Edward F. Poolos
Director

Jeffery W. Kitchens
Deputy Director

Kay Ivey
Governor

Alabama Department of Environmental Management
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Montgomery, Alabama 36130-1463
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January 12, 2026

Brent Kirby
General Counsel
Urban Oil and Gas Group, LLC
100 E. 14th Street, Suite 300
Plano, TX 75074

RE: Draft Permit
The Narrows
NPDES Permit Number AL0066621
Jefferson County (073)

Dear Mr. Kirby:

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

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

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

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

Should you have any questions concerning this matter, please contact Ange Boatwright at (334) 274-4208 or maboatwright@adem.alabama.gov.

Sincerely,

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

WDM/jlw File: DPER/7237

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

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

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

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

ADEM
Alabama Department of Environmental Management

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

PERMITTEE: Urban Oil and Gas Group, LLC
1000 E. 14th Street, Suite 300
Plano, TX 75074

FACILITY LOCATION: The Narrows Facility
16030 Romulus Rd
Buhl, AL 35446
Jefferson and Tuscaloosa County
T17S, R6W, Sections 28-33
T17S, R7W, Sections 25, 26, 35 and 36
T18S, R5W, Sections 7, 16-22, and 27-35
T18S, R6W, Sections 4-24 and 28-30
T18S, R7W, Sections 1-3, 10-15, 21-29, 32, and 33
T19S, R4W, Sections 7, 18, 19, and 30
T19S, R5W, Sections 1-36
T19S, R6W, Sections 1, 2, 11-14, 23-28, and 33-36
T20S, R5W, Sections 2-10 and 16-18
T20S, R6W, Sections 1-4, and 10-13
T20S, R6W, Sections 9 and 14-16

PERMIT NUMBER: AL0066621

DSN & RECEIVING STREAM: 004-1 Valley 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
Water Division Chief

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

Coalbed Methane Exploration, Production, and Associated Areas

TABLE OF CONTENTS

PART I DISCHARGE LIMITATIONS, CONDITIONS, AND REQUIREMENTS

A. DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

Produced and/or Process Wastewater Discharge Limitations and Monitoring Requirements
During the period beginning on the effective date of this Permit and lasting through the expiration date of this Permit, the Permittee is authorized to discharge from each point source identified on Page 1 of this Permit and described more fully in the Permittee's application, if the outfalls have been constructed and certified. Discharges shall be limited and monitored by the Permittee as specified below:

Parameter	Discharge Limitations			Monitoring Requirements	
	Daily Minimum	Monthly Average	Daily Maximum	Sample Type	Measurement Frequency[1]
pH 00400	6.0 s.u.	-------	9.0 s.u.	Grab	2/Month
Oil & Grease 00556	-------	-------	15.0 mg/L	Grab	2/Month
Chloride, Dissolved in Water 00941	-------	Report mg/L	Report mg/L	Grab	2/Month
Iron, Total (As Fe) 01045	-------	3.0 mg/L	6.0 mg/L	Grab	1/Month
Manganese, Total (As Mn) 01055	-------	2.0 mg/L	4.0 mg/L	Grab	1/Month
Flow, In Conduit or Thru Treatment Plant[2] 50050	-------	Report MGD	Report MGD	Totalizer	1/Day
Toxicity, Ceriodaphnia Acute[3] 61425	-------	-------	0 pass(0)/fail(1)	24 hour Composite	1/Quarter[4]
Toxicity, Pimephales Acute[3] 61427	-------	-------	0 pass(0)/fail(1)	24 hour Composite	1/Quarter[4]

B. REQUIREMENTS TO ACTIVATE A PROPOSED OUTFALL

1. Discharge from any point source identified on Page 1 of this Permit which is a proposed outfall is not authorized by this Permit until the outfall has been constructed and certification received by the Department from a professional engineer, registered in the State of Alabama, certifying that such facility has been constructed according to good engineering practices.

2. Certification required by Part I.B.1. shall be submitted on a completed ADEM Form 433. The certification shall include the latitude and longitude of the constructed and certified outfall.

3. Discharge monitoring and Discharge Monitoring Report (DMR) reporting requirements described in Parts I.E. and I.F. of this Permit do not apply to point sources that have not been constructed and certified.

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[1] See Part I.E.2. for further measurement frequency requirements.
[2] Flow must be determined at the time of sample collection by direct measurement, calculation, or other method acceptable to the Department.
[3] See Part IV.B. for Effluent Toxicity Limitations and Biomonitoring Requirements for **Acute** Toxicity.
[4] See Part IV.B.2.d. regarding Effluent Toxicity monitoring frequency reduction.

4. Upon submittal of the certification required by Part I.B.1. to the Department, all monitoring and DMR submittal requirements shall apply to the constructed and certified outfall.

C. STORMWATER DISCHARGE MONITORING AND INSPECTION REQUIREMENTS

1. Stormwater Discharge 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 stormwater associated with the construction and operation of the facilityprovided that:

a. The Permittee prepares, implements, and maintains a Spill Prevention, Control and Countermeasures (SPCC) Plan in accordance with 40 CFR 112 and Part II.A.2.d. of this Permit.

b. Best Management Practices (BMPs) be used to prevent pollution of stormwater from construction and operation of the facility. The BMPs shall, at a minimum, meet the requirements of Part II.A.2.b.

c. Stormwater discharge(s) shall have no sheen, and there shall be no discharge of visible oil, floating solids, or visible foam in other than trace amounts.

2. Stormwater Inspection Requirements

a. Complete and comprehensive inspections of a minimum of four percent (4%) of all wellpads, pipeline right-of-ways, treatment ponds, compressor stations, other facilities and related appurtenances, etc. covered by this Permit, including all BMPs implemented, by a professional engineer, registered in the State of Alabama or personnel under his direct supervision shall be performed every month until expiration of coverage under this Permit. The Permittee shall inspect different or additional 4% increments until all facilities (100%) have been inspected prior to repeating inspections.

b. Inspections shall be performed as often as is necessary to determine if, and ensure that, appropriate BMPs have been fully implemented and properly maintained and that stormwater runoff from the facility complies with limitations pursuant to Part I.C. of this Permit.

3. Recording of Results

For each inspection conducted pursuant to the requirements of Part I.C.2. of this Permit, the Permittee shall record on a Department approved form the following information:

a. The NPDES#, facility name, and location, source identifier (wellpad, compressor station, pipeline, etc.), and source location;

b. The name(s) of person(s) who performed the inspection;

c. The date and time the inspection was performed;

d. Any deficiencies noted during the inspection, any corrective action or mitigation needed to correct the deficiencies, and a proposed compliance schedule for deficiencies noted as

requiring significant maintenance not to exceed 14 days, unless approved in writing by the Department.

4. **Reporting of Inspection and Monitoring Requirements**

a. Inspection Summary Reports (Form 343) for stormwater discharges shall be submitted to the Director or his designee:

(1) By July 28 of each year for all inspectionsand monitoring performed during the preceding 12 month period ending on the last day of the month of June.

(2) With any Noncompliance Notification Form submitted pursuant to Part I.F.2. of this Permit.

b. Results of all inspections and monitoring shall be summarized on an appropriate form approved by the Department, and shall be available for inspection no later than 21 days following the date of the inspection or monitoring. Reports must be legible and bear original signature(s). Photo and electronic copies of the signature are not acceptable and shall not satisfy the reporting requirements of this Permit.

D. LAND APPLICATION OF TEMPORARY PIT WASTEWATERS

1. **Administrative and Reporting Requirements**

a. Notwithstanding any other provisions of this Permit, one-time land application of temporary pit wastewater in conjunction with pit closure from any pit which is associated with any drilling, wellpad construction, well stimulation, collecting, land application, transport, treatment, storage, discharge, or other facility(s) and associated appurtenances for each development or production field or permitted area whose waste stream or produced water is authorized by this Permit is prohibited unless conducted or operated in accordance with all provisions of this Permit, Departmental regulations and good engineering practices.

With the exception of a one-time land application of pit wastewater in conjunction with pit closure, land application of produced water and other wastewaters generated during drilling, well stimulation, well completion, and well development is not authorized.

b. The Permittee shall prepare and submit to the Department a comprehensive, detailed operations management plan for **ONE-TIME** land application of pit wastewater in conjunction with pit closure. As a minimum, this plan must address the types of equipment utilized, application rates and procedures, and site preparation and revegetation. Application of wastewater for dust suppression or other purposes on private or public roadways, access roads, trails, or other areas must also be addressed.

c. The plan shall be prepared and certified by a professional engineer, registered in the State of Alabama.

d. The Permittee shall notify the Department at least **48 hours** prior to beginning land application. The Permittee shall re-notify the Department if land application operations are not completed within 7 **days** of the initial 48 hour notification. The Permittee must report the field name, county name, wellpad number, township-range-section, nearest surface stream, and the anticipated time of application.

e. The Permittee shall complete and make available for inspection at the facility office, or at a Department-approved alternate location, the appropriate Department-approved **Land**

Application Certification. The Permittee shall submit such certification(s) as required to the Department - Attn. Chief, Mining and Natural Resource Section, Water Division - within 14 days of completion of land application operations for each pit which is associated with any drilling, well stimulation, construction, collecting, transport, treatment, storage, discharge, or other facility(s) and associated appurtenances for each development or production field or permitted area whose waste stream or produced water discharge is authorized by this Permit.

