittee is authorized to discharge from the following point source(s) outfall(s), described more fully in the permittee's application:

DSN002Q:Storm water runoff associated with electroplating and metal finishing operations 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
Solids, Total Suspended	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Zinc Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Lead, Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Copper Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Chromium, Trivalent Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Chromium, Hexavalent Tot Recoverable	-	-	-	-	REPORT mg/l	Quarterly	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/ For the purpose of demonstration of compliance with this parameter, "Total" and "Total recoverable" shall be considered equivalent.

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:

DSN002S:Storm water runoff associated with electroplating and metal finishing operations 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	-	-	6.0 S.U.	-	8.5 S.U.	Semi-Annually	Grab	-
Oil & Grease	-	-	-	-	15 mg/l	Semi-Annually	Grab	-
Flow, In Conduit or Thru Treatment Plant	-	REPORT MGD	-	-	-	Semi-Annually	Estimate	-

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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:

DSN003Q:Storm water runoff associated with electroplating and metal finishing operations 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
Solids, Total Suspended	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Zinc Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Lead, Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Copper Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
Chromium, Trivalent Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	-
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Oil & Grease	-	-	-	-	15 mg/l	Semi-Annually	Grab	-
Flow, In Conduit or Thru Treatment Plant	-	REPORT MGD	-	-	-	Semi-Annually	Estimate	-

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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 QUARTERLY TESTING shall be submitted on a **quarterly** 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 reporting waiver for DMR submittals. The waiver request should include the permit number; permittee name; facility/site name; facility address; name, address, and contact information for the responsible official or duly authorized representative; a detailed statement regarding the basis for requesting such a waiver; and the duration for which the waiver is requested. Approved electronic reporting waivers are not transferrable.

Permittees with an approved electronic reporting waiver for DMRs may submit hard copy DMRs for the period that the approved electronic reporting waiver request is effective. The permittee shall submit the Department-approved DMR forms to the address listed in 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 335-6-6-.09 or a "duly authorized representative" of such official as defined in ADEM Administrative Code Rule 335-6-6-.09 and shall bear the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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

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 Noncompliance Notification Form (ADEM Form 421) available on the Department's website (http://adem.alabama.gov/DeptForms/Form421.pdf) and include the following information:

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

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

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

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:

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 3l6(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. 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: January 8, 2020
PREPARED BY: Rachel Lounsberry

Permittee Name: Hyco Alabama LLC

Permit Number: AL0065111

PERMIT IS REISSUANCE DUE TO EXPIRATION

DISCHARGE SERIAL NUMBERS & DESCRIPTIONS:
DSN002: Storm water runoff associated with electroplating and metal finishing operations
DSN003: Storm water runoff associated with electroplating and metal finishing operations

INDUSTRIAL CATEGORY: NON-CATEGORICAL

MAJOR: N

STREAM INFORMATION:

Receiving Stream:	Shoal Creek
Classification:	Fish & Wildlife
River Basin:	Tennessee River Basin
7Q10:	0 cfs
303(d) List:	NO
Impairment:	None
TMDL:	NO

DISCUSSION:

Hyco Alabama, LLC designs and manufactures custom rods and telescoping hydraulic cylinders for vehicles and equipment. Maintenance activities and material storage activities occur onsite. Process water does not discharge into a water of the state or a POTW. The process wastewater from the facility is collected in two above ground storage tanks. The process wastewater is either evaporated in the facility's permitted evaporator or stored in totes to be hauled away and disposed.

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.

003Q:

Parameter	Monthly Avg Loading	Daily Max Loading	Daily Min Concentration	Monthly Avg Concentration	Daily Max Concentration	Sample Frequency	Sample Type	Basis*
Solids, Total Suspended	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Zinc Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Lead, Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Copper Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Chromium, Trivalent Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Chromium, Hexavalent Tot Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ

003S:

Parameter	Monthly Avg Loading	Daily Max Loading	Daily Min Concentration	Monthly Avg Concentration	Daily Max Concentration	Sample Frequency	Sample Type	Basis*
pH	-	-	6.0 S.U.	-	8.5 S.U.	Twice per Year	Grab	WQBEL
Oil and Grease	-	-	-	-	15 mg/l	Twice per Year	Grab	BPJ
Flow, In Conduit or Thru Treatment Plant	-	REPORT MGD	-	-	-	Twice per Year	Estimate	BPJ

002Q:

Parameter	Monthly Avg Loading	Daily Max Loading	Daily Min Concentration	Monthly Avg Concentration	Daily Max Concentration	Sample Frequency	Sample Type	Basis*
Solids, Total Suspended	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Zinc Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Lead, Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Copper Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Chromium, Trivalent Total Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ
Chromium, Hexavalent Tot Recoverable	-	-	-	-	REPORT mg/l	Quarterly	Grab	BPJ

002S:

Parameter	Monthly Avg Loading	Daily Max Loading	Daily Min Concentration	Monthly Avg Concentration	Daily Max Concentration	Sample Frequency	Sample Type	Basis*
pH	-	-	6.0 S.U.	-	8.5 S.U.	Twice per Year	Grab	WQBEL
Oil and Grease	-	-	-	-	15 mg/l	Twice per Year	Grab	BPJ
Flow, In Conduit or Thru Treatment Plant	-	REPORT MGD	-	-	-	Twice per Year	Estimate	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 Requirements

Discussion

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.

Metal Monitoring

This facility's process water is regulated under 40 CFR 413 (Electroplating Point Source Category) and 40 CFR Part 433(Metal Finishing Point Source Category), however the facility does not discharge any process water. Based on BPJ, Zinc, Lead, Copper, Trivalent Chromium, and Hexavalent Chromium will continue to be monitored.

Water Quality Based Effluent Limits (WQBEL)

pH

ADEM Administrative Code, Division 6 Regulations, specifically 335-6-10-.09 (5)(2) – Specific Water Quality for Fish & 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."

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.

NPDES & SID Fee Sheet
Municipal, Industrial and Mining

Base Application	Initial Issuance Reissuance or Modification (effluent limit change) (injection zone change or compatibility study)	Modification (No effluent limit change) (No injection zone change or no compatibility study)	Fee Total
Action Type: Reissuance			
Payment Type: Water NPDES Industrial Minor Fee			$5615.00
Major Industrial Discharger	$17,990	$3,940	
Minor Industrial Discharger	$5,615	$3,120	
Commercial/Industrial General	$1,385	$800	
Major Municipal & Private	$7,060	$3,140	
Minor Municipal & Private & Water Treatment	$4,290	$2,250	
Municipal Storm Water (**MS-4**)	$7,060	$3,275	
Minor NPDES Modification	- - - -	$ 800	
SID	$3,850	$2,125	
SID with EPA established Categorical Effluent Guidelines	$4,375	$2,520	
Name Change/Transfer	$ 800	- - - - -	
Mineral/Resource Extraction Mining, Storage Transloading, Dry Processing	$5,820	$3,400	
Wet Preparation, Processing, Beneficiation	$6,860	$3,940	
Coalbed Methane	$6,860	$3,940	

Master ID No: 0000006215
Applicant: Hyco Alabama LLC
Contact: Michael Barnes
Mailing Address: 218 ARAD THOMPSON RD
Atlanta, GA 30336
County: Marshall
Facility: Hyco Alabama LLC
Location: 218 ARAD THOMPSON RD
Facility City: Arab
Facility/Permit No: AL0065111
Application Receive Date: November 5, 2019

ADDITIVE FEES:	
Modeling with Data Collection (10 Stations)	$60,390
Modeling with Data Collection (5 Stations)	$49,315
Modeling - Desktop	$ 4,855
Review of Model Performed by Others	$ 2,705
Seasonal Limits (per additional Season)	$ 4,855
Biomonitoring & Toxicity Limits	$ 1,015
316b Phase I, II, & III Facilities (Permit Issuance/Re-Issuance Modification)	$ 5,065
Review Comp Demo Study [(316b Phase I (Track 2) & Phase II (Alt 2, 3, 4, 5)]	$40,525
Public Hearing	$ 8,450
Green Field Fee	$ 1,610

Entered to Permit Tracking: _____
By: _____
Total Fee Due: $5615.00
Amount Submitted with Appl: $5615.00
Amount to be Billed: $0.00
Date and Amt Received: _____
Amount to be Refunded: $
Prepared by: Rachel Lounsberry
Reviewed by: SSR

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
NPDES INDIVIDUAL PERMIT APPLICATION
SUPPLEMENTARY INFORMATION FOR INDUSTRIAL FACILITIES

Instructions: This form should be used to submit the required supplementary information for an application for an NPDES individual permit for industrial facilities. The completed application should be submitted to ADEM in duplicate. 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 not applicable to the applicant. Please type or print legibly in blue or black ink. Mail the completed application to:

ADEM-Water Division
Industrial Section
P O Box 301463
Montgomery, AL 36130-1463

RECEIVED
NOV 04 2019
IND/MUN BRANCH

PURPOSE OF THIS APPLICATION

- ☐ Initial Permit Application for New Facility*
- ☐ Initial Permit Application for Existing Facility*
- ☐ Modification of Existing Permit
- ☒ Reissuance of Existing Permit
- ☐ Revocation & Reissuance of Existing Permit

* *An application for participation in the ADEM's Electronic Environmental (E2) Reporting must be submitted to allow permittee to electronically submit reports as required.*

SECTION A – GENERAL INFORMATION

1. Facility Name: Hyco Alabama, LLC - Montanhydraulik Group
   a. Operator Name: Montanhydraulik GmbH
   b. Is the operator identified in A.1.a, the owner of the facility? ☒ Yes ☐ No
   If no, provide name and address of the operator and submit information indicating the operator's scope of responsibility for the facility.
2. NPDES Permit Number: AL 0065111 (not applicable if initial permit application)
3. SID Permit Number (if applicable): IU ___ ___ - ___ ___ - ___ ___ ___ ___ ___
4. NPDES General Permit Number (if applicable): ALG ___ ___ ___ ___ ___ ___
5. Facility Physical Location: **(Attach a map with location marked; street, route no. or other specific identifier)**
   Street: 218 Arad Thompson Road
   City: Arab County: Marshall State: Alabama Zip: 35016
   Facility Location (Front Gate): Latitude: 34.319323 Longitude: -86.477158
6. Facility Mailing Address: PO Box 70
   City: Arab County: Marshall State: Alabama Zip: 35016
7. Responsible Official (as described on the last page of this application):
   Name and Title: Michael Barnes, General Manager
   Address: 218 Arad Thompson Road
   City: Arab State: Alabama Zip: 35016
   Phone Number: (256) 586-8152 Email Address: michael.barnes@hyco-hydraulic.com
8. Designated Facility Contact:
   Name and Title: Chris Cobbs, Quality and Environmental
   Phone Number: (256) 586-9219 Email Address: chris.cobbs@hyco-hydraulic.com

9. Designated Discharge Monitoring Report (DMR) Contact:

Name and Title: Chris Cobbs, Quality and Environmental

Phone Number: (256) 586-9219 Email Address: chris.cobbs@hyco-hydraulic.com

10. Type of Business Entity:

☐ Corporation ☐ General Partnership ☐ Limited Partnership ■ Limited Liability Company ☐ Sole Proprietorship

☐ Other (Please Specify):

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

a) Location of Incorporation:

Address: 218 Arad Thompson Road

City: Arab County: Marshall State: Alabama Zip: 35016

b) Parent Corporation of Applicant:

Name: Montanhydraulik GmbH

Address: Bahnhofstrasse 39

City: 589439 Holzwickede State: Germany Zip:

c) Subsidiary Corporation(s) of Applicant:

Name:

Address:

City: State: Zip:

d) Corporate Officers:

Name:

Address:

City: State: Zip:

Name:

Address:

City: State: Zip:

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

Name:

Address:

City: State: Zip:

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

Name: Name:

Address: Address:

City: State: Zip: 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	AL0065111	Hyco Alabama, LLC
Air	711-0043	Hyco Alabama, LLC
RCRA	ALD072099690	Hyco Alabama, LLC

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
Hyco Alabama, LLC	ALD072099690	NOV	3/18/2016

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. 3593-Fluid Power Cylinders

b. _____

c. _____

d. _____

e. _____

f. _____

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)_____

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):

Hyco Alabama, LLC designs and manufactures custom rods and telescoping hydraulic cylinders for vehicles and equipment. The facility was purchased by Montanhydraulik GmbH in 2016. Office administration and plant operation are the two primary job functions. Maintenance activities and materials storage activities also occur onsite. Hazardous waste, metal chips, and oil are stored in covered containment areas. Wastewater from the facility is collected in two ASTs. The wastewater is either evaporated in the facility's permitted evaporator or stored in totes for haul away and disposal.

SECTION C – WASTEWATER DISCHARGE INFORMATION

Facilities that checked activities in B.2 and are considered Categorical Industrial Users should skip to C.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), enter the description that corresponds to each process. **(The flow schematic should include all treatment units as well as monitoring and discharge points).** [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)

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: _____

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)
N/A			

2b.

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

*** 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 _____ (days of week) at _____ (hours of day)

d. Flow rate: _____ gallons/minute

e. 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)
N/A			

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: _____

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
N/A		

All Applicants must complete C.3 – C.6.

3. Do you share an outfall with another facility? ☐ Yes ■ No (If no, continue to C.4)

For each shared outfall, provide the following:

Applicant's Outfall No.	Name of Other Permittee/Facility	NPDES Permit No.	Where is sample collected by Applicant?