(1) The certification form must be complete and correct. Forms that contain missing or incomplete responses are not acceptable. The certification must be signed by a registered professional engineer, registered in the State of Alabama, along with the registration number and stamped with the professional seal. In addition, the certification must be signed by a Responsible Corporate Official (RCO) of the level of vice-president or above with the authority to prevent and abate possible violations. The RCO may designate an employee such as a project manager with environmental experience who is familiar with the plan to sign the certification form as an agent of the RCO. The RCO must notify the ADEM in writing with the name of the designated employee.

(2) The certification shall contain at a minimum the name of the Permittee, field name, NPDES number, county, wellpad name and number, latitude and longitude, township-range-section to the nearest 1/4 section, nearest surface receiving stream, pH (s.u.), TDS (mg/l), and the date and the name of the Department representative that was notified.

(3) In addition the certification shall contain the following statement:

"Based upon the inspections of (dates and times) _____ performed prior to and during land application of pit wastewater from the pit(s) located at the site referenced above, which I or personnel under my direct supervision (list:_____) conducted, I certify that each land application site and all application equipment was in accordance with the land application procedures plan filed with the Department, that the pumped pit wastewater did not contain visible, floating material or oil & grease, and that all application procedures and operations were conducted in accordance with the above-referenced NPDES permit and ADEM regulations.

I further certify that no unauthorized discharge to surface or ground waters has occurred as a result of these activities."

f. The Permittee shall **IMMEDIATELY** notify the Department upon learning of any possible or probable discharge to State waters resulting from land application or any other activities associated with coalbed methane operations.

2. Technical Requirements

a. Approval of a land application plan assumes that a relatively small volume of wastewater will be disposed of and, due to the small quantity involved, groundwater quality will be unaffected. Land application of pit sludge, solids or other wastes is prohibited.

b. Only wastewater having a total dissolved solids concentration (TDS) of 2,000 mg/l or less and a pH between 6.0 and 9.0 standard units may be land applied. Wastewater must be free of visible, floating solids or oil and grease. The Permittee must ensure that **ONLY** wastewater is land applied and that all solids and sediments remain in the pit. It may be necessary to filter the wastewater during land application to ensure compliance. Land

application **MUST** cease immediately if at any time the applied effluent does not comply or will not comply, if application continues, with the minimum standards as stated above.

c. Wastewater must be uniformly applied over an area of sufficient expanse and at such a rate to prevent runoff of applied wastewater. Wastewater may be land applied **ONLY** to areas that wastewater has not previously been applied, unless re-application is specifically authorized in writing by the Department.

d. Application of wastewater is prohibited during rain events or when the soil is saturated or sufficiently moist as to prevent percolation of all wastewater applied.

e. Wastewater shall not be applied in such a manner that natural vegetation is discolored, killed, or otherwise adversely impacted. If the natural vegetation is adversely impacted, the Permittee shall ensure that the application area is revegetated to pre-spray conditions.

f. Wastewater shall not be applied on severe slopes, near sink holes, near natural drainage courses, near streams or other water bodies, nor in any other manner that will allow runoff of the wastewater from the application area.

g. The Permittee shall maintain a record of the results of the tests performed prior to land application to include the date the sample was collected, the name of the person performing the analysis, method of analysis, the date that the analysis was performed, the last date on which any substance was placed in the pit, the date that the wastewater was land applied, the amount of wastewater applied, and the location of the area on which the pit wastewater was land applied. This record shall be signed by the appropriate representative of the Permittee and retained for a period of at least three years after pit closure. Land application records shall be made available on request to the Department.

h. In recognition that land application is site specific in nature the Department reserves the right to require the operator to provide additional information or implement added measures in addition to the above described minimum standards to ensure compliance with this Permit, State law, and Departmental regulations.

3. Prohibitions

Unless specifically authorized elsewhere in this Permit, Part I.D. of this Permit does not authorize the Permittee to land apply produced water from coalbed methane production operations.

E. DISCHARGE MONITORING AND RECORD KEEPING REQUIREMENTS

1. Sampling Schedule and Frequency

a. The Permittee shall collect samples of the discharge from each constructed and certified point source identified on Page 1 of this Permit and described more fully in the Permittee's application, at the frequency specified in Part I.A. Analysis of the samples shall be conducted for the parameters specified in Part I.A.

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

2. Measurement Frequency

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

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

b. A measurement frequency of two days per month shall mean sample collection on any day of discharge which occurs every other week, but need not exceed two sample days per month, and are no less than seven days apart. However, if discharges occur only during one seven-day period in a month, then two days per month shall mean sample collection on any two days during that seven-day period.

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

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

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

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

3. Monitoring Schedule

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

a. MONITORING REQUIRED MORE FREQUENTLY THAN MONTHLY AND MONTHLY shall be conducted during the first full month following the effective date of coverage under this Permit and every month thereafter. More frequently than monthly and monthly monitoring may be done anytime during the month, unless restricted elsewhere in this Permit, but the results should be reported on the last Discharge Monitoring Report (DMR) due for the quarter (i.e., with the March, June, September, and December DMRs).

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

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

d. ANNUAL MONITORING shall be conducted at least once during the period of January through December. The Permittee shall conduct the annual monitoring during the first twelve (12) month period following the effective date of this Permit and is then required to monitor once during each calendar annual period thereafter. Annual monitoring may be done anytime during the year, unless restricted elsewhere in this Permit, but it should be reported on the December DMR.

4. Sampling Location

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

5. Representative Sampling

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

6. Test Procedures

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

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

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

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

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

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

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

7. **Recording of Results**

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

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

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

c. The dates and times the analyses were performed;

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

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

f. The results of all required analyses.

8. **Routine Inspection by Permittee**

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

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

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

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

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

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

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

9. **Records Retention and Production**

a. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Permit, and records of all data used to complete the above reports or the application for this Permit, for a period of at

least three (3) years from the date of the sample collection, measurement, report, or application. This period may be extended by request of the Director at any time. If litigation or other enforcement action, under the AWPCA, AEMA, and/or the FWPCA, is ongoing which involves any of the above records, the records shall be kept until the litigation is resolved. Upon the written request of the Director, the Permittee shall provide the Director with a copy of any record required to be retained by this paragraph. Copies of these records should not be submitted unless requested.

b. All records required to be kept in accordance with Part I.E.9.a. shall be kept at the permitted facility or an alternate location approved by the Department in writing and shall be available for inspection.

10. **Monitoring Equipment and Instrumentation**

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

F. DISCHARGE REPORTING REQUIREMENTS

1. **Requirements for Reporting of Monitoring**

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

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

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

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

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

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

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

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

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

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

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

Certified and Registered Mail shall be addressed to:

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

Montgomery, Alabama 36110-2059

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

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

2. Noncompliance Notification

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

(1) Potentially threatens human health or welfare;

(2) Potentially threatens fish or aquatic life;

(3) Causes or contributes to an exceedance of an in-stream water quality standard or causes or contributes to an exceedance the EPA suggested chronic criteria for total chlorides of 230 mg/L at the downstream edge of the regulatory mixing zone, when the discharge is mixed with the receiving stream by a high rate diffuser, the EPA suggested acute criteria for total chlorides of 860 mg/l at the downstream edge of the zone of initial dilution;

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

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

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

The Permittee shall orally or electronically report any of the above occurrences, describing the circumstances and potential effects of such discharge to the Director within 24-hours after the Permittee becomes aware of the occurrence of such discharge. In addition to the oral or electronic report, the Permittee shall submit to the Director a written report as provided in Part I.F.2.c., no later than five (5) days after becoming aware of the occurrence of such discharge.

b. If for any reason, the Permittee's discharge does not comply with any limitation of this Permit, the Permittee shall submit a written report to the Director, as provided in Part I.F.2.c. This report must be submitted with the next Discharge Monitoring Report required to be submitted by Part I.F.1. of this Permit after becoming aware of the occurrence of such noncompliance.

c. Any written report required to be submitted to the Director in accordance with Parts I.F.2.a. and b. shall be submitted using a Noncompliance Notification Form (ADEM Form 421) available on the Department's website

(http://adem.alabama.gov/DeptForms/Form421.pddf) 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 noncompliance and to prevent its recurrence.

3. Modification, Reduction, Suspension, or Termination of Monitoring and/or Reporting Requirements

a. The Director may, with respect to any point source identified on Page 1 of this Permit and described more fully in the Permittee's application, authorize the Permittee to modify, reduce, suspend, or terminate the monitoring and/or reporting required by this Permit upon the submission of a written request for such modification, reduction, suspension, or termination by the Permittee, supported by sufficient data as provided in applicable sections of this Permit.

b. It remains the responsibility of the Permittee to comply with the monitoring and reporting requirements of this Permit until written authorization to modify, reduce, suspend, or terminate such monitoring and/or reporting is received by the Permittee from the Director.

G. OTHER REPORTING AND NOTIFICATION REQUIREMENTS

1. Well Drilling Notification Requirements

Notification shall be provided to the Department at least seven days prior to the commencement of the well drilling phase of construction of each well.

2. 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.

3. Termination of Discharge

The Permittee shall notify the Director, in writing, when all discharges from any point source(s) identified on Page 1 of this Permit and described more fully in the Permittee's application have permanently ceased. This notification shall serve as sufficient cause for instituting procedures for termination of the Permit.

4. Updating Information

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

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

5. Duty to Provide Information

a. The Permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, terminating, or revoking and reissuing this Permit, in whole or in part, or to determine compliance with this Permit. The Permittee shall also furnish to the Director upon request, copies of records required to be maintained by this Permit.

b. The Permittee shall furnish to the Director upon request, within a reasonable time, available information (name, phone number, address, and site location) which identifies offsite sources of material or natural resources (mineral, ore, or other material such as iron, coal, coke, dirt, chert, shale, clay, sand, gravel, bauxite, rock, stone, etc.) used in its operation or stored at the facility.

H. SCHEDULE OF COMPLIANCE

The Permittee shall achieve compliance with the discharge limitations specified in Part I.A. of this Permit in accordance with the following schedule:

Compliance must be achieved by the effective date of this Permit.

PART II OTHER REQUIREMENTS, RESPONSIBILITIES, AND DUTIES

A. OPERATIONAL AND MANAGEMENT REQUIREMENTS

1. Facilities Operation and Management

The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.

2. Best Management Practices (BMPs)

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

b. No later than ninety (90) days after the issuance date of this Permit, the Permittee shall prepare, submit to the Department, and implement a Best Management Practices (BMPs) Plan that addresses the control of all nonpoint source pollution that is or may be associated with the Permittee's operations. These BMP plans should be based on best available technology, and include, but not be limited to, containment of any or all process liquids or solids in a manner such that these materials do not present a potential for discharge; stormwater runoff associated with wellpad construction and maintenance, roads, borrow pits less than 5 acres in size, and dirt or other material stockpiles; and water, wastewater, and other fluids acquisition operations that is or may be associated with the Permittee's operations. Protection and preservation of all surface waters onsite should be discussed, including (but not limited to) stream crossing(s), access roads, and other construction activities adjacent to waters of the State. When submitted, the BMP Plan shall become a part of this Permit and all requirements of the BMP Plan shall become requirements of this Permit. The BMPs shall include at a minimum:

(1) Plans to prevent or control pollution of stormwater by soil particles to the degree required to maintain compliance with this Permit and water quality standards;

(2) Plans to prevent the spillage or loss of any fluids, oil, grease, etc. and thereby prevent the contamination of stormwater from these substances;

(3) Plans to provide for the disposal of all used oils, hydraulic fluids, solvent degreasing materials, etc. in accordance with good management practices and any applicable state or federal regulations;

(4) Plans to prevent or minimize stormwater contact with any pollutants present at the facility;

(5) Descriptions of stormwater volume and velocity controls within the site to minimize soil erosion;

(6) Plans to minimize the amount of soil exposed during construction activity through the use of project phasing or other appropriate techniques;

(7) Plans to minimize the disturbance of steep slopes, unless infeasible;

(8) Plans to minimize sediment discharges from the site;

(9) Plans to minimize the generation of dust;

(10) Descriptions of construction entrance and exit stabilization to minimize off-site tracking of sediment from vehicles;

(11) Plans to minimize soil compaction and, unless infeasible, preserve topsoil;

(12) If applicable, the location and description of each borrow pit, a description of the stormwater discharge controls, and how the borrow pits will be reclaimed or closed in order to remediate any potential adverse impacts on water quality;

(13) If applicable, the exact location of each water, wastewater, and other fluids acquisition site and the method of withdrawal;

(14) If applicable, plans for the protection and preservation of all surface waters at all fluids acquisition sites or other waters which might be impacted, including, but not limited to, rivers, perennial and intermittent streams, lakes or impoundments, ponded areas, old treatment lagoons and sedimentation basins, dry hollows, subsurface wells, and all areas adjacent to waters of the State that are disturbed during water acquisition.

c. All borrow pits authorized by this permit must at all times total less than five unreclaimed acres, and must be used exclusively by the Permittee for the permitted facility. In addition to the inspections conducted by the Permittee referenced in Part I.C.2., of this Permit, the Permittee must conduct, at a minimum, monthly inspections of the borrow pits. The inspections of the borrow pits may not be used when calculating the monthly 4% increments of the Permitted facility.

d. Spill Prevention, Control, and Management

The Permittee shall prepare, implement, and maintain a Spill Prevention, Control and Countermeasures (SPCC) Plan acceptable to the Department that is prepared and certified by a Professional Engineer (PE), registered in the State of Alabama, for all onsite petroleum product or other pollutant storage tanks or containers as required by applicable state (ADEM Admin. Code r. 335-6-6-.12 (r)) and federal (40 C.F.R. §§112.1-.7) regulations. The Permittee shall implement appropriate structural and/or non-structural spill prevention, control, and/or management sufficient to prevent any spills of pollutants from entering a ground or surface water of the State or a publicly or privately owned treatment works. Careful consideration should be applied for tanks or containers located near treatment ponds, water bodies, or high traffic areas. In most situations this would require construction of a containment system if the cumulative storage capacity of petroleum products or other pollutants at the facility is greater than 1320 gallons. Any containment system used to implement this requirement shall be constructed of materials compatible with the substance(s) contained and shall prevent the contamination of groundwater. Such containment systems shall be capable of retaining a volume equal to 110 percent of the capacity of the largest tank for which containment is provided. The applicant shall maintain onsite or have readily available flotation booms to contain, and sufficient material to absorb, fuel and chemical spills and leaks. Soil contaminated by chemical spills, oil spills, etc., must be immediately cleaned up or be removed and disposed of in an approved manner.

3. **Biocide Additives**

a. The Permittee shall notify the Director in writing not later than sixty (60) days prior to instituting the use of any biocide corrosion inhibitor or chemical additive in any cooling or

boiler system(s) regulated by this Permit. Notification is not required for additives that should not reasonably be expected to cause the cooling water or boiler water to exhibit toxicity as determined by analysis of manufacturer's data or testing by the Permittee. Such notification shall include:

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

(2) 96-hour median tolerance limit data for organisms representative of the biota of the water(s) which the discharge(s) enter(s);

(3) Quantities to be used;

(4) Frequencies of use;

(5) Proposed discharge concentrations; and

(6) EPA registration number, if applicable.

b. The use of any biocide or chemical additive containing tributyl tin, tributyl tin oxide, zinc, chromium, or related compounds in any cooling or boiler system(s) regulated by the Permit is prohibited except as exempted below. The use of a biocide or additive containing zinc, chromium or related compounds may be used in special circumstances if (1) the Permit contains limits for these substances, or (2) the applicant demonstrates during the application process that the use of zinc, chromium or related compounds as a biocide or additive will not pose a reasonable potential to violate the applicable State water quality standards for these substances. The use of any additive, not identified in this Permit or in the application for this Permit or not exempted from notification under this Permit is prohibited, prior to a determination by the Department that permit modification to control discharge of the additive is not required or prior to issuance of a permit modification controlling discharge of the additive.

4. Facility Identification

The Permittee shall clearly display prior to commencement of any regulated activity and until permit coverage is properly terminated, the name of the Permittee, entire NPDES permit number, facility or site name, and other descriptive information deemed appropriate by the Permittee at an easily accessible location(s) to adequately identify the site, unless approved otherwise in writing by the Department. The Permittee shall repair or replace the sign(s) as necessary upon becoming aware that the identification is missing or is unreadable due to age, vandalism, theft, weather, or other reason(s).

5. Removed Substances

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

6. Loss or Failure of Treatment Facilities

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

7. **Duty to Mitigate**

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

B. BYPASS AND UPSET

1. Bypass

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

b. A bypass is not prohibited if:

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

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

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

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

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

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

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

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

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

2. Upset

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

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

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

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

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

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

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

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

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

(i) An upset occurred;

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

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

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

d. A discharge which is an overflow from a treatment facility or system, or an excess discharge from a point source associated with a treatment facility or system and which results from a 24-hour precipitation event larger than a 10-year, 24-hour precipitation event is not eligible to be considered as a result of an upset unless:

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

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

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

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

C. PERMIT CONDITIONS AND RESTRICTIONS

1. Prohibition against Discharge from Facilities Not Certified

Notwithstanding any other provisions of this Permit, any discharge(s) from any point source(s) from the permitted facility which was not certified to the Department by a professional engineer, registered in the State of Alabama, as being designed, constructed, and able to be operated in accordance with design plans reviewed by the Department, terms and conditions of this Permit, Departmental regulations and good engineering practices, is prohibited until the Permittee submits to the Department, on a form approved by the Department, a certification by a professional engineer certifying that all such facility(s) have been constructed and are able to be operated in accordance with design plans reviewed by the Department, terms and conditions of this Permit, Departmental regulations and good engineering practices.

2. Permit Modification, Suspension, Termination, and Revocation

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

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

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

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

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

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

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

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

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

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

3. Automatic Expiration of Permits for New or Increased Discharges

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

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

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

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

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

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

(2) Entered into a binding contractual obligation for the purpose of placement, assembly, or installation of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under the paragraph. The entering into a lease with the State of Alabama for exploration and production of hydrocarbons shall also be considered beginning construction.

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

4. Transfer of Permit

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

5. Groundwater

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

6. **Property and Other Rights**

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

D. RESPONSIBILITIES

1. **Duty to Comply**

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

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

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

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

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

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

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

2. **Change in Discharge**

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

discharge may begin until the Director has authorized it by issuance of a permit modification or a reissued permit.

b. The Permittee shall notify the Director as soon as it 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.

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

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

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

4. **Compliance with Water Quality Standards and Other Provisions**

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

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

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

5. **Compliance with Statutes and Rules**

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

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

6. **Right of Entry and Inspection**

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

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

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

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

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

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

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

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

c. Failure of the Permittee to submit to the Department a complete application for reissuance of this Permit at least 180 days prior to the expiration date of this Permit will void the automatic continuation of this Permit as provided by ADEM Admin. Code r. 335-6-6-.06, and should this Permit not be reissued for any reason, any discharge after the expiration of this Permit will be an unpermitted discharge.

PART III ADDITIONAL REQUIREMENTS, CONDITIONS, AND LIMITATIONS

A. CIVIL AND CRIMINAL LIABILITY

1. Tampering

Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained or performed under this Permit shall, upon conviction, be subject to penalties and/or imprisonment as provided by the AWPCA and/or the AEMA.