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

Current:	Flow Metering	☐ Yes	☐ No	■ N/A
	Sampling Equipment	☐ Yes	☐ No	■ N/A
Planned:	Flow Metering	☐ Yes	☐ No	■ N/A
	Sampling Equipment	☐ Yes	☐ No	■ N/A

If so, please attach a schematic diagram of the sewer system indicating the present or future location of this equipment and describe the equipment below:

5. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics?
☐ Yes ■ No (If no, continue to C.6)

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

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

Trade Name	Chemical Composition
N/A	

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 ☐ Surface Water

☒ Municipal Water Utility (Specify City): ☐ Other (Specify): City of Arab

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

City: 0.03 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

Complete D.1 and D.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: N/A 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 D.6 – D.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
Please see attachment	

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*
N/A		

***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

Is the discharge(s) located within the 10-foot elevation contour and within the limits of Mobile or Baldwin County? ☐ Yes ☒ No

If yes, complete items F.1 – F.12:

	Yes	No
1. Does the project require new construction?	☐	☐
2. Will the project be a source of new air emissions?	☐	☐

		Yes	No
3.	Does the project involve dredging and/or filling of a wetland area or water way?	☐	☐
	If Yes, has the Corps of Engineers (COE) permit been received?	☐	☐
	COE Project No. _____		
4.	Does the project involve wetlands and/or submersed grassbeds?	☐	☐
5.	Are oyster reefs located near the project site?	☐	☐
	If Yes, include a map showing project and discharge location with respect to oyster reefs		
6.	Does the project involve the site development, construction and operation of an energy facility as defined in ADEM Admin. Code r. 335-8-1-.02(bb)?	☐	☐
7.	Does the project involve mitigation of shoreline or coastal area erosion?	☐	☐
8.	Does the project involve construction on beaches or dune areas?	☐	☐
9.	Will the project interfere with public access to coastal waters?	☐	☐
10.	Does the project lie within the 100-year floodplain?	☐	☐
11.	Does the project involve the registration, sale, use, or application of pesticides?	☐	☐
12.	Does the project propose or require construction of a new well or to alter an existing groundwater well to pump more than 50 gallons per day (GPD)?	☐	☐
	If yes, has the applicable permit for groundwater recovery or for groundwater well installation been obtained?	☐	☐

SECTION G – ANTI-DEGRADATION EVALUATION

In accordance with 40 CFR §131.12 and the ADEM Admin. Code r. 335-6-10-.04 for anti-degradation, 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 G.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 G.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 G.2.A – G.2.F below and ADEM Forms 311 and 313 (attached). ADEM 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. The EPA application forms are found on the Department's website at http://www.adem.alabama.gov/programs/water/waterforms.cnt . 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

Outfall No.	Receiving Water(s)	303(d) Segment?		Included in TMDL?*	
DSN002	Shoal Creek	☐ Yes	■ No	☐ Yes	■ No
DSN003	Shoal Creek	☐ Yes	■ No	☐ Yes	■ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No
		☐ Yes	☐ No	☐ Yes	☐ No

*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 Code r. 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: _____ Date Signed: 10-23-19

Name and Title: Michael Bratt General Manager

If the Responsible Official signing this application is <u>not</u> identified in Section A.7, provide the following information:

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Email Address: _____

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:

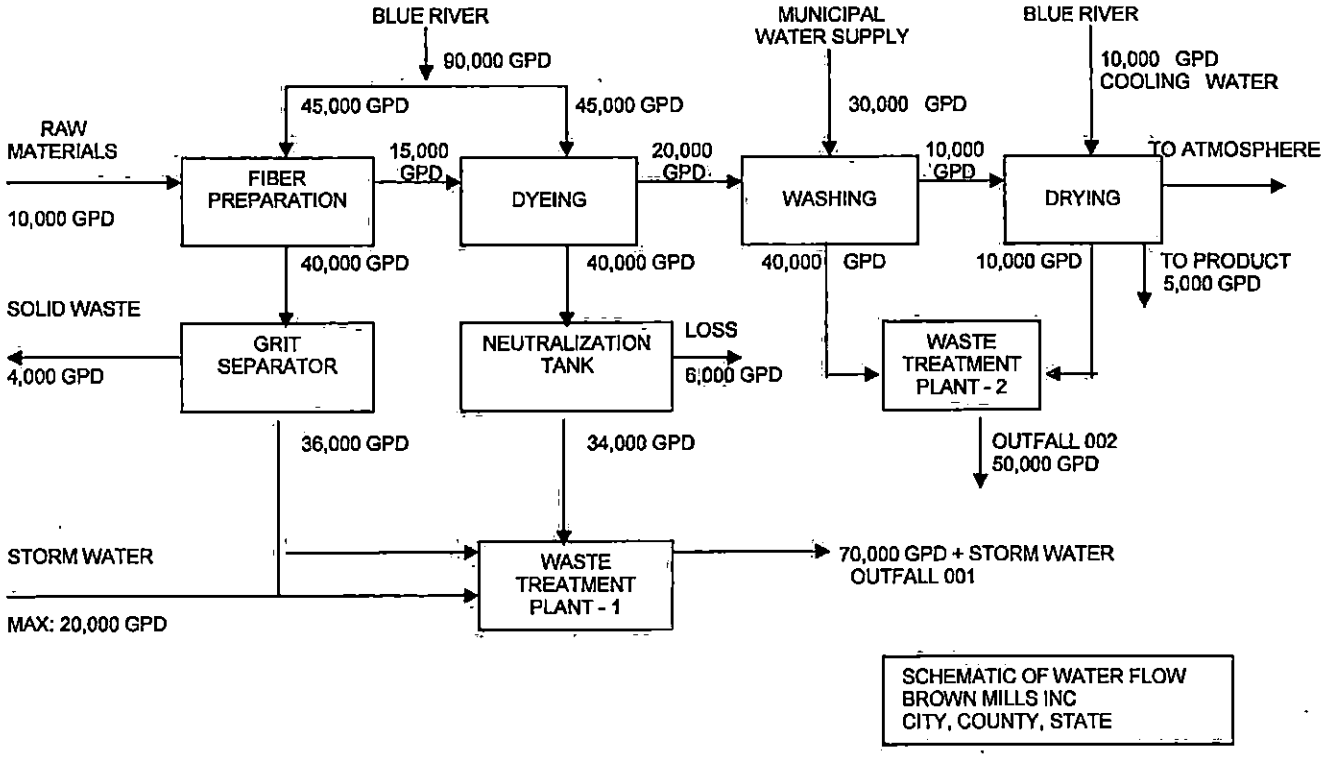
(a) In the case of a corporation, by a principal executive officer of at least the level of vice president, or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, 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.

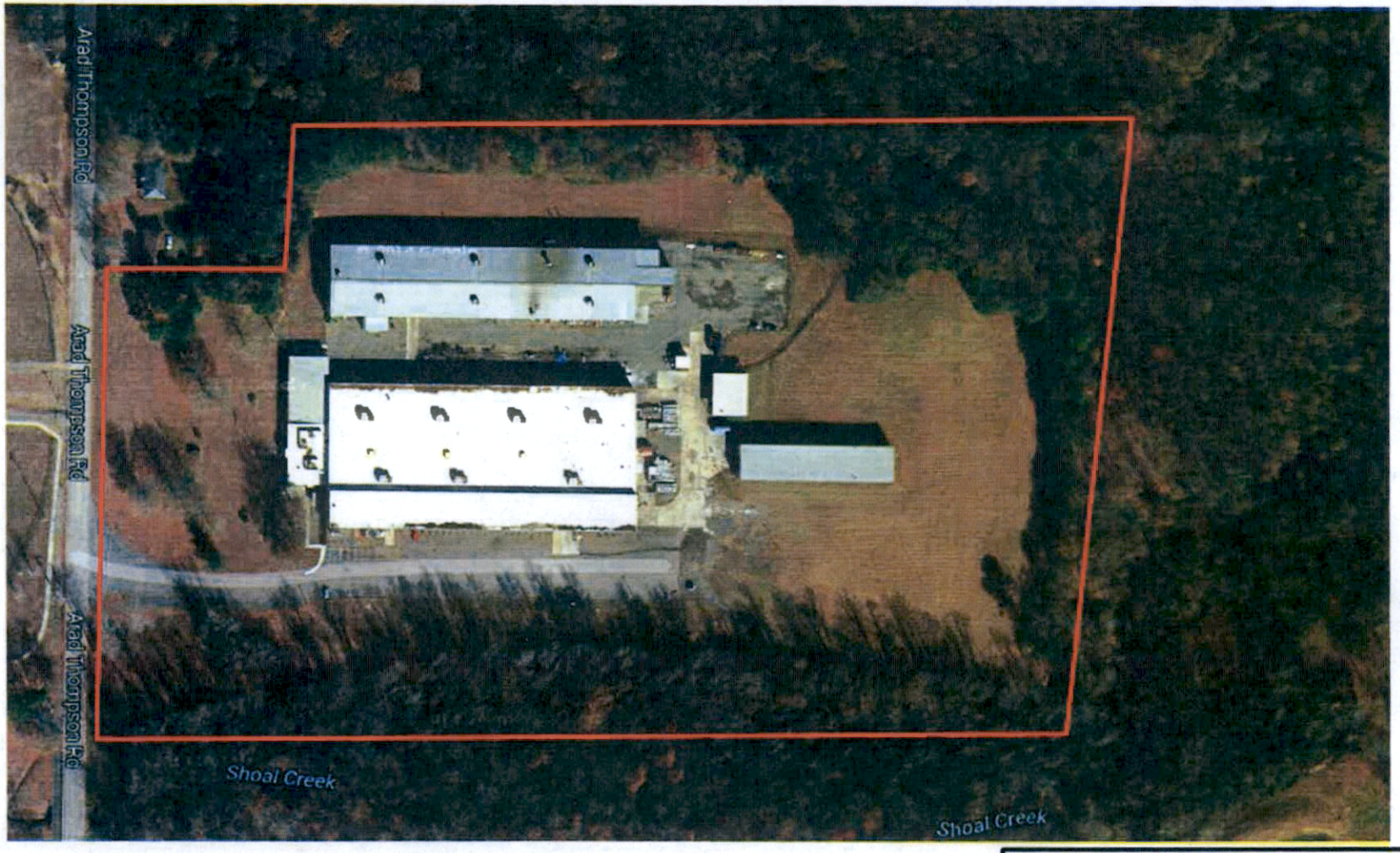
FIGURE 1


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

ADDITIONAL INFORMATION

SECTION E - WASTE STORAGE AND DISPOSAL INFORMATION (continued from page 10 of Form 187)

Description of Waste	Description of Storage Location
Chromium Waste	90-Day Storage Building between Plants 1 & 2
Oily Wastewater	5,000-gallon and 3,500-gallon tanks located in covered containment areas northeast of Plant 2 and east of Plant 1 respectively; Up to 5,000 gallons of wastewater is collected in totes and stored east of Plant 1 until picked up for disposal
Coolant Coated Metal Shavings and Chips	Covered and curbed chip hopper shed located east of Plant 1
Paint Waste	90-Day Storage Building between Plants 1 & 2
Description of Products	**Description of Storage Location**
Chromic Acid	Process tank located inside Plant 1
Virgin Oil	3,000-gallon tank located in covered containment area northeast of Plant 2.



PROPERTY BOUNDARY----------

NORTH

Not To Scale

Project:
Hyco Alabama, LLC
NPDES Permit Renewal

Title:
Facility Location Diagram

GSE

Designed	S. HEMMING
Checked	K. COLE
October 21, 2019	

Figure
4

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
ALD072099690	AL0065111	Hyco Alabama, LLC	

Form 1 NPDES

EPA

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

GENERAL INFORMATION

SECTION 1. ACTIVITIES REQUIRING AN NPDES PERMIT (40 CFR 122.21(f) and (f)(1))

Activities Requiring an NPDES Permit

1.1 Applicants *Not Required* to Submit Form 1

1.1.1	Is the facility a new or existing **publicly owned treatment works?** If yes, STOP. Do NOT complete Form 1. Complete Form 2A. ☐ Yes ☑ No	1.1.2	Is the facility a new or existing **treatment works treating domestic sewage?** If yes, STOP. Do NOT complete Form 1. Complete Form 2S. ☐ Yes ☑ No

1.2 Applicants *Required* to Submit Form 1

1.2.1	Is the facility a **concentrated animal feeding operation** or a **concentrated aquatic animal production facility?** ☐ Yes → Complete Form 1 ***and*** Form 2B. ☑ No	1.2.2	Is the facility an **existing** manufacturing, commercial, mining, or silvicultural **facility** that is **currently discharging process wastewater?** ☐ Yes → Complete Form 1 ***and*** Form 2C. ☑ No
1.2.3	Is the facility a **new** manufacturing, commercial, mining, or silvicultural **facility** that has **not yet commenced to discharge?** ☐ Yes → Complete Form 1 ***and*** Form 2D. ☑ No	1.2.4	Is the facility a **new or existing** manufacturing, commercial, mining, or silvicultural **facility** that **discharges only nonprocess wastewater?** ☐ Yes → Complete Form 1 ***and*** Form 2E. ☑ No
1.2.5	Is the facility a **new or existing facility** whose discharge is composed entirely of **stormwater associated with industrial activity** or whose discharge is composed of **both stormwater and non-stormwater?** ☑ Yes → Complete Form 1 ***and*** Form 2F unless exempted by 40 CFR 122.26(b)(14)(x) or (b)(15). ☐ No		

SECTION 2. NAME, MAILING ADDRESS, AND LOCATION (40 CFR 122.21(f)(2))

Name, Mailing Address, and Location

2.1 Facility Name

Hyco Alabama, LLC - Montanhydraulik Group

2.2 EPA Identification Number

ALD072099690

2.3 Facility Contact

Name (first and last)	Title	Phone number
Chris Cobbs	Quality and Environmental	256 586-9219