2. False Statements

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

3. Permit Enforcement

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

4. Relief From Liability

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

B. OIL AND HAZARDOUS SUBSTANCE LIABILITY

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

C. AVAILABILITY OF REPORTS

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

D. DEFINITIONS

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

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

3. Average monthly discharge limitation - means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month (zero discharge days shall not be included in the number of "daily discharges" measured and a less than detectable test result shall be treated as a concentration of zero if the most sensitive EPA approved method was used).

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

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

6. 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.

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

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

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

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

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

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

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

14. 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.

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

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

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

18. 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.

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

20. MGD - means million gallons per day.

21. Mixing Zone - that portion of the receiving waters where mixture of effluents and natural waters take place. Mixing zones must meet the requirements of ADEM Admin. Code r. 335-6-6-.15(10).

22. Monthly Average - means, other than for E. coli bacteria, the arithmetic mean of all the composite or grab samples taken for the daily discharges collected in one month period. The monthly average for E. coli bacteria is the geometric mean of daily discharge samples collected in a one month period. The monthly average for flow is the arithmetic mean of all flow measurements taken in a one month period. (Zero discharges shall not be included in the calculation of monthly averages.)

23. New Source - means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

    a. After promulgation of standards of performance under Section 306 of FWPCA which are applicable to such source; or

    b. After proposal of standards of performance in accordance with Section 306 of the FWPCA which are applicable to such source, but only if the standards are promulgated in accordance with Section 206 within 120 days of their proposal.

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

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

26. Pollutant - includes for purposes of this Permit, but is not limited to, those pollutants specified in Code of Alabama 1975, §22-22-1(b)(3) and those effluent characteristics, excluding flow, specified in Part I.A. of this Permit.

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

28. Process Wastewater - means any discharge(s) of water other than stormwater discharges.

29. Produced Water - means all water produced from the dewatering of coal and related seams, not to include flowback from fracturing and cement returns.

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

31. 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.

32. Stimulation - means any process used to clean a well bore, enlarge channels, increase permeability or increase pore spaces in a formation, thus making it possible for formation fluids to move more rapidly and greater distances through the formation, and may include surging, jetting, acidizing, or fracturing.

33. Stimulation fluids - means all fluids used for and associated with the stimulation of coal seams.

34. Stormwater discharges - means any discharges related to storm events or snow melt.

35. Treatment facility and treatment system - means all structures which contain, convey, and as necessary, chemically or physically treat coalbed methane extraction operations process wastewater, produced wastewater, or drainage from associated areas, which remove pollutants limited by this Permit from such drainage or wastewater. This includes all pipes, channels, ponds, tanks, and all other equipment serving such structures.

36. 24 Hour Composite - means a 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.

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

38. Waters - means "[a]ll waters of any river, stream, watercourse, pond, lake, coastal, ground or surface water, wholly or partially within the State, natural or artificial. This does not include waters which are entirely confined and retained completely upon the property of a single individual, partnership, or corporation unless such waters are used in interstate commerce." Code of Alabama 1975, §22-22-1(b)(2). "Waters" include all "navigable waters" as defined in §502(7) of the FWPCA, 33 U.S.C. §1362(7), which are within the State of Alabama.

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

40. Weekly (7-day and calendar week) Average - 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.

41. Zone of Initial Dilution (ZID) - the area extending from the port openings of a high rate diffuser to the initial edge of the mixing zone where, due to great turbulence, a constant instream waste concentration (IWC) cannot be determined. A ZID must meet the requirements of ADEM Admin. Code r. 335-6-6-.02(ggg)

E. SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

F. PROHIBITIONS AND ACTIVIES NOT AUTHORIZED

1. Discharges from disposal or landfill activities as described in ADEM Admin. Code div. 335-13 are not authorized by this Permit unless specifically approved by the Department.

2. Relocation, diversion, or other alteration of a water of the State is not authorized by this Permit unless specifically approved by the Department.

3. 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.

4. Discharges of stormwater, process water, produced water, other wastewaters, or other pollutants from exploration, development, production, closure, and associated activities, of hydrocarbons from sources other than coal seams (e.g., conventional oil and natural gas operations) are not authorized by this Permit unless specifically approved in writing by the Director. The Permittee shall submit documentation and must receive approval from the Department prior to inclusion, under this Permit discharges of stormwater, process water, and other wastewaters from any well that has been, or will be converted from conventional oil and gas exploration or other hydrocarbon development, or production operations to coalbed methane operations

PART IV SPECIAL REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

A. DISCHARGES TO IMPAIRED WATERS

1. This Permit does not authorize new sources or new discharges of pollutants of concern to impaired waters unless consistent with an EPA-approved or EPA-established Total Maximum Daily Load (TMDL) and applicable State law. Impaired waters are those that do not meet applicable water quality standards and are identified on the State of Alabama's §303(d) list or on an EPA-approved or EPA-established TMDL. Pollutants of concern are those pollutants for which the receiving water is listed as impaired or contribute to the listed impairment.

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

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

B. EFFLUENT TOXICITY LIMITATIONS AND BIOMONITORING REQUIREMENTS FOR ACUTE TOXICITY

Except as provided below, the Permittee shall perform 48-hour acute toxicity screening tests on the discharges required to be tested for acute toxicity in Part I.A. of this Permit.

In addition to the frequency specified in Part I.A. of this Permit, acute toxicity screening tests shall be performed in conjunction with the discharge of each new formulation of stimulation fluid that is discharged through any outfall(s). The testing in conjunction with the discharge of stimulation fluid may coincide with the regularly required testing.

1. **Test Requirements**

   a. The tests shall be performed using effluent diluted, using appropriate control water, to the Instream Waste Concentration (IWC) which is 1% effluent for Outfall 004.

   b. Any test where survival in the effluent concentration is less than 90% and statistically lower than the control indicates acute toxicity and constitutes noncompliance with this Permit.

2. **General Test Requirements**

   a. A 24 hour composite sample shall be obtained for use in the above biomonitoring tests. The holding time for each sample shall not exceed 36 hours. The control water shall be a water prepared in the laboratory in accordance with the EPA procedure described in EPA

821-R-02-012 or most current edition or another control water selected by the Permittee and approved by the Department.

b. Effluent toxicity tests in which the control survival is less than 90% or in which the other requirements of the EPA Test Procedure are not met shall be unacceptable and the Permittee shall rerun the tests as soon as practical within the monitoring period.

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

d. Should results from four consecutive testing periods indicate that effluent from a point source identified on Page 1 of this Permit does not exhibit acute toxicity, the Permittee may request that the toxicity testing frequency be reduced to semiannual. A reduction in toxicity testing frequency will be allowed only if approved by the Department in writing. The required toxicity testing frequency will revert back to once per quarter under the following conditions:

(1) If effluent from a point source identified on Page 1 of this Permit continues to exhibit acute toxicity in any of the four (4) additional acute toxicity tests following the initial indication of acute toxicity as specified in Part IV.B.4., unless waived in writing by the Department; and

(2) If the characteristics of the effluent from a point source identified on Page 1 of this Permit changes significantly from the effluent which was discharging when the reduction in frequency was approved. Such changes in characteristics may include, but are not limited to, changes in stimulation fluids.

3. Reporting Requirements

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

b. Biomonitoring test results obtained during each monitoring period shall be summarized and reported using the appropriate Discharge Monitoring Report (DMR) form approved by the Department. In accordance with Section 6. of this part, an effluent toxicity report containing the information in Section 6. shall be included with the DMR. Two copies of the test results must be submitted to the Department no later than 28 days after the month in which the tests were performed.

4. Additional Testing Requirements

a. If acute toxicity is indicated (noncompliance with permit limit), the Permittee shall perform four (4) additional valid acute toxicity tests in accordance with these procedures. The toxicity tests shall be performed once per week and shall be performed during the first four calendar weeks after becoming aware of the acute toxicity. The results of these tests shall be submitted no later than 28 days following the month in which the tests were performed. Additional testing sample collection and analysis timeframes may be extended, as necessary, to obtain the samples during discharges.

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

5. Test Methods

The tests shall be performed in accordance with the latest edition of the "EPA Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" and shall be performed using the fathead minnow (*Pimephales promelas*) and the cladoceran (*Ceriodaphnia dubia*).

6. Effluent Toxicity Testing Reports

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

a. Introduction

(1) Facility Name, location and county

(2) Permit number

(3) Toxicity testing requirements of permit

(4) Name of receiving water body

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

(i) Name of firm

(ii) Telephone number

(iii) Address

(6) Objective of test

b. Plant Operations

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

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

c. Source of Effluent and Dilution Water

(1) Effluent samples

(i) Sampling point

(ii) Sample collection date(s) and time(s)

(iii) Sample collection method

(iv) Physical and chemical data of undiluted effluent samples (water temperature, pH, alkalinity, hardness, specific conductance, total residual chlorine (if applicable), etc.)