Email address
chris.cobbs@hyco-hydraulic.com

2.4 Facility Mailing Address

Street or P.O. box
PO Box 70

City or town	State	ZIP code
Arab	AL	35016

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
ALD072099690	AL0065111	Hyco Alabama, LLC	

Name, Mailing Address, and Location Continued

2.5	**Facility Location**		
	Street, route number, or other specific identifier 218 Arad Thompson Road		
	County name Marshall	County code (if known)	
	City or town Arab	State AL	ZIP code 35016

SECTION 3. SIC AND NAICS CODES (40 CFR 122.21(f)(3))

SIC and NAICS Codes

3.1	**SIC Code(s)**	**Description** (optional)
	3593	Fluid Power Cylinders and Actuators
3.2	**NAICS Code(s)**	**Description** (optional)
	333995	Fluid Power Cylinder and Actuator Manufacturing

SECTION 4. OPERATOR INFORMATION (40 CFR 122.21(f)(4))

Operator Information

4.1	**Name of Operator**
	Montanhydraulik GmbH
4.2	Is the name you listed in Item 4.1 also the owner? ☑ Yes ☐ No
4.3	**Operator Status** ☐ Public—federal ☐ Public—state ☐ Other public (specify)_____ ☑ Private ☐ Other (specify) _____
4.4	**Phone Number of Operator**
	+49 (0) 2301 916-0

Operator Information Continued

4.5	**Operator Address**		
	Street or P.O. Box Bahnhofstrasse 39		
	City or town 589439 Holzwickede	State Germany	ZIP code
	Email address of operator info@montanhydraulik.com		

SECTION 5. INDIAN LAND (40 CFR 122.21(f)(5))

Indian Land

5.1	Is the facility located on Indian Land? ☐ Yes ☑ No

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
ALD072099690	AL0065111	Hyco Alabama, LLC	

SECTION 6. EXISTING ENVIRONMENTAL PERMITS (40 CFR 122.21(f)(6))

Existing Environmental Permits

6.1 **Existing Environmental Permits** (check all that apply and print or type the corresponding permit number for each)

☑ NPDES (discharges to surface water) AL0065111	☑ RCRA (hazardous wastes) ALD072099690	☐ UIC (underground injection of fluids)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☑ NESHAPs (CAA) 711-0043
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☐ Other (specify)

SECTION 7. MAP (40 CFR 122.21(f)(7))

Map

7.1 Have you attached a topographic map containing all required information to this application? (See instructions for specific requirements.)

☑ Yes ☐ No ☐ CAFO—Not Applicable (See requirements in Form 2B.)

SECTION 8. NATURE OF BUSINESS (40 CFR 122.21(f)(8))

Nature of Business

8.1 Describe the nature of your business.

Hyco Alabama, LLC designs and manufactures custom rods and telescoping hydraulic cylinders for vehicles and equipment. The facility was purchased by Montanhydraulik GmbH in 2016. Office administration and plant operation are the two primary job functions. Maintenance activities and material storage activities also occur onsite.

SECTION 9. COOLING WATER INTAKE STRUCTURES (40 CFR 122.21(f)(9))

Cooling Water Intake Structures

9.1 Does your facility use cooling water?

☐ Yes ☑ No → SKIP to Item 10.1.

9.2 Identify the source of cooling water. (Note that facilities that use a cooling water intake structure as described at 40 CFR 125, Subparts I and J may have additional application requirements at 40 CFR 122.21(r). Consult with your NPDES permitting authority to determine what specific information needs to be submitted and when.)

SECTION 10. VARIANCE REQUESTS (40 CFR 122.21(f)(10))

Variance Requests

10.1 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(m)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

- ☐ Fundamentally different factors (CWA Section 301(n))
- ☐ Water quality related effluent limitations (CWA Section 302(b)(2))
- ☐ Non-conventional pollutants (CWA Section 301(c) and (g))
- ☐ Thermal discharges (CWA Section 316(a))
- ☑ Not applicable

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
ALD072099690	AL0065111	Hyco Alabama, LLC	

SECTION 11. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

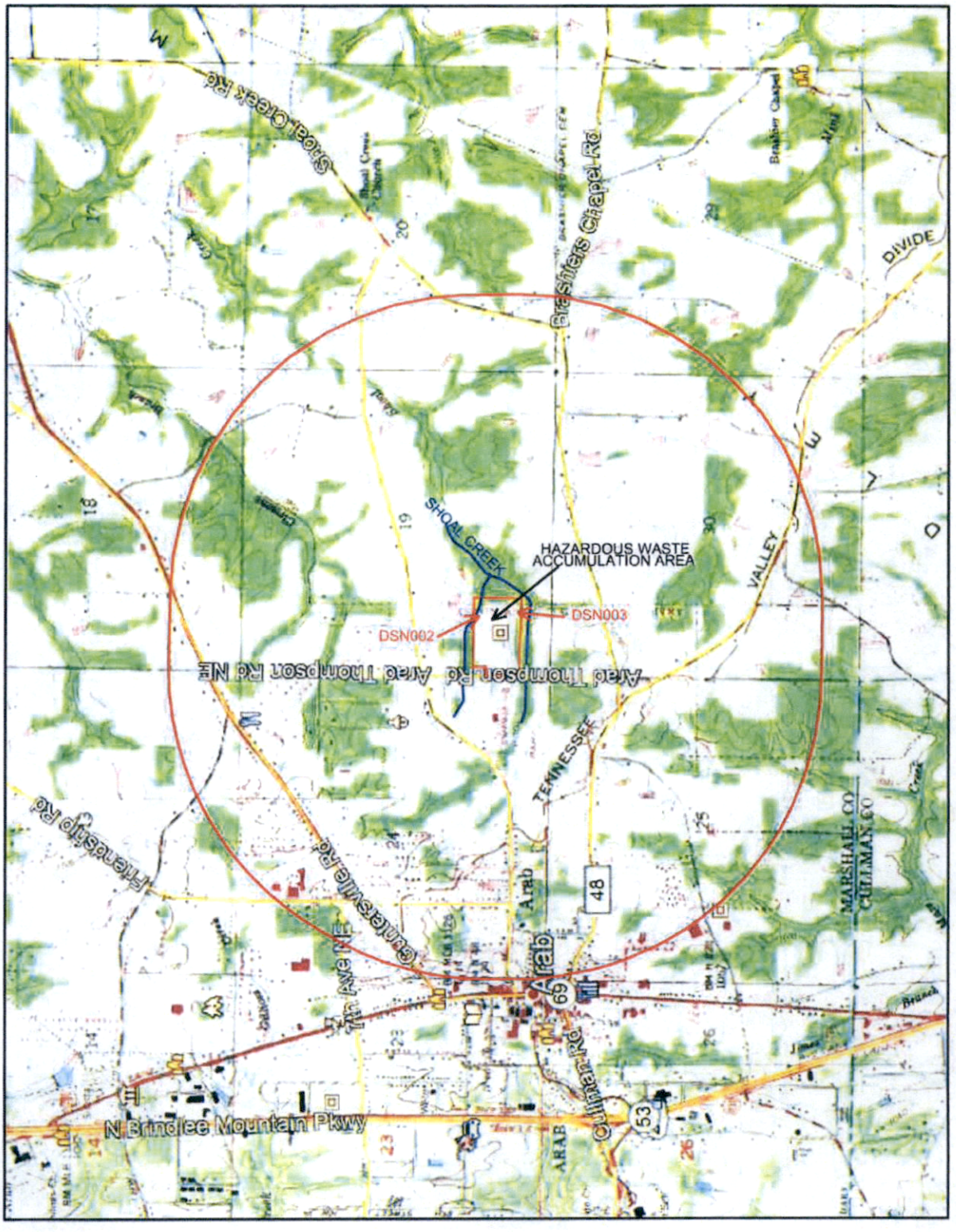
11.1 In Column 1 below, mark the sections of Form 1 that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2
☑ Section 1: Activities Requiring an NPDES Permit	☐ w/ attachments
☑ Section 2: Name, Mailing Address, and Location	☐ w/ attachments
☑ Section 3: SIC Codes	☐ w/ attachments
☑ Section 4: Operator Information	☐ w/ attachments
☑ Section 5: Indian Land	☐ w/ attachments
☑ Section 6: Existing Environmental Permits	☐ w/ attachments
☑ Section 7: Map	☑ w/ topographic map ☐ w/ additional attachments
☑ Section 8: Nature of Business	☐ w/ attachments
☑ Section 9: Cooling Water Intake Structures	☐ w/ attachments
☑ Section 10: Variance Requests	☐ w/ attachments
☑ Section 11: Checklist and Certification Statement	☐ w/ attachments

11.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
Michael Barnes	General Manager
Signature	Date signed
	10-23-19



HYCO ALABAMA, LLC MONTANHYDRAULIK GROUP	Scale: 1:2000 Job No: 19-189 Date: 10/21/2019 Drawn by: sah	GSE, Inc. 3795 Gordon Terry Parkway Trinity, AL 35673 Phone: (256) 350-9754 Fax: (256) 350-9768
USGS 7.5' TOPOGRAPHIC MAP		

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19
ALD072099690	AL0065111	Hyco Alabama, LLC	OMB No. 2040-0004

Form 2F NPDES

EPA

U.S Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below

Outfall Number	Receiving Water Name	Latitude	Longitude
DSN002	Shoal Creek	34° 19' 14.63" N	86° 28' 25.89" W
DSN003	Shoal Creek	34° 19' 7.73" N	86° 28' 24.03" W
		° ' "	° ' "
		° ' "	° ' "
		° ' "	° ' "
		° ' "	° ' "

SECTION 2. IMPROVEMENTS (40 CFR 122.21(g)(6))

Improvements

2.1 Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☑ No → SKIP to Section 3.

2.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall numbers)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

2.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (Optional Item)

☐ Yes ☐ No

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EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19
ALD072099690	AL0065111	Hyco Alabama, LLC	OMB No. 2040-0004

SECTION 3. SITE DRAINAGE MAP (40 CFR 122.26(c)(1)(i)(A))

Site Drainage Map

3.1 Have you attached a site drainage map containing all required information to this application? (See instructions for specific guidance.)

☑ Yes ☐ No

SECTION 4. POLLUTANT SOURCES (40 CFR 122.26(c)(1)(i)(B))

Pollutant Sources

4.1 Provide information on the facility's pollutant sources in the table below.

Outfall Number	Impervious Surface Area (within a mile radius of the facility)		Total Surface Area Drained (within a mile radius of the facility)	
DSN002	3.18	*specify units* acres	4.03	*specify units* acres
DSN003	0.51	*specify units* acres	2.04	*specify units* acres
		specify units		*specify units*
		specify units		*specify units*
		specify units		*specify units*
		specify units		*specify units*

4.2 Provide a narrative description of the facility's significant material in the space below. (See instructions for content requirements.)

Virgin oil is stored in an aboveground storage tank in a covered containment area on the northeast side of Plant 2. Wastewater is stored in an aboveground storage tank in the covered containment area on the northeast side of Plant 2 and on the east end of Plant 1. Material loading and access areas are located along the east side of the manufacturing facility. Spill equipment is readily available to clean up any spills or leaks that may occur in these areas and caution is used when material transfers and handling are in progress. The hazardous waste building is located to the northeast of Plant 1 and consists of a covered, enclosed building that has a curbed containment floor. The chip hopper shed is a covered, curbed containment area which has sumps to collect any runoff from the rolloffs that may occur. No pesticides, herbicides, soil conditioners, or fertilizers are used onsite.

4.3 Provide the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff. (See instructions for specific guidance.)

Stormwater Treatment		
Outfall Number	Control Measures and Treatment	Codes from Exhibit 2F-1 (list)
DSN002	Materials are stored in containment areas and spill equipment is readily available	
DSN003	Materials are stored in containment areas and spill equipment is readily available	

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19
ALD072099690	AL0065111	Hyco Alabama, LLC	OMB No. 2040-0004

SECTION 5: NON STORMWATER DISCHARGES (40 CFR 122.26(c)(1)(i)(C))

Non-Stormwater Discharges

5.1 *I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-stormwater discharges. Moreover, I certify that the outfalls identified as having non-stormwater discharges are described in either an accompanying NPDES Form 2C, 2D, or 2E application.*

Name (print or type first and last name)	Official title
Michael Bowers	General Manager
Signature	**Date signed**
	10-23-19

5.2 Provide the testing information requested in the table below.

Outfall Number	Description of Testing Method Used	Date(s) of Testing	Onsite Drainage Points Directly Observed During Test
DSN002	Visual Observation		
DSN003	Visual Observation		

SECTION 6: SIGNIFICANT LEAKS OR SPILLS (40 CFR 122.26(c)(1)(i)(D))

Significant Leaks or Spills

6.1 Describe any significant leaks or spills of toxic or hazardous pollutants in the last three years.

Hyco is a manufacturing facility that designs and builds customized hydraulic components. They also provide chrome plating and engineering services. On September 25, 2017, Hyco discovered a spill from a chromic acid tank. Upon initial investigation, the spill was a result of an employee performing normal duties of adding water to the chromic acid tank and not completely turning off the water source prior to leaving the facility. The area affected by the discharge on the pavement was approximately 6 feet wide and 45 feet in length, reaching the North-East corner of the property through a drainage ditch adjacent to the facility. The drainage ditch also had some runoff which was contained through a temporary berm. The concentration of the chromic acid was measured from various areas of the spill at approximately 4.7 oz. per gallon. An estimated 396 gallons (121 pounds of chromic acid) of discharge potentially made it outside of the facility.

SECTION 7: DISCHARGE INFORMATION (40 CFR 122.26(c)(1)(i)(E))

Discharge Information

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

7.1 Is this a new source or new discharge?

☐ Yes → See instructions regarding submission of *estimated* data. ☑ No → See instructions regarding submission of *actual* data.

Tables A, B, C, and D

7.2 Have you completed Table A for each outfall?

☑ Yes ☐ No

Discharge Information Continued

7.3	Is the facility subject to an effluent limitation guideline (ELG) or effluent limitations in an NPDES permit for its process wastewater?	☑ Yes ☐ No → SKIP to Item 7.5.
7.4	Have you completed Table B by providing quantitative data for those pollutants that are (1) limited either directly or indirectly in an ELG and/or (2) subject to effluent limitations in an NPDES permit for the facility's process wastewater?	☑ Yes ☐ No
7.5	Do you know or have reason to believe any pollutants in Exhibit 2F–2 are present in the discharge?	☑ Yes ☐ No → SKIP to Item 7.7.
7.6	Have you listed all pollutants in Exhibit 2F–2 that you know or have reason to believe are present in the discharge and provided quantitative data or an explanation for those pollutants in Table C?	☑ Yes ☐ No
7.7	Do you qualify for a small business exemption under the criteria specified in the Instructions?	☐ Yes →SKIP to Item 7.18. ☑ No
7.8	Do you know or have reason to believe any pollutants in Exhibit 2F–3 are present in the discharge?	☑ Yes ☐ No → SKIP to Item 7.10.
7.9	Have you listed all pollutants in Exhibit 2F–3 that you know or have reason to believe are present in the discharge in Table C?	☑ Yes ☐ No
7.10	Do you expect any of the pollutants in Exhibit 2F–3 to be discharged in concentrations of 10 ppb or greater?	☑ Yes ☐ No → SKIP to Item 7.12.
7.11	Have you provided quantitative data in Table C for those pollutants in Exhibit 2F–3 that you expect to be discharged in concentrations of 10 ppb or greater?	☑ Yes ☐ No
7.12	Do you expect acrolein, acrylonitrile, 2,4-dinitrophenol, or 2-methyl-4,6-dinitrophenol to be discharged in concentrations of 100 ppb or greater?	☐ Yes ☑ No → SKIP to Item 7.14.
7.13	Have you provided quantitative data in Table C for the pollutants identified in Item 7.12 that you expect to be discharged in concentrations of 100 ppb or greater?	☐ Yes ☐ No
7.14	Have you provided quantitative data or an explanation in Table C for pollutants you expect to be present in the discharge at concentrations less than 10 ppb (or less than 100 ppb for the pollutants identified in Item 7.12)?	☑ Yes ☐ No
7.15	Do you know or have reason to believe any pollutants in Exhibit 2F–4 are present in the discharge?	☐ Yes ☑ No → SKIP to Item 7.17.
7.16	Have you listed pollutants in Exhibit 2F–4 that you know or believe to be present in the discharge and provided an explanation in Table C?	☐ Yes ☐ No
7.17	Have you provided information for the storm event(s) sampled in Table D?	☑ Yes ☐ No

Discharge Information Continued

Used or Manufactured Toxics

7.18 Is any pollutant listed on Exhibits 2F–2 through 2F–4 a substance or a component of a substance used or manufactured as an intermediate or final product or byproduct?

☑ Yes ☐ No → SKIP to Section 8.

7.19 List the pollutants below, including TCDD if applicable.

1. Chromium, total	4.	7.
2.	5.	8.
3.	6.	9.

SECTION 8. BIOLOGICAL TOXICITY TESTING DATA (40 CFR 122.21(g)(11))

Biological Toxicity Testing Data

8.1 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 three years?

☐ Yes ☑ No → SKIP to Section 9.

8.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
		☐ Yes ☐ No	
		☐ Yes ☐ No	
		☐ Yes ☐ No	

SECTION 9. CONTRACT ANALYSIS INFORMATION (40 CFR 122.21(g)(12))

Contract Analysis Information

9.1 Were any of the analyses reported in Section 7 (on Tables A through C) performed by a contract laboratory or consulting firm?

☑ Yes ☐ No → SKIP to Section 10.

9.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	Waypoint Analytical		
Laboratory address	2790 Whitten Road Memphis, TN 38133		
Phone number	(901) 2132400		
Pollutant(s) analyzed	O&G Lead Zinc BOD5 Chromium, Tri COD Chromium, Hex TSS Copper Nitrogen, T Phosphorus, T		

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19
ALD072099690	AL0065111	Hyco Alabama, LLC	OMB No. 2040-0004

SECTION 10. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

10.1 In Column 1 below, mark the sections of Form 2F that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.

Column 1	Column 2
☑ Section 1	☐ w/ attachments (e.g., responses for additional outfalls)
☑ Section 2	☐ w/ attachments
☑ Section 3	☑ w/ site drainage map
☑ Section 4	☐ w/ attachments
☑ Section 5	☐ w/ attachments
☑ Section 6	☐ w/ attachments
☑ Section 7	☑ Table A ☐ w/ small business exemption request ☑ Table B ☑ w/ analytical results as an attachment ☑ Table C ☑ Table D
☑ Section 8	☐ w/attachments
☑ Section 9	☐ w/attachments (e.g., responses for additional contact laboratories or firms)
☑ Section 10	☐

10.2 **Certification Statement**

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

Name (print or type first and last name)	Official title
Marion Barnes	General Manager
Signature	**Date signed**
	10-23-19

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	DSN002

Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))[1]

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 and requirements.

	Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	<1.4 mg/L		<1.4 mg/L		1	
2.	Biochemical oxygen demand (BOD_5)	23 mg/L	7 mg/L	23 mg/L	7 mg/L	1	
3.	Chemical oxygen demand (COD)	47.2 mg/L	20.7 mg/L	47.2 mg/L	20.7 mg/L	1	
4.	Total suspended solids (TSS)	10 mg/L	10 mg/L	10 mg/L	10 mg/L	1	
5.	Total phosphorus	<0.500 mg/L	<0.500 mg/L	<0.500 mg/L	<0.500 mg/L	1	
6.	Total Kjeldahl nitrogen (TKN)	2.36 mg/L	<1.00 mg/L	2.36 mg/L	<1.00 mg/L	1	
7.	Total nitrogen (as N)	2.58 mg/L	0.444 mg/L	2.58 mg/L	0.444 mg/L	1	
8.	pH (minimum)	6.72		6.72		1	
	pH (maximum)	6.72		6.72		1	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	DSN002

Form Approved 03/05/19
OMB No. 2040-0004

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that 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 Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Copper, Total	0.0068 mg/L	0.0078 mg/L	0.0068 mg/L	0.0078 mg/L	1	
Lead, Total	<0.0060 mg/L	<0.0060 mg/L	<0.0060 mg/L	<0.0060 mg/L	1	
Zinc, Total	0.0545 mg/L	0.0546 mg/L	0.0545 mg/L	0.0546 mg/L	1	
Chromium, Tri	<0.010 mg/L	0.025 mg/L	<0.010 mg/L	0.025 mg/L	1	
Chromium, Hex	<0.010 mg/L	<0.010 mg/L	<0.010 mg/L	<0.010 mg/L	1	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	DSN002

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

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

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Copper, Total	0.0068 mg/L	0.0078 mg/L	0.0068 mg/L	0.0078 mg/L	1	
Lead, Total	<0.0060 mg/L	<0.0060 mg/L	<0.0060 mg/L	<0.0060 mg/L	1	
Zinc, Total	0.0545 mg/L	0.0546 mg/L	0.0545 mg/L	0.0546 mg/L	1	
Chromium, Total	0.0077 mg/L	0.0259 mg/L	0.0077 mg/L	0.0259 mg/L	1	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	DSN002

Form Approved 03/05/19
OMB No. 2040-0004

TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
10/07/2019	1.75	0.42	965	402	37,000

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

Rational method

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	DSN003

Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. CONVENTIONAL AND NON CONVENTIONAL PARAMETERS (40 CFR 122.26(c)(1)(i)(E)(3))[1]

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 and requirements.

	Pollutant or Parameter	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
		Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
1.	Oil and grease	<1.4 mg/L		<1.4 mg/L		1	
2.	Biochemical oxygen demand (BOD_5)	68 mg/L	71 mg/L	68 mg/L	71 mg/L	1	
3.	Chemical oxygen demand (COD)	223 mg/L	150 mg/L	223 mg/L	150 mg/L	1	
4.	Total suspended solids (TSS)	48 mg/L	98 mg/L	48 mg/L	98 mg/L	1	
5.	Total phosphorus	<1.25 mg/L	<0.500 mg/L	<1.25 mg/L	<0.500 mg/L	1	
6.	Total Kjeldahl nitrogen (TKN)	2.93 mg/L	2.17 mg/L	2.93 mg/L	2.17 mg/L	1	
7.	Total nitrogen (as N)	3.42 mg/L	3.75 mg/L	3.42 mg/L	3.75 mg/L	1	
8.	pH (minimum)	6.81		6.81		1	
	pH (maximum)	6.81		6.81		1	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	DSN003

Form Approved 03/05/19
OMB No. 2040-0004

TABLE B. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(A))[1]

List each pollutant that is limited in an effluent limitation guideline (ELG) that 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 Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Copper, Total	0.0162 mg/L	0.0192 mg/L	0.0162 mg/L	0.0192 mg/L	1	
Lead, Total	0.0071 mg/L	0.0076 mg/L	0.0071 mg/L	0.0076 mg/L	1	
Zinc, Total	0.0526 mg/L	0.0419 mg/L	0.0526 mg/L	0.0419 mg/L	1	
Chromium, Tri	<0.010 mg/L	<0.010 mg/L	<0.010 mg/L	<0.010 mg/L	1	
Chromium, Hex	<0.010 mg/L	<0.010 mg/L	<0.010 mg/L	<0.010 mg/L	1	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	DSN003

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. TOXIC POLLUTANTS, CERTAIN HAZARDOUS SUBSTANCES, AND ASBESTOS (40 CFR 122.26(c)(1)(i)(E)(4) and 40 CFR 122.21(g)(7)(vi)(B) and (vii))[1]

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

Pollutant and CAS Number (if available)	Maximum Daily Discharge (specify units)		Average Daily Discharge (specify units)		Number of Storm Events Sampled	Source of Information (new source/new dischargers only; use codes in instructions)
	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite	Grab Sample Taken During First 30 Minutes	Flow-Weighted Composite		
Copper, Total	0.0162 mg/L	0.0192 mg/L	0.0162 mg/L	0.0192 mg/L	1	
Lead, Total	0.0071 mg/L	0.0076 mg/L	0.0071 mg/L	0.0076 mg/L	1	
Zinc, Total	0.0526 mg/L	0.0419 mg/L	0.0526 mg/L	0.0419 mg/L	1	
Chromium, Total	0.0097 mg/L	0.0084 mg/L	0.0097 mg/L	0.0084 mg/L	1	

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility name	Outfall Number
ALD072099690	AL0065111	Hyco Alabama, LLC	D5N003

Form Approved 03/05/19
OMB No. 2040-0004

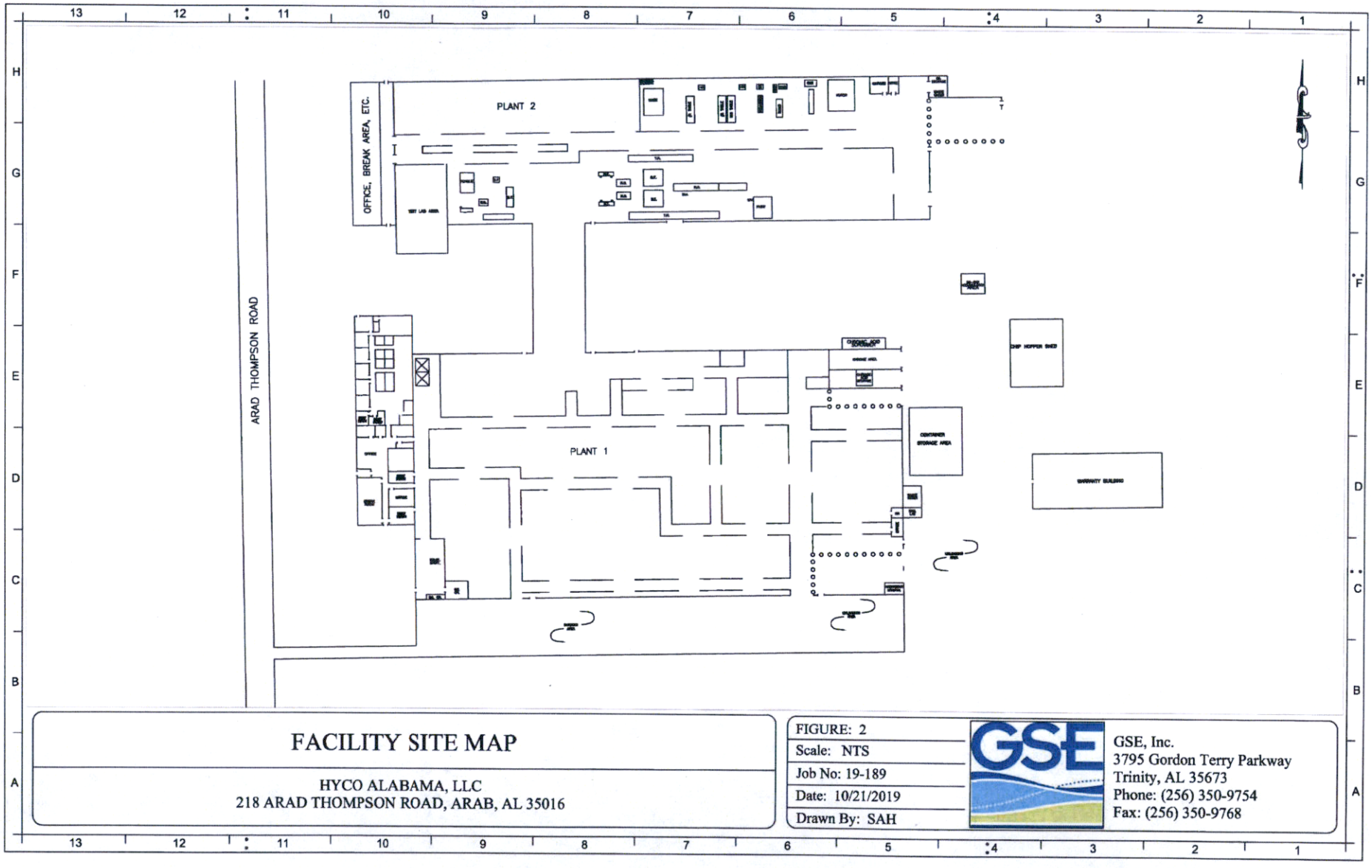
TABLE D. STORM EVENT INFORMATION (40 CFR 122.26(c)(1)(i)(E)(6))

Provide data for the storm event(s) that resulted in the maximum daily discharges for the flow-weighted composite sample.