(v) Sample temperature when received at the laboratory

(vi) Lapsed time from sample collection to delivery

(vii) Lapsed time from sample collection to test initiation

(2) Dilution Water samples

(i) Source

(ii) Collection date(s) and time(s) (where applicable)

(iii) Pretreatment (if applicable)

(iv) Physical and chemical characteristics (pH, hardness, water temperature, alkalinity, specific conductivity, etc.)

d. Test Conditions

(1) Toxicity test method utilized

(2) End point(s) of test

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

(4) Date and time test started

(5) Date and time test terminated

(6) Type and volume of test chambers

(7) Volume of solution per chamber

(8) Number of organisms per test chamber

(9) Number of replicate test chambers per treatment

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

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

(12) Light intensity (mean)

e. Test Organisms

(1) Scientific name

(2) Life stage and age

(3) Source

(4) Disease treatment (if applicable)

f. Quality Assurance

(1) Reference toxicant utilized and source

(2) Date and time of most recent acute reference toxicant test(s), raw data, and current cusum chart(s)

(3) Dilution water utilized in reference toxicant test

(4) Results of reference toxicant test(s) (LC50, etc.), report concentration-response relationship and evaluate test sensitivity. The most recent reference toxicant test shall be conducted within 30-days of the routine.

(5) Physical and chemical methods utilized

g. Results

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

(2) Provide table of endpoints: LC50, NOAEC, Pass/Fail (as required in the applicable NPDES permit)

(3) Indicate statistical methods used to calculate endpoints

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

(5) Results of test(s) (LC50, NOAEC, Pass/Fail, etc.), report concentration-response relationship (definitive test only), report percent minimum significant difference (PMSD)

h. Conclusions and Recommendations

(1) Relationship between test endpoints and permit limits

(2) Action to be taken

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
WATER DIVISION

NPDES INDIVIDUAL PERMIT RATIONALE

Company Name:	Urban Oil and Gas Group, LLC
Facility Name:	The Narrows
County:	Jefferson and Tuscaloosa
Permit Number:	AL0066621
Prepared by:	Jasmine White
Date:	January 7, 2026
Receiving Waters:	Valley Creek
Permit Coverage:	Coalbed Methane Exploration, Production, and Associated Areas
SIC Code:	1311

The Department has made a tentative determination that the available information is adequate to support reissuance and modification of this permit. The modification addresses the deletion of Outfalls 001, 002, and 003.

This proposed permit covers produced water and stormwater discharges from coalbed methane exploration, production, and associated areas.

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

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

The Instream Waste Concentration (IWC) calculated based on the average discharge flow (Q_w) provided in the application and the receiving stream's $7Q_{10}$ (seven-day 10-year low flow) is:

Outfall 004-1

$$Instream\ Waste\ Concentration\ (IWC) = \frac{Q_w}{7Q_{10} + Q_w} = \frac{0.09283\ cfs}{(42.60 + 0.09283)cfs} = 0.217\%$$

The instream water quality standards for pH in streams classified as Fish and Wildlife is 6.0 – 8.5 s.u. per ADEM Admin. Code r. 335-6-10-.09. However, a discharge limitation for pH of 9.0 s.u. is imposed when the IWC indicates that enough dilution is considered to be available in-stream to allow for a discharge at 9.0 s.u. without endangering water quality. In the case of this proposed permit, the IWC indicates that dilution is available to allow a discharge of 9.0 s.u. However, the discharge shall not be allowed to cause the in-stream pH to deviate more than 1.0 s.u. from the normal or natural pH, nor be less than 6.0 s.u., nor greater than 8.5 s.u.

Total iron and total manganese limitations are based on Best Professional Judgment (BPJ). These limitations have been used in previous permits and are believed to be adequate to protect water quality. The oil and grease daily maximum limit of 15 mg/L has been shown to provide a reasonable assurance of compliance with ADEM Admin. Code r. 335-6-10-.06(b) which says "State waters shall be free from floating debris, oil...."

The applicant has submitted, in accordance with 40 CFR Part 122.21 and their NPDES permit application, a complete EPA Form 2C for all existing outfalls and a complete EPA Form 2D for all proposed outfalls as part of this application. Based on these and other sources of submitted data, the Department completed a reasonable potential analysis (RPA) of the discharge to determine whether or not pollutants in the treated effluent have the potential to contribute to excursions of Alabama's in-stream water quality standards. Based on the RPA, it was determined that potential pollutants discharged from this facility at Outfall 001-1, if discharged within the concentrations allowed by this permit, would not have a reasonable potential to cause or contribute to a contravention of applicable State water quality standards.

The Department's experience with existing discharges on receiving streams with greater that 100:1 dilution has shown that acute toxicity requirements are more stringent than chronic requirements. This permit proposes discharges with a flow rate of 0.09283 cfs with the receiving streams 7Q10 of 42.60 cfs resulting in greater than 100:1 dilution. Therefore, acute toxicity testing with two species (Ceriodaphnia dubia and Pimephales promelas) is required by this permit. The acute toxicity testing is required using effluent diluted to the IWC using the 1Q10 flow (ADEM Admin. Code r. 335-6-6-.15(11)). The 1Q10 is estimated to be 75% of the 7Q10, and in this case is 32 cfs.

$$Instream\ Waste\ Concentration\ (IWC) = \frac{Q_w}{1Q_{10} + Q_w} = \frac{0.09283\ cfs}{(32 + 0.09823)cfs} = 0.289\%\ (round\ to\ 1\%)$$

The acute toxicity testing at the 1Q10 IWC of 1% is required once per quarter, unless the Permittee has met the requirements of Part IV.B.2. and been granted approval for semiannual toxicity testing frequency. In addition, since limited information is available concerning the aquatic toxicity of the chemicals used in the stimulation fluids or the exact ratios and combinations of these chemicals, Part IV.B. of the permit requires the Permittee to conduct toxicity testing in conjunction with the discharge of any new stimulation fluids into the waste stream.

Pursuant to ADEM Admin. Code r. 335-6-6-.12(r) this Permit requires the Permittee to prepare, implement, and maintain a Spill Prevention Control and Countermeasures (SPCC) plan for all stored chemicals, fuels and/or stored pollutants that have the potential to discharge to a water of the State. This plan must meet the minimum engineering requirements as defined in 40 CFR Part 112 and must provide for secondary containment adequate to control a potential spill.

A Best Management Practices (BMP) Plan is required for the control of all nonpoint sources of pollution from all areas that are or may be associated with the Permittee's operations. This plan must be based on best available technology and include, but not be limited to, containment of process liquids and solids such that these do not present a potential for discharge; stormwater runoff associated with wellpad construction and maintenance; roads, borrow pits, and dirt or other material stockpiles; and water, wastewater, and other fluids acquisition operations that may be associated with the Permittee's operations. The Permittee is required to inspect a minimum of 4% of its facilities each month to ensure that their BMPs are effective in minimizing pollutants in stormwater runoff and are adequate for compliance with State water quality standards.

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

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

The applicant is not proposing new discharges of pollutant(s) to an ADEM identified Tier I water.

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

Facility Name: **Urban Oil & Gas Group, LLC - The Narrows Facility**

NPDES No.: **AL0066621** **Outfall 004-1**[1234]

				Freshwater F&W classification.						Freshwater Acute (µg/l) Q_s =1Q10						Freshwater Chronic (µg/l) Q_s = 7Q10						Human Health Consumption Fish only (µg/l) Carcinogen Q_s = Annual Average Non-Carcinogen Q_s = 7Q10			
ID	Pollutant	RP?	Carcinogen yes	Background Instream (Cs) Daily Max	Max Daily Discharge as reported by Applicant[4] (C_{dmax})	Water Quality Criteria (C_r)	Draft Permit Limit (C_{dmax})	20% of Draft Permit Limit	RP?	Background Instream (Cs) Monthly Ave	Avg Daily Discharge as reported by Applicant (C_{davg})[4]	Water Quality Criteria (C_r)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?	Water Quality Criteria (C_r)	Draft Permit Limit (C_{davg})	20% of Draft Permit Limit	RP?
1	Antimony			0	0	-	-	-	-	0	0	-	-	-	-	3.73E+02	1.46E+05	2.92E+04	No
2	Arsenic		YES	0	0	340.000	99927.783	19985.557	No	0	0	150.000	58731.049	11746.210	No	5.28E-01	1.23E+03	2.46E+02	No
3	Berylium			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
4	Cadmium			0	0	8.533	2507.819	501.564	No	0	0	1.042	408.125	81.625	No	-	-	-	-
5	Chromium/ Chromium III			0	0	2713.159	797411.778	159482.356	No	0	0	352.926	138184.877	27636.975	No	-	-	-	-
6	Chromium/ Chromium VI			0	0	16.000	4702.484	940.497	No	0	0	11.000	4306.944	861.389	No	-	-	-	-
7	Copper			0.94	0	34.637	9904.633	1980.927	No	0.94	0	23.082	8670.361	1734.072	No	1.30E+03	5.09E+05	1.02E+05	No
8	Lead			0	0	138.290	40644.126	8128.825	No	0	0	5.389	2109.995	421.999	No	-	-	-	-
9	Mercury			0	0	2.400	705.373	141.075	No	0	0	0.012	4.698	0.940	No	1.40E-01	5.50E+01	1.10E+01	No
10	Nickel			0	0	927.200	272508.816	54501.763	No	0	0	102.983	40322.094	8064.419	No	1.97E+03	7.70E+05	1.54E+05	No
11	Selenium			0	0	20.000	5878.105	1175.621	No	0	0	5.000	1957.702	391.540	No	2.43E+03	9.52E+05	1.90E+05	No
12	Silver			0	0	3.217	945.422	189.084	No	0	0	-	-	-	-	-	-	-	-
13	Thallium			0	0	-	-	-	-	0	0	-	-	-	-	2.74E-01	1.07E+02	2.14E+01	No
14	Zinc			0	0	355.092	104363.485	20872.697	No	0	0	357.997	140170.233	28034.047	No	4.51E+04	1.77E+07	3.53E+06	No
15	Cyanide			0	0	22.000	6465.915	1293.183	No	0	0	5.200	2036.010	407.202	No	9.33E+03	3.65E+06	7.31E+05	No
16	Total Phenolic Compounds			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-
17	Hardness (As CaCO3)			0	0	-	-	-	-	0	0	-	-	-	-	-	-	-	-

[1]Outfall 004-1 discharges to the Valley Creek. The 7Q10 for the receiving stream is 42.6 cfs. The mean annual flow is 254.3 cfs. This is the receiving stream flow value used in the calculations.

[4]Outfall 004-1 is reported to have an average discharge flow rate of 0.06 MGD. This is the discharge flow rate used in the calculations.

[3]A hardness of 100 mg/L was used in the calculations based information provided in the application.

[4]Discharge data for all parameters are the results of samples obtained from Outfall 004-1 at the Narrows Facility on March 27, 2020. Instream data is the result of a sample obtained from the Valley Creek on March 27, 2020.

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

COALBED METHANE OPERATIONS – EXPLORATION, DEVELOPMENT, OPERATION, CLOSURE, AND ASSOCIATED ACTIVITIES AND AREAS

INSTRUCTIONS: COMPLETE ALL QUESTIONS. RESPOND WITH "N/A" AS APPROPRIATE. INCOMPLETE OR INCORRECT ANSWERS OR MISSING SIGNATURES WILL DELAY PROCESSING. ATTACH ADDITIONAL COMMENTS OR INFORMATION AS NEEDED. IF SPACE IS INSUFFICIENT, CONTINUE ON AN ATTACHED SHEET(S) AS NECESSARY. COMMENCEMENT OF ACTIVITIES APPLIED FOR AS DETAILED IN THIS APPLICATION ARE NOT AUTHORIZED UNTIL THE EFFECTIVE DATE OF PERMIT COVERAGE ISSUED BY THE DEPARTMENT.

PLEASE TYPE OR PRINT IN INK ONLY.

R# 20-51796
$7,875.00

PURPOSE OF THIS APPLICATION

☐ Initial Permit Application for New Operations ☐ Modification of Existing Permit ☒ Reissuance of Existing Permit

☐ Reissuance & Modification of Existing Permit ☐ Reissuance & Transfer of Existing Permit ☐ Other: _____

I. GENERAL INFORMATION

NPDES Permit Number (Not applicable if initial permit application):	County(s) in which Operations are Located:
AL 0066621	Jefferson & Tuscaloosa

Company/Permittee Name			Operations Name		
Urban Oil & Gas Group, LLC			The Narrows Facility		
Mailing Address of Company/Permittee:			Physical Address of Operation (as near as possible to main entrance):		
1000 E. 14th Street, Suite 300			16030 Romulus Road		
City:	State:	Zip:	City:	State:	Zip:
Plano	TX	75074	Buhl	Alabama	35446
Permittee Phone Number	Permittee Fax Number:		Latitude and Longitude of Main Entrance:		
(972) 543 8823	(972) 543 7844		N33.439109, W87.206558		

Responsible Official (as described on Page 8 of this application):			Responsible Official Title:		
Brent Kirby			General Counsel, Director of Land/Legal		
Mailing Address of Responsible Official:			Physical Address of Responsible Official:		
1000 E. 14th Street, Suite 300			1000 E. 14th Street, Suite 300		
City:	State:	Zip:	City:	State:	Zip:
Plano	TX	75074	Plano	TX	75074
Phone Number of Responsible Official:	Fax Number of Responsible Official:		Email Address of Responsible Official:		
(972) 543 8825	(972) 543 7844		bkirby@urbanoilandgas.com		

Operations Contact:			Operations Contact Title:	
Scott White			Operations Superintendent	
Physical Address of Operations Contact:			Phone Number of Operations Contact: (205) 310-5580	Fax Number of Operations Contact: (972) 543 7889
City:	State:	Zip:	Email Address of Operations Contact:	
Buhl	AL	35446	scott.white@urbanoilandgas.com	

RECEIVED
JUN - 4 2020
WATER DIVISION

II. MEMBER INFORMATION

A. Identify the name, title/position, and unless waived in writing by the Department, the resident address of every officer, general partner, LLP partner, LLC member, investor, director, or person performing a function similar to a director, of the applicant, and each person who is the record or beneficial owner of 10 percent or more of any class of voting stock of the applicant, or any other responsible official(s) of the applicant with legal or decision making responsibility or authority for the operations:

Name	Title/Position	Physical Address of Residence (P.O. Box is Not Acceptable)
See Attachment		

B. Other than the "Company/Permittee" listed in Part I, identify the name of each corporation, partnership, association, and single proprietorship for which any individual identified in Part II.A. is or was an officer, general partner, LLP partner, LLC member, investor, director, or individual performing a function similar to a director, or principal (10% or more) stockholder, that had an Alabama NPDES permit at any time during the five year (60 month) period immediately preceding the date on which this form is signed:

Name of Corporation, Partnership, Association, or Single Proprietorship:	Name of Individual from Part II.A.:	Title/Position in Corporation, Partnership, Association, or Single Proprietorship:
None		

III. LEGAL STRUCTURE OF APPLICANT

A. Indicate the legal structure of the "Company/Permittee" listed in Part I:

☐ Corporation ☐ Association ☐ Individual ☐ Single Proprietorship ☐ Partnership ☐ LLP ☒ LLC

☐ Government Agency _____ ☐ Other _____

B. If not an individual or single proprietorship, is the "Company/Permittee" listed in Part I properly registered and in good standing with the Alabama Secretary of State's office. (If the answer is "No," attach a letter of explanation.) ☒ Yes ☐ No

C. Parent Corporation and Subsidiary Corporations of Applicant, if any: Not Applicable

D. Land owner(s): Information available to the department upon request

E. Mining Sub-contractor(s)/Operator(s), if known: Not Applicable

IV. COMPLIANCE HISTORY

A. Has the applicant ever had any of the following:

	Yes	No
(1) An Alabama NPDES, SID, or UIC permit suspended or terminated?	☐	☒
(2) An Alabama or federal environmental permit suspended/terminated?	☐	☒
(3) An Alabama State Oil & Gas Board permit or other approval suspended or terminated?	☐	☒
(4) An Alabama or federal performance/environmental bond, or similar security deposited in lieu of a bond, or portion thereof, forfeited?	☐	☒

(If the response to any item of Part IV.A. is "Yes," attach a letter of explanation.)

B. Identify every Warning Letter, Notice of Violation (NOV), Administrative Action, or litigation issued to the applicant, parent corporation, subsidiary, general partner, LLP partner, or LLC Member and filed by ADEM or EPA during the three year (36 month) period preceding the date on which this form is signed. Indicate the date of issuance, briefly describe alleged violations, list actions (if any) to abate alleged violations, and indicate date of final resolution:

None

V. OTHER PERMITS/AUTHORIZATIONS

A. List any other NPDES, State Oil & Gas Board (OGB) Class II Injection wells , or other environmental permits (including permit numbers), authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, Alabama Surface Mining Commission (ASMC), Alabama Department of Industrial Relations (ADIR), or other agency, to the applicant, parent corporation, subsidiary, or LLC member for thess operations whether presently effective, expired, suspended, revoked or terminated:

OGB Permits for wells will be provided upon request.

Radioactive Material License No. SM 1344

B. List any other NPDES or other ADEM permits (including permit numbers), authorizations, or certifications that have been applied for or issued within the State by ADEM, EPA, OGB, ASMC, or ADIR to the applicant, parent corporation, subsidiary, or LLC member for other facilities whether presently effective, expired, suspended, revoked, or terminated:

See Attachment

VI. PROPOSED SCHEDULE

Anticipated Activity Commencement Date: 2013 Anticipated Activity Completion Date: 2030 +/-

VII. ACTIVITY DESCRIPTION & INFORMATION

A. Proposed Total Area of the Permitted Site: 96,640 acres Proposed Total Disturbed Area of the Permitted Site: 50 +/- acres

B. Township(s), Range(s), Section(s): See Attachment

C. Detailed Directions to Site: From I20/59 take exit 112, follow Cty Rd 46 in a westerly direction 14.7 miles to Cty Rd 15. Turn left and proceed along Cty Rd 15 in a southwesterly direction to Edge Sawmill Rd. Turn left and proceed South along Edge Sawmill Rd 0.2 miles to the facility entrance on the right.