Date of Storm Event	Duration of Storm Event (in hours)	Total Rainfall During Storm Event (in inches)	Number of Hours Between Beginning of Storm Measured and End of Previous Measurable Rain Event	Maximum Flow Rate During Rain Event (in gpm or specify units)	Total Flow from Rain Event (in gallons or specify units)
10/07/2019	1.75	0.42	965	166	14,000

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

Rational Method

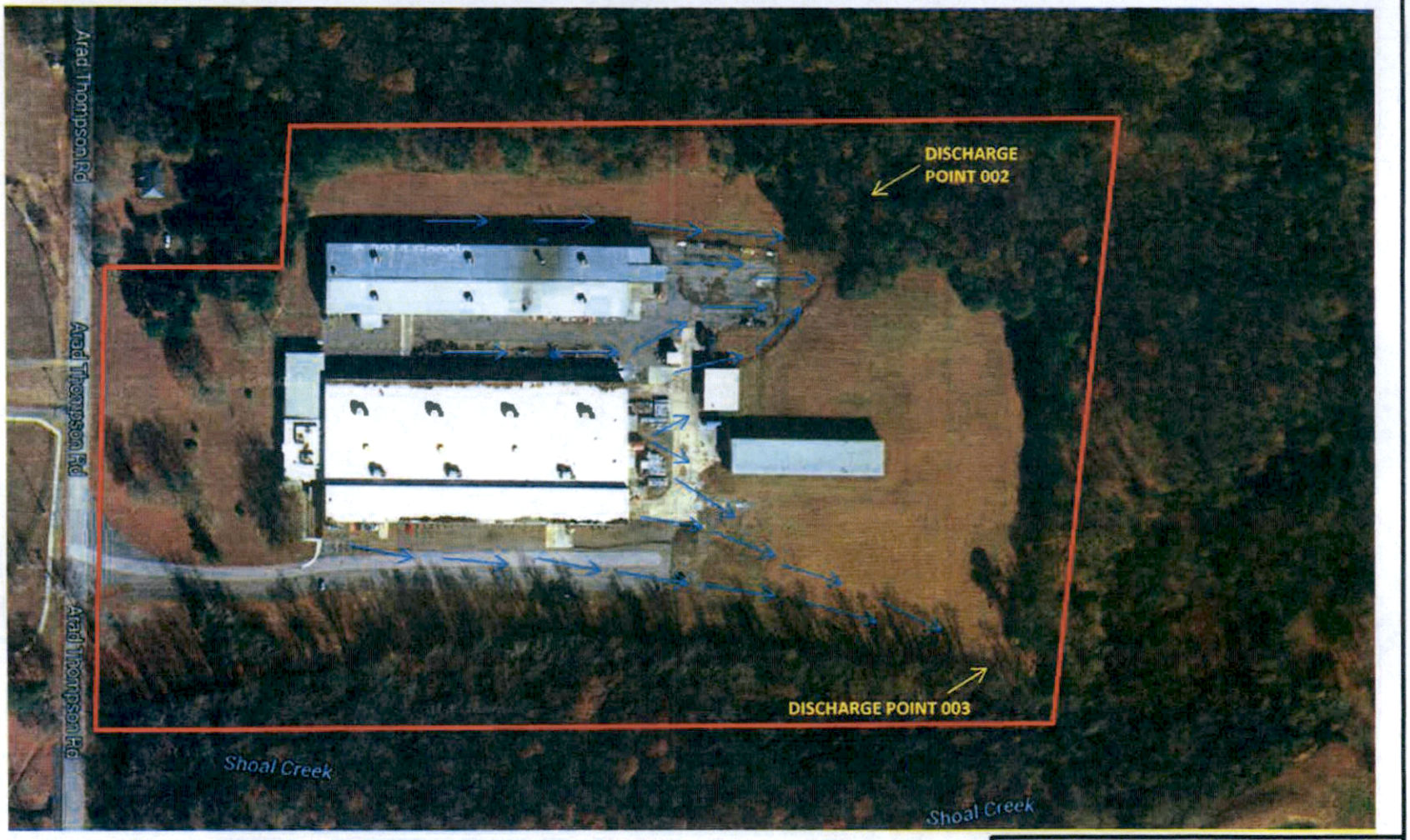


FACILITY SITE MAP

HYCO ALABAMA, LLC
218 ARAD THOMPSON ROAD, ARAB, AL 35016

FIGURE:	2
Scale:	NTS
Job No:	19-189
Date:	10/21/2019
Drawn By:	SAH

GSE, Inc.
3795 Gordon Terry Parkway
Trinity, AL 35673
Phone: (256) 350-9754
Fax: (256) 350-9768



PROPERTY BOUNDARY----------
WATER FLOW----------

Not To Scale

Project:
Hyco Alabama, LLC
NPDES Permit Renewal

Title:
Facility Drainage Map

GSE

Designed	S. HEMMING
Checked	K. COLE
October 21, 2019	

Figure
3

Waypoint ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
Main 901.213.2400 ° Fax 901.213.2440
www.waypointanalytical.com

10/14/2019

Great Southern Engineering
Ms. Shelley Hemming
3795 Gordon Terry Parkway
Trinity, AL, 35673

Ref: Analytical Testing
Lab Report Number: 19-280-0056
Client Project Description: Hyco - Arab, AL

Dear Ms. Shelley Hemming:
Waypoint Analytical, LLC. received sample(s) on 10/7/2019 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method. Where the laboratory was not responsible for the sampling stage (refer to the chain of custody) results apply to the sample as received.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule August 2017) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an as-received basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Rebekah Ross

Rebekah Ross
Project Manager

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.

Alabama	#40750	Louisiana	#04015	VA NELAP	#460181	Texas	#T104704180	Arkansas	#88-0650
Mississippi		California	#2904	NC	#415	Oklahoma	#9311	SC	#84002
Kentucky	#90047	Tennessee	#TN02027	EPA	#TN00012	Kentucky UST	#80215	PA DEP	#68-03195

nelac

Waypoint ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
Main 901.213.2400 ° Fax 901.213.2440
www.waypointanalytical.com

Sample Summary Table

Report Number: 19-280-0056

Client Project Description: Hyco - Arab, AL

Lab No	Client Sample ID	Matrix	Date Collected	Date Received
89873	DSN002	Aqueous	10/07/2019 05:05	10/07/2019
89874	DSN003	Aqueous	10/07/2019 05:15	10/07/2019

Waypoint ANALYTICAL

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www.waypointanalytical.com

Summary of Detected Analytes

Project: Hyco - Arab, AL

Report Number: 19-280-0056

Client Sample ID / Method	Lab Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
DSN002	**L 89873**					
2540D-2011	Total Suspended Solids	10	mg/L	2	10/08/2019 10:53	
4500NORGD-2011	Total Kjeldahl Nitrogen	2.36	mg/L	1.00	10/14/2019 14:38	
5210B-2011	Biochemical Oxygen Demand (5-day)	23	mg/L	12	10/07/2019 13:30	
5220D-2011	COD (Chemical Oxygen Demand)	47.2	mg/L	15.0	10/10/2019 10:10	
CALCULATION	Total Nitrogen	2.58	mg/L	0.100	10/08/2019 15:53	
EPA-200.7	Chromium	0.0077	mg/L	0.0050	10/09/2019 22:28	
EPA-200.7	Copper	0.0068	mg/L	0.0050	10/09/2019 22:28	
EPA-200.7	Zinc	0.0545	mg/L	0.0200	10/09/2019 22:28	
EPA-300.0	Nitrate (NO3-N)	0.222	mg/L	0.100	10/08/2019 15:53	
EPA-300.0	Nitrate+Nitrite-N	0.222	mg/L	0.100	10/08/2019 15:53	
DSN003	**L 89874**					
2540D-2011	Total Suspended Solids	48	mg/L	5	10/08/2019 10:53	
4500NORGD-2011	Total Kjeldahl Nitrogen	2.93	mg/L	2.50	10/14/2019 14:39	
5210B-2011	Biochemical Oxygen Demand (5-day)	68	mg/L	24	10/07/2019 13:30	
5220D-2011	COD (Chemical Oxygen Demand)	223	mg/L	150	10/09/2019 11:00	
CALCULATION	Total Nitrogen	3.42	mg/L	0.100	10/08/2019 16:04	
EPA-200.7	Chromium	0.0097	mg/L	0.0050	10/09/2019 22:33	
EPA-200.7	Copper	0.0162	mg/L	0.0050	10/09/2019 22:33	
EPA-200.7	Lead	0.0071	mg/L	0.0060	10/09/2019 22:33	
EPA-200.7	Zinc	0.0526	mg/L	0.0200	10/09/2019 22:33	
EPA-300.0	Nitrate (NO3-N)	0.494	mg/L	0.100	10/08/2019 16:04	
EPA-300.0	Nitrate+Nitrite-N	0.494	mg/L	0.100	10/08/2019 16:04	

Waypoint ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
Main 901.213.2400 ° Fax 901.213.2440
www.waypointanalytical.com

Client: Great Southern Engineering
Project: Hyco - Arab, AL
Lab Report Number: 19-280-0056
Date: 10/14/2019

CASE NARRATIVE

Chemical Oxygen Demand (COD) Method 5220D-2011
QC Batch No: L458304
Relative percent difference (RPD) for the duplicate analysis was outside of the allowable quality control limits. The sample and duplicate results are less than two times the reporting limit. At this level, RPD is not applicable. The data is considered to be acceptable.

Waypoint ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
Main 901.213.2400 ° Fax 901.213.2440
www.waypointanalytical.com

02387
Great Southern Engineering
Ms. Shelley Hemming
3795 Gordon Terry Parkway
Trinity , AL 35673

Project Information : Hyco - Arab, AL

Report Date : 10/14/2019
Received : 10/07/2019

Report Number : **19-280-0056**

REPORT OF ANALYSIS

Rebekah Ross
Project Manager

Lab No : **89873**
Sample ID : **DSN002**

Matrix: **Aqueous**
Sampled: **10/7/2019 5:05**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Biochemical Oxygen Demand (5-day)	**23**	mg/L	12	1	10/07/19 13:30	SLM	5210B-2011
Chromium, Hexavalent	<0.010	mg/L	0.010	1	10/07/19 13:23	VBW	3500CrB-2011
Chromium, Tri-valent	<0.010	mg/L	0.010	1	10/07/19 13:23		CALCULATION
COD (Chemical Oxygen Demand)	**47.2**	mg/L	15.0	1	10/10/19 10:10	SLM	5220D-2011
Nitrate (NO3-N)	**0.222**	mg/L	0.100	1	10/08/19 15:53	CCR	EPA-300.0
Nitrite (NO2-N)	<0.100	mg/L	0.100	1	10/08/19 15:53	CCR	EPA-300.0
Nitrate+Nitrite-N	**0.222**	mg/L	0.100	1	10/08/19 15:53		EPA-300.0
Total Suspended Solids	**10**	mg/L	2	1	10/08/19 10:53	ADM	2540D-2011
Total Kjeldahl Nitrogen	**2.36**	mg/L	1.00	1	10/14/19 14:38	CLP	4500NORGD-2011
Total Nitrogen	**2.58**	mg/L	0.100	1	10/08/19 15:53		CALCULATION~
Phosphorus	<0.500	mg/L	0.500	1	10/14/19 15:27	CLP	365.4
Chromium	**0.0077**	mg/L	0.0050	1	10/09/19 22:28	BKN	EPA-200.7
Copper	**0.0068**	mg/L	0.0050	1	10/09/19 22:28	BKN	EPA-200.7
Lead	<0.0060	mg/L	0.0060	1	10/09/19 22:28	BKN	EPA-200.7
Zinc	**0.0545**	mg/L	0.0200	1	10/09/19 22:28	BKN	EPA-200.7

Qualifiers/ Definitions

DF Dilution Factor
MQL Method Quantitation Limit
L Limit Exceeded

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02387
Great Southern Engineering
Ms. Shelley Hemming
3795 Gordon Terry Parkway
Trinity , AL 35673