D. Is/will this operation:

	Yes	No
(1) an existing operation which currently results in discharges to State waters?	☒	☐
(2) a proposed operation which will result in a discharge to State waters?	☐	☒
(3) be located within any 100-year flood plain?	☒	☐
(4) discharge to Municipal Separate Storm Sewer?	☐	☒
(5) discharge to waters of or be located in the Coastal Zone?	☐	☒
(6) need/have ADEM UIC permit coverage?	☐	☒
(7) be located on Indian/historically significant lands?	☐	☒
(8) need/have ADEM SID permit coverage?	☐	☒
(9) need/have State Oil & Gas Board coverage?	☒	☐
(10) need/have ADIR permit coverage?	☐	☒
(11) generate, treat, store, or dispose of hazardous or toxic waste? (If "Yes," attach a detailed explanation.)	☐	☒
(12) be located in or discharge to a Public Water Supply (PWS) watershed or be located within ½ mile of any PWS well?	☐	☒

VIII. PROPOSED ACTIVITY TO BE CONDUCTED

A. Type(s) of activity presently conducted at applicant's existing operations or proposed to be conducted at operations (check all that apply):

☒ CBM exploration/production (drilling, fracturing, etc.)	☐ Surface water withdrawal
☒ Land application of temporary pit waters	☐ Conventional Oil & Gas exploration
☒ Creek/stream pipeline or road crossings	☐ Gob well development
☒ Construction related temporary borrow pits/areas	☒ Chemicals used in process or wastewater treatment (coagulant, biocide, etc.)
☒ Onsite construction debris or equipment storage/disposal	☒ Construction Excavation
☒ Grading, clearing, grubbing, etc.	☒ Reclamation of disturbed areas
☐ Waterbody relocation or other alteration	☒ Other (describe): Natural Gas Production (Coalbed Methane)

☐ Other beneficiation/manufacturing operations. If "Yes", please describe:

B. Primary SIC Code 1311 Description Coalbed methane (crude petroleum and natural gas)

Secondary SIC Code(s) Description

C. Narrative Description of the Activity: Coalbed methane exploration, production, operation, and associated activities.

IX. FUEL – CHEMICAL HANDLING, STORAGE & SPILL PREVENTION CONTROL & COUNTERMEASURES (SPCC) PLAN

A. Will fuels, chemicals, compounds, or liquid waste be used or stored onsite? ☒ Yes ☐ No

B. If "Yes," identify the fuel, chemicals, compounds, or liquid waste and indicate the volume of each: See Attached SPCC Plan

Volume	*Contents*	*Volume*	*Contents*	*Volume*	*Contents*
_____ gallons	_____	_____ gallons	_____	_____ gallons	_____
_____ gallons	_____	_____ gallons	_____	_____ gallons	_____

C. If "Yes", a detailed SPCC Plan with acceptable format and content, including diagrams, must be attached to application in accordance with ADEM Admin. Code R. 335-6-6-.12(r). Unless waived in writing by the Department on a programmatic, categorical, or individual compound/chemical basis, Material Safety Data Sheets (MSDS) for chemicals/compounds used or proposed to be used at the operations must be included in the SPCC Plan submittal.

X. TOPOGRAPHIC MAP SUBMITTAL

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

(a) An outline of legal boundary of entire operations (property lines and lease boundaries)
(b) Compressor stations
(c) All existing and proposed disturbed areas
(d) Operations gas and water pipelines
(e) Proposed and existing discharge points
(f) Perennial, intermittent, and ephemeral streams
(g) Lakes, springs, water wells, and wetlands
(h) All known dirt/improved access roads for operations
(i) Wellpads and service roads
(j) Other information relevant to operations
(k) All surrounding unimproved/improved roads
(l) High-tension power lines and railroad tracks
(m) Buildings and structures, including fuel/water tanks
(n) Contour lines, township-range-section lines
(o) Drainage patterns, swales, washes
(p) All drainage conveyance/treatment structures (ditches, berms, etc.)
(q) Any other pertinent or significant structure/feature
(r) Location of any waste storage/disposal areas
(s) Location of operations sign showing Permittee name, operations name, and NPDES Number

XI. RECEIVING WATERS

List the requested permit action for each outfall (issue, reissue, add, delete, move, etc.), outfall designation including denoting "E" for existing and "P" for proposed outfalls, name of receiving water(s), latitude and longitude (to seconds) of location of each discharge point, the receiving water(s) use classification, whether or not the outfall discharges to an ADEM listed CWA Section 303(d) waterbody segment at the time of application submittal, and whether or not the stream is included in a TMDL.

Action	Outfall E/P	Receiving Water	Latitude	Longitude	ADEM WUC	303(d) Segment (Y / N)	TMDL Segment* (Y / N)
Delete	001E	Mud Creek	N33.486056	W87.185361	F&W	N	N
Reissue	002E	Valley Creek	N33.505361	W87.201611	F&W	N	N
Delete	003E	Valley Creek	N33.497194	W87.196306	F&W	N	N
Reissue	004E	Valley Creek	N33.432972	W87.089278	F&W	N	N

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

XII. DISCHARGE CHARACTERIZATION

EPA Form 2C/2D Submittal

[X] Yes [ ] No A complete and correct EPA Form 2C and/or 2D or a Department-approved version of the EPA Form 2C is attached for each proposed and/or existing outfall. If "No", provide explanation:

See Attached - EPA 2C form and ADEM Modified Instream Mining form.

XIII. INFORMATION

Contact the Department prior to submittal with any questions or to request acceptable alternate content/format. Be advised that you are not authorized to commence regulated activity until this application can be processed, publicly noticed, and approval to proceed is received in writing from the Department.

EPA Form(s) 1 and 2F need not be submitted unless specifically required by the Department. EPA Form(s) 2C and/or 2D (or a Department-approved version of the forms) are required to be submitted. The applicant should ensure that other than those proposed activities described in this application, there are no other potential pollutants, processes, process wastewaters or activities that require NPDES permit coverage. Permit coverage will allow for use of captive borrow areas used solely for the permitted operation. Coverage under the Department's NPDES Construction Stormwater Permit Program allows for short-lived, construction related, limited removal or relocation of fill material offsite, and does not provide coverage for coalbed methane operations.

The applicant should understand by submission of this application, that they are advised to contact:

1) The Alabama State Oil & Gas Board;
2) The Alabama Historical Commission for requirements related to any potential historic or culturally significant sites;
3) The Alabama Department of Conservation and Natural Resources (ADCNR) for requirements related to potential presence of threatened/endangered species; and
4) The US Army Corps of Engineers, Mobile or Nashville Districts, if this project could cause fill to be placed in federal waters/wetlands or could interfere with navigation.

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

Water Division–Mining and Natural Resource Section
Alabama Department of Environmental Management
Post Office Box 301463
Montgomery, AL 36130-1463
Phone: (334) 394-4372
Fax: (334) 279-3051
h2omail@adem.state.al.us
www.adem.alabama.gov

XIV. PROPOSED NEW OR INCREASED DISCHARGES

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

☐ Yes. New/increased discharges of pollutant(s) or discharge locations to Tier 2 waters are proposed.

☒ No. New/increased discharges of pollutants(s) or discharge locations to Tier 2 waters are not proposed.

B. If "Yes," complete this Part (XV.B.), Part XVI, and XVII. **Attach additional sheets/documentation and supporting information as needed.**

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

Not Apllicable

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

Not Apllicable

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

Not Apllicable

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

Not Apllicable

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

Not Apllicable

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

Not Apllicable

XV. ALTERNATIVES ANALYSIS – ADEM Form 311 3/02

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

Alternative	Viable	Non-Viable	Reason/Rationale For Indicating Non-Viable
1) Treatment/Discharge Proposed In This Application			Not Apllicable
2) Land Application			
3) Pretreatment/Discharge to POTW By SID Permit			
4) Relocation of Discharge			
5) Reuse/Recycle – Pollution Prevention			
6) Other Process/Treatment Alternatives			
7) Underground Injection By UIC Permit			
8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM			
9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM			

COMMENTS: _____

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

This item must be completed for each technically feasible alternative evaluated in Item XVI. **Copy, complete, and attach additional blocks/sheets and supporting information as needed.** Not Apllicable

Capital Costs of pollution control project to be expended or financed by applicant (Supplied by applicant) $_____(1)

Interest Rate for Financing (Expressed as a decimal) _____(i)

Time Period of Financing (Assume 10 years *) 10 years (n)

Annualization Factor ** = $\frac{i}{(1+i)^{10}-1} + i$ _____(2)

i = Interest Rate

Annualized Capital Cost [Calculate: (1) x (2)] $_____(3)

Annual Cost of Operation & Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration & replacement) *** $_____(4)

Total Annual Cost of Pollution Control Project [(3) + (4)] $_____**(5)**

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

** Or refer to Appendix B (application information) for calculated annualization factors.

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

XVII. PROFESSIONAL ENGINEER (PE) CERTIFICATION

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

"Except for the pages, portions, maps, plans, etc. contained in this application that are specifically certified by a professional engineer registered in the state of Alabama, I certify on behalf of the applicant, that I have completed an evaluation of discharge alternatives (Item XV) for any proposed new or increased discharges of pollutant(s) to Tier 2 waters and reached the conclusions indicated. I certify under penalty of law that technical information and data contained in this application, and any attached SPCC plan, maps, engineering designs, etc., has been prepared under my supervision for this operation utilizing effective, good engineering and pollution control practices and in accordance with the provisions of ADEM Admin. Code Division 335-6. If the treatment systems are properly implemented and maintained by the permittee, discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable and according to permit discharge limitations and other permit requirements. The applicant has been advised that Best Management Practices must be fully implemented and regularly maintained as needed at the operation in accordance with good sediment, erosion, and other pollution control practices, permit requirements, and other ADEM requirements to ensure protection of groundwater and surface water quality."

Address 2814 Stillman Blvd.; Tuscaloosa, AL 35401 PE Registration # 30097-E

Name and Title (type or print) Q. Hansel Stewart, PE Phone Number (205) 759-1521

Signature Q. Hansel Stewart Date Signed 6/1/20

XVIII. RESPONSIBLE OFFICIAL SIGNATURE*

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

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

I understand that regular inspections must be performed by, or under the direct supervision of, a PE and all appropriate treatment facilities and structural & nonstructural management practices or Department approved equivalent management practices identified by the PE must be fully implemented prior to and concurrent with commencement of regulated activities and regularly maintained as needed at the operation in accordance with good sediment, erosion, and other pollution control practices and ADEM requirements. I understand that the Best Management Practices must be fully implemented and regularly maintained so that discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable and according to permit discharge limitations and other requirements to ensure protection of groundwater and surface water quality. I understand that failure to fully implement and regularly maintain required management practices for the protection of groundwater and surface water quality may subject the myself and/or the organization for which I represent to appropriate enforcement action. I understand that applicable records of data and information used to complete this application and any supplemental information submitted as part of this application must be retained pursuant to applicable requirements of ADEM Admin. Code Ch. 335-6.