Project Information : Hyco - Arab, AL

Report Date : 10/14/2019
Received : 10/07/2019

Report Number : **19-280-0056**

REPORT OF ANALYSIS

Rebekah Ross
Project Manager

Lab No : **89874**
Sample ID : **DSN003**

Matrix: **Aqueous**
Sampled: **10/7/2019 5:15**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Biochemical Oxygen Demand (5-day)	**68**	mg/L	24	1	10/07/19 13:30	SLM	5210B-2011
Chromium, Hexavalent	<0.010	mg/L	0.010	1	10/07/19 13:23	VBW	3500CrB-2011
Chromium, Tri-valent	<0.010	mg/L	0.010	1	10/07/19 13:23		CALCULATION
COD (Chemical Oxygen Demand)	**223**	mg/L	150	1	10/09/19 11:00	SLM	5220D-2011
Nitrate (NO3-N)	**0.494**	mg/L	0.100	1	10/08/19 16:04	CCR	EPA-300.0
Nitrite (NO2-N)	<0.100	mg/L	0.100	1	10/08/19 16:04	CCR	EPA-300.0
Nitrate+Nitrite-N	**0.494**	mg/L	0.100	1	10/08/19 16:04		EPA-300.0
Total Suspended Solids	**48**	mg/L	5	1	10/08/19 10:53	ADM	2540D-2011
Total Kjeldahl Nitrogen	**2.93**	mg/L	2.50	1	10/14/19 14:39	CLP	4500NORGD-2011
Total Nitrogen	**3.42**	mg/L	0.100	1	10/08/19 16:04		CALCULATION ~
Phosphorus	<1.25	mg/L	1.25	1	10/14/19 15:29	CLP	365.4
Chromium	**0.0097**	mg/L	0.0050	1	10/09/19 22:33	BKN	EPA-200.7
Copper	**0.0162**	mg/L	0.0050	1	10/09/19 22:33	BKN	EPA-200.7
Lead	**0.0071**	mg/L	0.0060	1	10/09/19 22:33	BKN	EPA-200.7
Zinc	**0.0526**	mg/L	0.0200	1	10/09/19 22:33	BKN	EPA-200.7

Qualifiers/ Definitions

DF Dilution Factor
MQL Method Quantitation Limit
L Limit Exceeded

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Quality Control Data

Client ID: **Great Southern Engineering**
Project Description: **Hyco - Arab, AL**
Report No: **19-280-0056**

QC Analytical Batch: L457744
Analysis Method: 2540D-2011
Analysis Description: Total Suspended Solids

Lab Reagent Blank LRB Matrix: AQU
Associated Lab Samples: 89873, 89874

Parameter	Units	Blank Result	MQL	Analyzed
Total Suspended Solids	mg/L	< 2	2	10/08/19 10:53

Duplicate L 89883-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Total Suspended Solids	mg/L	10	11	9.5	10	10/08/19 10:53

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Analytical Batch: L457648
Analysis Method: 3500CrB-2011
Analysis Description: Hexavalent Chromium

Lab Reagent Blank LRB Matrix: AQU
Associated Lab Samples: 89873, 89874

Parameter	Units	Blank Result	MQL	Analyzed
Chromium, Hexavalent	mg/L	< 0.010	0.010	10/07/19 13:23

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Chromium, Hexavalent	mg/L	0.125	0.122	97.6	90-110

Matrix Spike & Matrix Spike Duplicate L 89842-MS L 89842-MSD

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Chromium, Hexavalent	mg/L	< 0.010	0.101	0.101	0.093	0.092	92.0	91.0	70-130	1.0	20.0

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Prep: L458663
QC Prep Batch Method: TKN/TKP Digestion
QC Analytical Batch(es): L458689,L458690
Analysis Method: 365.4
Analysis Description: Total Phosphorus

Lab Reagent Blank LRB-L458663 Matrix: AQU
Associated Lab Samples: 89873, 89874

Parameter	Units	Blank Result	MQL	Analyzed
Phosphorus	mg/L	< 0.500	0.500	10/14/19 15:13

Laboratory Control Sample LCS-L458663

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Phosphorus	mg/L	4.00	4.36	109	80-120

Duplicate L 98029-DUP-L458663

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Phosphorus	mg/L	1.18	1.36	14.1	20.0	10/14/19 15:17

Matrix Spike L 98029-MS-L458663

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
Phosphorus	mg/L	1.18	4.00		6.11		123	70-130	

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Prep: L458663
QC Prep Batch Method: TKN/TKP Digestion
QC Analytical Batch(es): L458689,L458690
Analysis Method: 4500NORGD-2011
Analysis Description: Block Digestion and FIA

Lab Reagent Blank LRB-L458663 Matrix: AQU
Associated Lab Samples: 89873, 89874

Parameter	Units	Blank Result	MQL	Analyzed
Total Kjeldahl Nitrogen	mg/L	< 1.00	1.00	10/14/19 14:28

Laboratory Control Sample LCS-L458663

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Total Kjeldahl Nitrogen	mg/L	20.0	19.1	95.5	80-120

Duplicate L 98029-DUP-L458663

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Total Kjeldahl Nitrogen	mg/L	2.34	2.49	6.2	20.0	10/14/19 14:31

Matrix Spike L 98029-MS-L458663

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
Total Kjeldahl Nitrogen	mg/L	2.34	20.0		21.2		94.3	70-130	

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Analytical Batch: L457796
Analysis Method: 5210B-2011
Analysis Description: Biochemical Oxygen Demand (BOD)

Glucose-Glutamic Acid GGA

Parameter	Units	Result	Range	Analyzed
Biochemical Oxygen Demand (5-day)	mg/L	205	167.5-228.5	10/07/19 13:30

Duplicate L 89792-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Biochemical Oxygen Demand (5-day)	mg/L	2530	2640	4.2	30	10/07/19 13:30

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Analytical Batch: L458123
Analysis Method: 5220D-2011
Analysis Description: Chemical Oxygen Demand (COD)

Lab Reagent Blank LRB Matrix: AQU
Associated Lab Samples: 89874

Parameter	Units	Blank Result	MQL	Analyzed
COD (Chemical Oxygen Demand)	mg/L	< 150	150	10/09/19 11:00

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
COD (Chemical Oxygen Demand)	mg/L	750	713	95.0	95-105

Duplicate L 89758-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
COD (Chemical Oxygen Demand)	mg/L	3010	3120	3.5	10.0	10/09/19 11:00

Matrix Spike L 89758-MS

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
COD (Chemical Oxygen Demand)	mg/L	3010	3750		6930		105	70-130	

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Analytical Batch: L458304
Analysis Method: 5220D-2011
Analysis Description: Chemical Oxygen Demand (COD)

Lab Reagent Blank 2 LRB2 Matrix: AQU
Associated Lab Samples: 89873

Parameter	Units	Blank Result	MQL	Analyzed
COD (Chemical Oxygen Demand)	mg/L	< 15.0	15.0	10/10/19 10:10

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
COD (Chemical Oxygen Demand)	mg/L	75.0	72.8	97.0	95-105

Duplicate L 91543-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
COD (Chemical Oxygen Demand)	mg/L	< 15.0	17.3	14.2*	10.0	10/10/19 10:10

Matrix Spike L 91543-MS

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
COD (Chemical Oxygen Demand)	mg/L	< 15.0	78.9		93.6		119	70-130	

* QC Fail

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Prep: L457878
QC Prep Batch Method: EPA-200.7 (PREP)
QC Analytical Batch(es): L458090
Analysis Method: EPA-200.7
Analysis Description: Total Metals

Lab Reagent Blank LRB-L457878 Matrix: AQU
Associated Lab Samples: 89873, 89874

Parameter	Units	Blank Result	MQL	Analyzed
Chromium	mg/L	< 0.0050	0.0050	10/09/19 12:27
Copper	mg/L	< 0.0050	0.0050	10/09/19 12:27
Lead	mg/L	< 0.0060	0.0060	10/09/19 12:27
Zinc	mg/L	< 0.0200	0.0200	10/09/19 12:27

Laboratory Control Sample LCS-L457878

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Chromium	mg/L	1.00	1.06	106	85-115
Copper	mg/L	1.00	1.05	105	85-115
Lead	mg/L	0.100	0.107	107	85-115
Zinc	mg/L	1.00	1.07	107	85-115

Matrix Spike & Matrix Spike Duplicate L 90032-MS-L457878 L 90032-MSD-L457878

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Chromium	mg/L	< 0.0050	1.00	1.00	1.05	1.05	105	105	70-130	0.0	20.0
Copper	mg/L	0.0063	1.00	1.00	1.03	1.03	102	102	70-130	0.0	20.0
Lead	mg/L	< 0.0060	0.100	0.100	0.106	0.106	106	106	70-130	0.0	20.0
Zinc	mg/L	0.0954	1.00	1.00	1.12	1.12	102	102	70-130	0.0	20.0

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0056

QC Prep: L457907
QC Prep Batch Method: EPA-300.0 (PREP)
QC Analytical Batch(es): L457975
Analysis Method: EPA-300.0
Analysis Description: Anions by Ion Chromatography

Lab Reagent Blank LRB-L457907 Matrix: AQU
Associated Lab Samples: 89873, 89874

Parameter	Units	Blank Result	MQL	Analyzed
Nitrate (NO3-N)	mg/L	< 0.100	0.100	10/08/19 14:37
Nitrite (NO2-N)	mg/L	< 0.100	0.100	10/08/19 14:37

Laboratory Control Sample LCS-L457907

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Nitrate (NO3-N)	mg/L	12.5	13.0	104	90-110
Nitrite (NO2-N)	mg/L	8.46	8.45	99.9	90-110

Matrix Spike & Matrix Spike Duplicate L 89883-MS-L457907 L 89883-MSD-L457907

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Nitrate (NO3-N)	mg/L	0.444	5.94	5.94	6.86	6.88	108	108	80-120	0.2	20.0
Nitrite (NO2-N)	mg/L	< 0.105	4.01	4.01	4.31	4.27	108	107	80-120	0.9	20.0

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Cooler Receipt Form

Customer Number: **02387**
Customer Name: **Great Southern Engineering**
Report Number: **19-280-0056**

Shipping Method

○ Fed Ex	○ US Postal	○ Lab	○ Other :	
○ UPS	● Client	○ Courier	Thermometer ID:	#70

Shipping container/cooler uncompromised?	● Yes	○ No	
Number of coolers received	1		
Custody seals intact on shipping container/cooler?	○ Yes	○ No	● Not Required
Custody seals intact on sample bottles?	○ Yes	○ No	● Not Required
Chain of Custody (COC) present?	● Yes	○ No	
COC agrees with sample label(s)?	● Yes	○ No	
COC properly completed	● Yes	○ No	
Samples in proper containers?	● Yes	○ No	
Sample containers intact?	● Yes	○ No	
Sufficient sample volume for indicated test(s)?	● Yes	○ No	
All samples received within holding time?	● Yes	○ No	
Cooler temperature in compliance?	● Yes	○ No	
Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun.	● Yes	○ No	
Water - Sample containers properly preserved	● Yes	○ No	○ N/A
Water - VOA vials free of headspace	○ Yes	○ No	● N/A
Trip Blanks received with VOAs	○ Yes	○ No	● N/A
Soil VOA method 5035 – compliance criteria met	○ Yes	○ No	● N/A

☐ High concentration container (48 hr) ☐ Low concentration EnCore samplers (48 hr)

☐ High concentration pre-weighed (methanol -14 d) ☐ Low conc pre-weighed vials (Sod Bis -14 d)

Special precautions or instructions included?	○ Yes	● No

Comments:

Signature: Tory Phillips Date & Time: 10/07/2019 13:17:52

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Kit ID:	**0000125242**
Initiated By:	**Rebekah Barger Ross**
Initiated Date:	**10/7/2019**
Project Comment	

CHAIN-OF-CUSTODY

19-280-0056
02387
10-07-2019
Great Southern Engineering
Hyco Arab AL

Company Name	Company Number	Client Project Manager/Contact	Purchase Order Number
Great Southern Engineering	02387	Ms. Shelley Hemming	
Site Name	**Project Number**	☐ RUSH – Additional charges apply ☐ Special Detection Limit(s): Date Results Needed	**Method of Shipment** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Courier ☒ Client Drop Off Other
Stormwater: Hyco - Arab, AL			
LIMS Project ID	**Project Manager Phone #**	**Project Manager Email**	**Site/Facility ID #**
GSE Stormwater	(256) 350-9754	shemming@gseinc.com	

Date	Time	Sample ID	Matrix	Grab/ Comp	# of Cont	Container Type	Preservation	Analyses
10/7/19	0505	DSN002	Aqueous	G	1	Plastic - Quart	NONE	BOD, TSS
10/7/19	0505	DSN002	Aqueous	G	1	Plastic - Pint	NONE	Hexavalent Chromium, Trivalent Chromium
10/7/19	0505	DSN002	Aqueous	G	1	Plastic - Pint	HNO3 - Nitric Acid	Cu, Pb, Zn, Cr
10/7/19	0505	DSN002	Aqueous	G	1	Plastic - Pint	H2SO4 - Sulfuric Acid	Phosphorus, COD, Total Nitrogen
10/7/19	0515	DSN003	Aqueous	G	1	Plastic - Quart	NONE	BOD, TSS
10/7/19	0515	DSN003	Aqueous	G	1	Plastic - Pint	NONE	Hexavalent Chromium, Trivalent Chromium
10/7/19	0515	DSN003	Aqueous	G	1	Plastic - Pint	HNO3 - Nitric Acid	Cu, Pb, Zn, Cr
10/7/19	0515	DSN003	Aqueous	G	1	Plastic - Pint	H2SO4 - Sulfuric Acid	Phosphorus, COD, Total Nitrogen

For Laboratory Use Only			Sampled by (Name - Print)	Client Remarks/Comments			
Ice	Custody Seals	Lab Comments	Shelley Hemming	pH - Grab - 002 - 6.72 pH - Grab - 003 - ~~7.13~~ 6.81			
(Y/N)	Y/N		**Relinquished by: (SIGNATURE)**	**Date**	**Time**	**Received by: (SIGNATURE)**	**Date Time**
Blank/Cooler Temp			Shelley Hemming	10/7/19	1755		
3.8°C T70			**Relinquished by: (SIGNATURE)**	**Date**	**Time**	**Received by: (SIGNATURE)**	**Date Time**
			Relinquished by: (SIGNATURE)	**Date**	**Time**	**Received by: (SIGNATURE)**	**Date Time**
						Carol Dunlap	10/7/19 12:55

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10/14/2019

Great Southern Engineering
Mr. Ryan Bailey
3795 Gordon Terry Parkway
Trinity, AL, 35673

Ref: Analytical Testing
Lab Report Number: 19-280-0057
Client Project Description: Hyco - Arab, AL

Dear Mr. Ryan Bailey:
Waypoint Analytical, LLC. received sample(s) on 10/7/2019 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method. Where the laboratory was not responsible for the sampling stage (refer to the chain of custody) results apply to the sample as received.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters (NELAP and non-NELAP) were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule August 2017) and NELAC unless otherwise indicated. Any parameter for which the laboratory is not officially NELAP accredited is indicated by a '~' symbol. These are not included in the scope because NELAP accreditation is either not available or has not been applied for. Additional certifications may be held/are available for parameters, where NELAP accreditation is not required or applicable. A full list of certifications is available upon request.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an as-received basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Rebekah Ross
Project Manager

Laboratory's liability in any claim relating to analyses performed shall be limited to, at laboratory's option, repeating the analysis in question at laboratory's expense, or the refund of the charges paid for performance of said analysis.

Alabama	#40750	Louisiana	#04015	VA NELAP	#460181	Texas	#T104704180	Arkansas	#88-0650
Mississippi		California	#2904	NC	#415	Oklahoma	#9311	SC	#84002
Kentucky	#90047	Tennessee	#TN02027	EPA	#TN00012	Kentucky UST	#80215	PA DEP	#68-03195

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Sample Summary Table

Report Number: **19-280-0057**

Client Project Description: **Hyco - Arab, AL**

Lab No	Client Sample ID	Matrix	Date Collected	Date Received
89882	DSN002 - Grab	Aqueous	10/07/2019 05:05	10/07/2019
89883	DSN002 - Comp	Aqueous	10/07/2019 07:30	10/07/2019
89884	DSN003 - Grab	Aqueous	10/07/2019 05:15	10/07/2019
89885	DSN003 - Comp	Aqueous	10/07/2019 07:30	10/07/2019

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Summary of Detected Analytes

Project: Hyco - Arab, AL

Report Number: 19-280-0057

Client Sample ID / Method	Lab Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
DSN002 - Comp	**L 89883**					
2540D-2011	Total Suspended Solids	10	mg/L	2	10/08/2019 10:53	
5210B-2011	Biochemical Oxygen Demand (5-day)	7	mg/L	5	10/07/2019 13:30	
5220D-2011	COD (Chemical Oxygen Demand)	20.7	mg/L	15.0	10/10/2019 10:10	
CALCULATION	Chromium, Tri-valent	0.025	mg/L	0.010	10/07/2019 13:23	
CALCULATION	Total Nitrogen	0.444	mg/L	0.100	10/08/2019 15:30	
EPA-200.7	Chromium	0.0259	mg/L	0.0050	10/09/2019 22:39	
EPA-200.7	Copper	0.0078	mg/L	0.0050	10/09/2019 22:39	
EPA-200.7	Zinc	0.0546	mg/L	0.0200	10/09/2019 22:39	
EPA-300.0	Nitrate (NO3-N)	0.444	mg/L	0.100	10/08/2019 15:30	
EPA-300.0	Nitrate+Nitrite-N	0.444	mg/L	0.100	10/08/2019 15:30	
DSN003 - Comp	**L 89885**					
2540D-2011	Total Suspended Solids	98	mg/L	7	10/08/2019 10:53	
4500NORGD-2011	Total Kjeldahl Nitrogen	2.17	mg/L	1.00	10/14/2019 14:44	
5210B-2011	Biochemical Oxygen Demand (5-day)	71	mg/L	24	10/07/2019 13:30	
5220D-2011	COD (Chemical Oxygen Demand)	150	mg/L	150	10/09/2019 11:00	
CALCULATION	Total Nitrogen	3.75	mg/L	0.100	10/08/2019 15:42	
EPA-200.7	Chromium	0.0084	mg/L	0.0050	10/09/2019 22:54	
EPA-200.7	Copper	0.0192	mg/L	0.0050	10/09/2019 22:54	
EPA-200.7	Lead	0.0076	mg/L	0.0060	10/09/2019 22:54	
EPA-200.7	Zinc	0.0419	mg/L	0.0200	10/09/2019 22:54	
EPA-300.0	Nitrate (NO3-N)	1.58	mg/L	0.100	10/08/2019 15:42	
EPA-300.0	Nitrate+Nitrite-N	1.58	mg/L	0.100	10/08/2019 15:42	

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Client: Great Southern Engineering
Project: Hyco - Arab, AL
Lab Report Number: 19-280-0057
Date: 10/14/2019

CASE NARRATIVE

Chemical Oxygen Demand (COD) Method 5220D-2011
QC Batch No: L458304
Relative percent difference (RPD) for the duplicate analysis was outside of the allowable quality control limits. The sample and duplicate results are less than two times the reporting limit. At this level, RPD is not applicable. The data is considered to be acceptable.

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02387
Great Southern Engineering
Mr. Ryan Bailey
3795 Gordon Terry Parkway
Trinity , AL 35673

Project Information : Hyco - Arab, AL

Report Date : 10/14/2019
Received : 10/07/2019

Report Number : **19-280-0057**

REPORT OF ANALYSIS

Rebekah Ross
Project Manager

Lab No : **89882**
Sample ID : **DSN002 - Grab**

Matrix: **Aqueous**
Sampled: **10/7/2019 5:05**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
HEM: Oil and Grease	<1.4	mg/L	1.4	1	10/09/19 16:40	CxC	1664B

Qualifiers/ Definitions

DF Dilution Factor
MQL Method Quantitation Limit
L Limit Exceeded

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Project Information : Hyco - Arab, AL

Report Date : 10/14/2019
Received : 10/07/2019

Report Number : **19-280-0057**

REPORT OF ANALYSIS

Rebekah Ross
Project Manager

Lab No : **89883**
Sample ID : **DSN002 - Comp**

Matrix: **Aqueous**
Sampled: **10/7/2019 7:30**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Biochemical Oxygen Demand (5-day)	**7**	mg/L	5	1	10/07/19 13:30	SLM	5210B-2011
Chromium, Hexavalent	<0.010	mg/L	0.010	1	10/07/19 13:23	VBW	3500CrB-2011
Chromium, Tri-valent	**0.025**	mg/L	0.010	1	10/07/19 13:23		CALCULATION
COD (Chemical Oxygen Demand)	**20.7**	mg/L	15.0	1	10/10/19 10:10	SLM	5220D-2011
Nitrate (NO3-N)	**0.444**	mg/L	0.100	1	10/08/19 15:30	CCR	EPA-300.0
Nitrite (NO2-N)	<0.100	mg/L	0.100	1	10/08/19 15:30	CCR	EPA-300.0
Nitrate+Nitrite-N	**0.444**	mg/L	0.100	1	10/08/19 15:30		EPA-300.0
Total Suspended Solids	**10**	mg/L	2	1	10/08/19 10:53	ADM	2540D-2011
Total Kjeldahl Nitrogen	<1.00	mg/L	1.00	1	10/14/19 14:43	CLP	4500NORGD-2011
Total Nitrogen	**0.444**	mg/L	0.100	1	10/08/19 15:30		CALCULATION~
Phosphorus	<0.500	mg/L	0.500	1	10/14/19 15:34	CLP	365.4
Chromium	**0.0259**	mg/L	0.0050	1	10/09/19 22:39	BKN	EPA-200.7
Copper	**0.0078**	mg/L	0.0050	1	10/09/19 22:39	BKN	EPA-200.7
Lead	<0.0060	mg/L	0.0060	1	10/09/19 22:39	BKN	EPA-200.7
Zinc	**0.0546**	mg/L	0.0200	1	10/09/19 22:39	BKN	EPA-200.7

Qualifiers/ Definitions

DF Dilution Factor
MQL Method Quantitation Limit
L Limit Exceeded

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Project Information : Hyco - Arab, AL

Report Date : 10/14/2019
Received : 10/07/2019

Report Number : **19-280-0057**

REPORT OF ANALYSIS

Rebekah Ross
Project Manager

Lab No : **89884**
Sample ID : **DSN003 - Grab**

Matrix: **Aqueous**
Sampled: **10/7/2019 5:15**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
HEM: Oil and Grease	<1.4	mg/L	1.4	1	10/09/19 16:40	CxC	1664B

Qualifiers/ Definitions

DF Dilution Factor
MQL Method Quantitation Limit
L Limit Exceeded

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Project Information : Hyco - Arab, AL

Report Date : 10/14/2019
Received : 10/07/2019

Report Number : **19-280-0057**

REPORT OF ANALYSIS

Rebekah Ross
Project Manager

Lab No : **89885**
Sample ID : **DSN003 - Comp**

Matrix: **Aqueous**
Sampled: **10/7/2019 7:30**

Test	Results	Units	MQL	DF	Date / Time Analyzed	By	Analytical Method
Biochemical Oxygen Demand (5-day)	**71**	mg/L	24	1	10/07/19 13:30	SLM	5210B-2011
Chromium, Hexavalent	<0.010	mg/L	0.010	1	10/07/19 13:23	VBW	3500CrB-2011
Chromium, Tri-valent	<0.010	mg/L	0.010	1	10/07/19 13:23		CALCULATION
COD (Chemical Oxygen Demand)	**150**	mg/L	150	1	10/09/19 11:00	SLM	5220D-2011
Nitrate (NO3-N)	**1.58**	mg/L	0.100	1	10/08/19 15:42	CCR	EPA-300.0
Nitrite (NO2-N)	<0.100	mg/L	0.100	1	10/08/19 15:42	CCR	EPA-300.0
Nitrate+Nitrite-N	**1.58**	mg/L	0.100	1	10/08/19 15:42		EPA-300.0
Total Suspended Solids	**98**	mg/L	7	1	10/08/19 10:53	ADM	2540D-2011
Total Kjeldahl Nitrogen	**2.17**	mg/L	1.00	1	10/14/19 14:44	CLP	4500NORGD-2011
Total Nitrogen	**3.75**	mg/L	0.100	1	10/08/19 15:42		CALCULATION
Phosphorus	<0.500	mg/L	0.500	1	10/14/19 15:35	CLP	365.4
Chromium	**0.0084**	mg/L	0.0050	1	10/09/19 22:54	BKN	EPA-200.7
Copper	**0.0192**	mg/L	0.0050	1	10/09/19 22:54	BKN	EPA-200.7
Lead	**0.0076**	mg/L	0.0060	1	10/09/19 22:54	BKN	EPA-200.7
Zinc	**0.0419**	mg/L	0.0200	1	10/09/19 22:54	BKN	EPA-200.7

Qualifiers/ Definitions

DF Dilution Factor
MQL Method Quantitation Limit
L Limit Exceeded

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Analytical Batch: L457999
Analysis Method: 1664B
Analysis Description: Oil and Grease

Lab Reagent Blank LRB Matrix: AQU
Associated Lab Samples: 89882, 89884

Parameter	Units	Blank Result	MQL	Analyzed
HEM: Oil and Grease	mg/L	< 1.4	1.4	10/09/19 16:40

Ongoing Precision and Recovery OPR

Parameter	Units	Spike Conc.	OPR Result	% Recovery	Analyzed	%Rec Limits	Qualifie
HEM: Oil and Grease	mg/L	40.0	35.8	89.5	10/09/19 16:40	78-114	

Matrix Spike L 90307-MS

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
HEM: Oil and Grease	mg/L	< 1.4	80.0		66.1		82.6	78-114	

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Quality Control Data

Client ID: **Great Southern Engineering**
Project Description: **Hyco - Arab, AL**
Report No: **19-280-0057**

QC Analytical Batch: L457744
Analysis Method: 2540D-2011
Analysis Description: Total Suspended Solids

Lab Reagent Blank LRB Matrix: AQU
Associated Lab Samples: 89883, 89885

Parameter	Units	Blank Result	MQL	Analyzed
Total Suspended Solids	mg/L	< 2	2	10/08/19 10:53

Duplicate L 89883-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Total Suspended Solids	mg/L	10	11	9.5	10	10/08/19 10:53

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Analytical Batch: L457648
Analysis Method: 3500CrB-2011
Analysis Description: Hexavalent Chromium

Lab Reagent Blank LRB Matrix: AQU
Associated Lab Samples: 89883, 89885

Parameter	Units	Blank Result	MQL	Analyzed
Chromium, Hexavalent	mg/L	< 0.010	0.010	10/07/19 13:23

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Chromium, Hexavalent	mg/L	0.125	0.122	97.6	90-110

Matrix Spike & Matrix Spike Duplicate L 89842-MS L 89842-MSD

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Chromium, Hexavalent	mg/L	< 0.010	0.101	0.101	0.093	0.092	92.0	91.0	70-130	1.0	20.0

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Prep: L458663
QC Prep Batch Method: TKN/TKP Digestion
QC Analytical Batch(es): L458689,L458690
Analysis Method: 365.4
Analysis Description: Total Phosphorus

Lab Reagent Blank LRB-L458663 Matrix: AQU
Associated Lab Samples: 89883, 89885

Parameter	Units	Blank Result	MQL	Analyzed
Phosphorus	mg/L	< 0.500	0.500	10/14/19 15:13

Laboratory Control Sample LCS-L458663

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Phosphorus	mg/L	4.00	4.36	109	80-120

Duplicate L 98029-DUP-L458663

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Phosphorus	mg/L	1.18	1.36	14.1	20.0	10/14/19 15:17

Matrix Spike L 98029-MS-L458663

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
Phosphorus	mg/L	1.18	4.00		6.11		123	70-130	

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Prep: L458663
QC Prep Batch Method: TKN/TKP Digestion
QC Analytical Batch(es): L458689,L458690
Analysis Method: 4500NORGD-2011
Analysis Description: Block Digestion and FIA

Lab Reagent Blank LRB-L458663 Matrix: AQU
Associated Lab Samples: 89883, 89885

Parameter	Units	Blank Result	MQL	Analyzed
Total Kjeldahl Nitrogen	mg/L	< 1.00	1.00	10/14/19 14:28

Laboratory Control Sample LCS-L458663

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Total Kjeldahl Nitrogen	mg/L	20.0	19.1	95.5	80-120

Duplicate L 98029-DUP-L458663

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Total Kjeldahl Nitrogen	mg/L	2.34	2.49	6.2	20.0	10/14/19 14:31

Matrix Spike L 98029-MS-L458663

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
Total Kjeldahl Nitrogen	mg/L	2.34	20.0		21.2		94.3	70-130	

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Analytical Batch: L457796
Analysis Method: 5210B-2011
Analysis Description: Biochemical Oxygen Demand (BOD)

Glucose-Glutamic Acid GGA

Parameter	Units	Result	Range	Analyzed
Biochemical Oxygen Demand (5-day)	mg/L	205	167.5-228.5	10/07/19 13:30

Duplicate L 89792-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Biochemical Oxygen Demand (5-day)	mg/L	2530	2640	4.2	30	10/07/19 13:30

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Analytical Batch: L458123
Analysis Method: 5220D-2011
Analysis Description: Chemical Oxygen Demand (COD)

Lab Reagent Blank LRB Matrix: AQU
Associated Lab Samples: 89885

Parameter	Units	Blank Result	MQL	Analyzed
COD (Chemical Oxygen Demand)	mg/L	< 150	150	10/09/19 11:00

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
COD (Chemical Oxygen Demand)	mg/L	750	713	95.0	95-105

Duplicate L 89758-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
COD (Chemical Oxygen Demand)	mg/L	3010	3120	3.5	10.0	10/09/19 11:00

Matrix Spike L 89758-MS

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
COD (Chemical Oxygen Demand)	mg/L	3010	3750		6930		105	70-130	

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Analytical Batch: L458304
Analysis Method: 5220D-2011
Analysis Description: Chemical Oxygen Demand (COD)

Lab Reagent Blank 2 LRB2 Matrix: AQU
Associated Lab Samples: 89883

Parameter	Units	Blank Result	MQL	Analyzed
COD (Chemical Oxygen Demand)	mg/L	< 15.0	15.0	10/10/19 10:10

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
COD (Chemical Oxygen Demand)	mg/L	75.0	72.8	97.0	95-105

Duplicate L 91543-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
COD (Chemical Oxygen Demand)	mg/L	< 15.0	17.3	14.2*	10.0	10/10/19 10:10

Matrix Spike L 91543-MS

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
COD (Chemical Oxygen Demand)	mg/L	< 15.0	78.9		93.6		119	70-130	

* QC Fail

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Prep: L457878
QC Prep Batch Method: EPA-200.7 (PREP)
QC Analytical Batch(es): L458090
Analysis Method: EPA-200.7
Analysis Description: Total Metals

Lab Reagent Blank LRB-L457878 Matrix: AQU
Associated Lab Samples: 89883, 89885

Parameter	Units	Blank Result	MQL	Analyzed
Chromium	mg/L	< 0.0050	0.0050	10/09/19 12:27
Copper	mg/L	< 0.0050	0.0050	10/09/19 12:27
Lead	mg/L	< 0.0060	0.0060	10/09/19 12:27
Zinc	mg/L	< 0.0200	0.0200	10/09/19 12:27

Laboratory Control Sample LCS-L457878

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Chromium	mg/L	1.00	1.06	106	85-115
Copper	mg/L	1.00	1.05	105	85-115
Lead	mg/L	0.100	0.107	107	85-115
Zinc	mg/L	1.00	1.07	107	85-115

Matrix Spike & Matrix Spike Duplicate L 90032-MS-L457878 L 90032-MSD-L457878

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Chromium	mg/L	< 0.0050	1.00	1.00	1.05	1.05	105	105	70-130	0.0	20.0
Copper	mg/L	0.0063	1.00	1.00	1.03	1.03	102	102	70-130	0.0	20.0
Lead	mg/L	< 0.0060	0.100	0.100	0.106	0.106	106	106	70-130	0.0	20.0
Zinc	mg/L	0.0954	1.00	1.00	1.12	1.12	102	102	70-130	0.0	20.0

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Quality Control Data

Client ID: Great Southern Engineering
Project Description: Hyco - Arab, AL
Report No: 19-280-0057

QC Prep: L457907
QC Prep Batch Method: EPA-300.0 (PREP)
QC Analytical Batch(es): L457975
Analysis Method: EPA-300.0
Analysis Description: Anions by Ion Chromatography

Lab Reagent Blank LRB-L457907 Matrix: AQU
Associated Lab Samples: 89883, 89885

Parameter	Units	Blank Result	MQL	Analyzed
Nitrate (NO3-N)	mg/L	< 0.100	0.100	10/08/19 14:37
Nitrite (NO2-N)	mg/L	< 0.100	0.100	10/08/19 14:37

Laboratory Control Sample LCS-L457907

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Nitrate (NO3-N)	mg/L	12.5	13.0	104	90-110
Nitrite (NO2-N)	mg/L	8.46	8.45	99.9	90-110

Matrix Spike & Matrix Spike Duplicate L 89883-MS-L457907 L 89883-MSD-L457907

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Nitrate (NO3-N)	mg/L	0.444	5.94	5.94	6.86	6.88	108	108	80-120	0.2	20.0
Nitrite (NO2-N)	mg/L	< 0.105	4.01	4.01	4.31	4.27	108	107	80-120	0.9	20.0

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Cooler Receipt Form

Customer Number: **02387**
Customer Name: **Great Southern Engineering**
Report Number: **19-280-0057**

Shipping Method

○ Fed Ex ○ US Postal ○ Lab ○ Other :
○ UPS ● Client ○ Courier Thermometer ID: #56

Shipping container/cooler uncompromised?	● Yes	○ No	
Number of coolers received	1		
Custody seals intact on shipping container/cooler?	○ Yes	○ No	● Not Required
Custody seals intact on sample bottles?	○ Yes	○ No	● Not Required
Chain of Custody (COC) present?	● Yes	○ No	
COC agrees with sample label(s)?	● Yes	○ No	
COC properly completed	● Yes	○ No	
Samples in proper containers?	● Yes	○ No	
Sample containers intact?	● Yes	○ No	
Sufficient sample volume for indicated test(s)?	● Yes	○ No	
All samples received within holding time?	● Yes	○ No	
Cooler temperature in compliance?	● Yes	○ No	
Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun.	● Yes	○ No	
Water - Sample containers properly preserved	● Yes	○ No	○ N/A
Water - VOA vials free of headspace	○ Yes	○ No	● N/A
Trip Blanks received with VOAs	○ Yes	○ No	● N/A
Soil VOA method 5035 – compliance criteria met	○ Yes	○ No	● N/A

☐ High concentration container (48 hr) ☐ Low concentration EnCore samplers (48 hr)
☐ High concentration pre-weighed (methanol -14 d) ☐ Low conc pre-weighed vials (Sod Bis -14 d)

Special precautions or instructions included?	○ Yes	● No

Comments:

Signature: Tory Phillips Date & Time: 10/07/2019 13:21:54

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Kit ID:	**0000124586**
Initiated By:	**Rebekah Barger Ross**
Initiated Date:	**9/25/2019**
Project Comment	

CHAIN-OF-CUSTODY

19-280-0057
02387
10-07-2019
13:29:32
Great Southern Engineering
Hyco - Arab, AL

Company Name	Company Number	Client Project Manager/Contact	Purchase Order Number
Great Southern Engineering	02387	Ms Shelley Hemming	
Site Name	**Project Number**	☐ RUSH - Additional charges apply ☐ Special Detection Limits(s) Date Results Needed	**Method of Shipment** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Courier ☒ Client Drop Off Other
Stormwater: Hyco - Arab, AL			
LIMS Project ID	**Project Manager Phone #**	**Project Manager Email**	**Site/Facility ID #**
GSE - Stormwater	(256) 350-9754	shemming@gseinc com	

Date	Time	Sample ID	Matrix	Grab/ Comp	# of Cont	Container Type	Preservation	Analyses
10/7/19	0505	DSN002	Aqueous	G	1	Glass Clear - Quart	H2SO4 - Sulfuric Acid	Oil & Grease
10/7/19	0730	DSN002	Aqueous	C	1	Plastic - Quart	NONE	BOD, TSS
10/7/19	0730	DSN002	Aqueous	C	1	Plastic - Pint	NONE	Hexavalent Chromium, Trivalent Chromium
10/7/19	0730	DSN002	Aqueous	C	1	Plastic - Pint	HNO3 - Nitric Acid	Cu, Pb, Zn, Cr
10/7/19	0730	DSN002	Aqueous	C	1	Plastic - Pint	H2SO4 - Sulfuric Acid	Phosphorus, COD, Total Nitrogen
10/7/19	0515 SW	DSN003	Aqueous	G	1	Glass Clear - Quart	H2SO4 - Sulfuric Acid	Oil & Grease
10/7/19	0730	DSN003	Aqueous	C	1	Plastic - Quart	NONE	BOD, TSS
10/7/19	0730	DSN003	Aqueous	C	1	Plastic - Pint	NONE	Hexavalent Chromium, Trivalent Chromium

For Laboratory Use Only			Sampled by (Name - Print)	Client Remarks/Comments			
Ice	Custody Seals	Lab Comments	Shelley Hemming	pH - Grab - 002 = 6.72 pH - Comp - 002 = 7.12		pH-Grab-003 = 6.81 pH-Comp-003 = 6.84	
(Y/N)	Y/N		**Relinquished by: (SIGNATURE)**	**Date Time**	**Received by: (SIGNATURE)**	**Date Time**	
			Shelley Hemming	10/7/19 1255			
Blank/Cooler Temp			**Relinquished by: (SIGNATURE)**	**Date Time**	**Received by: (SIGNATURE)**	**Date Time**	
TSCR 1.5°C (TP)			**Relinquished by: (SIGNATURE)**	**Date Time**	**Received by: (SIGNATURE)**	**Date Time**	
					Cara Dunlap	10/7/19 12:55	

Waypoint ANALYTICAL

2790 Whitten Road, Memphis, TN 38133
Main 901.213.2400 ° Fax 901.213.2440
www.waypointanalytical.com

Kit ID:	**0000124586**
Initiated By:	**Rebekah Barger Ross**
Initiated Date:	**9/25/2019**
Project Comment	

CHAIN-OF-CUSTODY

19-280-0057
02387
10-07-2019
13:21:32
Great Southern Engineering
Hyco Arab AL

Company Name	Company Number	Client Project Manager/Contact	Purchase Order Number
Great Southern Engineering	02387	Ms. Shelley Hemming	
Site Name	**Project Number**	☐ RUSH - Additional charges apply ☐ Special Detection Limit(s) Date Results Needed	**Method of Shipment** ☐ Fed Ex ☐ UPS ☐ USPS ☐ Courier ☒ Client Drop Off Other
Stormwater Hyco - Arab, AL			
LIMS Project ID	**Project Manager Phone #**	**Project Manager Email**	**Site/Facility ID #**
GSE - Stormwater	(256) 350-9754	shemming@gseinc.com	

Date	Time	Sample ID	Matrix	Grab/ Comp	# of Cont	Container Type	Preservation	Analyses
10/7/19	0730	DSN003	Aqueous	C	1	Plastic - Pint	HNO3 - Nitric Acid	Cu, Pb, Zn, Cr
10/7/19	0730	DSN003	Aqueous	C	1	Plastic - Pint	H2SO4 - Sulfuric Acid	Phosphorus, COD, Total Nitrogen

For Laboratory Use Only			Sampled by (Name - Print)	Client Remarks/Comments			
Ice	Custody Seals	Lab Comments	Shelley Hemming	pH-Grab-002 = 6.72 pH-Comp-002 = 7.12		pH-Grab-003 = 6.81 pH-Comp-003 = 6.84	
(Y)N	Y(N)		Relinquished by: (SIGNATURE)	Date	Time	Received by: (SIGNATURE)	Date Time
Blank/Cooler Temp 1.5°C TSL TP			Shelley Hemming	10/7/19	1755		
			Relinquished by: (SIGNATURE)	Date	Time	Received by: (SIGNATURE)	Date Time
			Relinquished by: (SIGNATURE)	Date	Time	Received by: (SIGNATURE)	Date Time
						Carol Dunlap	10/7/19 12:55