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

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

Name (type or print) Brent Kirby Official Title General Counsel, Director of Land/Legal

Signature Date Signed 5/28/20

*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 partnership, 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.

ATTACHMENT
URBAN OIL & GAS GROUP, LLC
THE NARROWS FACILITY
ADEM FORM 549 m3 5/14
NPDES PERMIT NO. AL0066621
JEFFERSON & TUSCALOOSA COUNTIES, ALABAMA

Item II. MEMBER INFORMATION

Office/Partner Information:

Name	Title/Position	Physical Address
Bonnie C. Shea	Member	1000 E. 14th Street, Ste 300 Plano, TX 75074
Fred N. Diem	Member	1000 E. 14th Street, Ste 300 Plano, TX 75074
Matthew T. Kirby	Member	1000 E. 14th Street, Ste 300 Plano, TX 75074

Item V. OTHER PERMITS/AUTHORIZATIONS

- White Oak Creek Coalbed Methane Project NPDES Permit No. AL0068390
- Maxwell Crossing Facility NDPES Permit No. AL0060216
- Dorroh Facility NPDES Permit No. AL0057363
- River Road Facility NPDES Permit No. AL0060755
- Cahaba Coalbed Methane Project NPDES Permit No. AL0076252
- Blue Creek Field NPDES Permit No. AL0060267

ATTACHMENT
URBAN OIL & GAS GROUP, LLC
THE NARROWS FACILITY
ADEM FORM 549 m3 5/14
NPDES PERMIT NO. AL0066621
JEFFERSON & TUSCALOOSA COUNTIES, ALABAMA

Item VII. ACTIVITY DESCRIPTION & INFORMATION

Township(s), Range(s), Section(s):

T17S R6W JEFFERSON COUNTY, AL
SECTIONS 28, 29, 30, 31, 32, AND 33

T17S R7W JEFFERSON COUNTY, AL
SECTIONS 25, 26, 35, AND 36

T18S R7W JEFFERSON COUNTY, AL
SECTIONS 1, 2, 3, 10, 11, 12, 13, 14, 15, 21, 22, 23, 24, 25, 26, 27, 28, 29, 32, AND 33

T18S R6W JEFFERSON COUNTY, AL
SECTIONS 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 28, 29, AND 30

T18S R5W JEFFERSON COUNTY, AL
SECTIONS 7, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34, AND 35

T19S R6W JEFFERSON COUNTY, AL
SECTIONS 1, 2, 11, 12, 13, 14, 23, 24, 25, 26, 27, 28, 33, 34, 35, AND 36

T19S R5W JEFFERSON COUNTY, AL
SECTIONS 1 THROUGH 36

T19S R4W JEFFERSON COUNTY, AL
SECTIONS 7, 18, 19, AND 30

T20S R6W JEFFERSON COUNTY, AL
SECTIONS 1, 2, 3, 4, 10, 11, 12, AND 13

T20S R5W JEFFERSON COUNTY, AL
SECTIONS 2, 3, 4, 5, 6, 7, 8, 9, 10, 16, 17, AND 18

T20S R6W TUSCALOOSA COUNTY, AL
SECTIONS 9, 14, 15, AND 16

Date Printed: 4/13/2020

Client: **McGiffert And Associates, LLC**
P.O. Box 20559
Tuscaloosa, AL 35402

REPORT OF FINDINGS

Location: , MAA-Special, URBAN Narrows -- DSN002-MAX-Up **Lab ID:** 20033020-01

Sample Date: 3/27/2020 @ 9:18:00 AM **Comments:**

Analyte	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Arsenic III	BML	0.30 µg/L	EPA200.8/HPLC	4/8/2020	KyleThomas
Arsenic, Dissolved	0.32	0.27 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Copper, Dissolved	BML	0.90 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	4/6/2020	KyleThomas
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Mercury, Total	BML	0.010 µg/L	EPA245.2	4/7/2020 1:04:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Phenols, Total	BML	6.0 µg/L	EPA420.1	4/3/2020	KyleThomas
Selenium, Total	BML	0.95 µg/L	EPA200.8	3/31/2020 5:00:21 PM	KyleThomas
Silver, Dissolved	BML	0.15 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	3/31/2020 5:04:23 PM	KyleThomas

NA = Not Analyzed *ND = No Discharge* *BML = Below Minimum Level*

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mcgehee engineering corp

Date Printed: 4/13/2020

Client: **McGiffert And Associates, LLC**
P.O. Box 20559
Tuscaloosa, AL 35402

REPORT OF FINDINGS

Location: , MAA-Special, URBAN Narrows -- DSN004-MAX-Up **Lab ID:** 20033022-01

Sample Date: 3/27/2020 @ 11:00:00 AM **Comments:**

Analyte	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Arsenic III	BML	0.30 µg/L	EPA200.8/HPLC	4/8/2020	KyleThomas
Arsenic, Dissolved	0.36	0.27 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Copper, Dissolved	0.94	0.90 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	4/6/2020	KyleThomas
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Mercury, Total	BML	0.010 µg/L	EPA245.2	4/7/2020 1:09:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Phenols, Total	BML	6.0 µg/L	EPA420.1	4/3/2020	KyleThomas
Selenium, Total	BML	0.95 µg/L	EPA200.8	3/31/2020 5:28:38 PM	KyleThomas
Silver, Dissolved	BML	0.15 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	3/31/2020 5:32:41 PM	KyleThomas

NA = Not Analyzed *ND = No Discharge* *BML = Below Minimum Level*

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NPDES MINING AND PREPARATION PLANT OUTFALL DATA FOR METALS, CYANIDE, AND TOTAL PHENOLS

NPDES Permit No.:		Applicant:			Facility:
AL0066621		Urban Oil & Gas Group, LLC			The Narrows Facility
Outfall Sampled[1]:	Date of Sampling:	Was Sample Taken In-Pond?	Was Sample Taken from Discharge?	Substantially Identical Outfalls:	Description of Discharge:
DSN-002E	03/27/2020	NO	YES	NA	Effluent Discharge Sample In Stream Up-gradient Background Sample

Please supply the following information separately for every P or E outfall evaluated or tested. If necessary, attach extra sheets. If you are a coal facility, mark "X" in appropriate column for all listed metals, cyanide, and total phenols. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is proposed, you must either submit at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical outfall at another similar facility.

Pollutant and CAS No. (If available)	Mark "X"			Effluent												Instream		
	Existing Outfall (Testing Required)	Proposed Outfall – Parameter Believed Present	Proposed Outfall – Parameter Believed Absent	Maximum Daily Value		Maximum 30 Day Value (if available)		Long Term Average Value (if available)		# of Analyses	Frequency of Discharge (Days/Month Hours/Day)	EPA Approved Method Analysis Used[2]	Method Detection Limit (µg/L)	Receiving Water 7Q10 Flow (cfs)	Discharge Flow (cfs)	Background Instream Concentration (µg/L)	Instream Hardness (optional) (mg/L $CaCO_3$)[3]	Instream Flow (optional) (cfs)
				Concentration (µg/L)	Mass (lbs)	Concentration (µg/L)	Mass (lbs)	Concentration (µg/L)	Mass (lbs)									
1M. Antimony, Total (7440-36-0)	X			<1.92						1						<1.92	-	-
2M. Arsenic, Total (7440-38-2)	X			<0.27						1						0.32	-	-
3M. Beryllium, Total (7440-41-7)	X			<2.20						1						<2.20	-	-
4M. Cadmium, Total (7440-43-9)	X			<0.08						1						<0.08	-	-
5M. Chromium, Total (744-47-3)	X			<1.64						1						<1.64	-	-
6M. Copper, Total (7440-50-8)	X			<0.90						1						<0.90	-	-
7M. Lead, Total (7439-92-1)	X			<0.31						1						<0.31	-	-
8M. Mercury, Total (7439-97-6)	X			<0.010						1						<0.010	-	-
9M. Nickel, Total (7440-02-0)	X			<6.86						1						<6.86	-	-
10M. Selenium, Total (7782-49-2)	X			<0.95						1						<0.95	-	-
11M. Silver, Total (7440-22-4)	X			<0.15						1						<0.15	-	-
12M. Thallium, Total 74440-28-0)	X			<0.08						1						<0.08	-	-
13M. Zinc, Total (7440-66-6)	X			<16.45						1						<16.45	-	-
14M. Cyanide, Total (57-12-5)	X			<3.0						1						<3.0	-	-
15M. Phenols, Total	X			<6.0						1						<6.0	-	-

[1] Sampling results must be representative of the discharge.
[2] Test methods used must be in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).
[3] Instream Hardness ($CaCO_3$) will be assumed to be either 50 mg/L or 100 mg/L based on the location of the discharge if Hardness data is not submitted.

NPDES MINING AND PREPARATION PLANT OUTFALL DATA FOR METALS, CYANIDE, AND TOTAL PHENOLS

NPDES Permit No.:		Applicant:			Facility:
AL0066621		Urban Oil & Gas Group, LLC			The Narrows Facility
Outfall Sampled[1]:	Date of Sampling:	Was Sample Taken In-Pond?	Was Sample Taken from Discharge?	Substantially Identical Outfalls:	Description of Discharge:
DSN-004E	03/27/2020	NO	YES	NA	Effluent Discharge Sample In Stream Up-gradient Background Sample

Please supply the following information separately for every P or E outfall evaluated or tested. If necessary, attach extra sheets. If you are a coal facility, mark "X" in appropriate column for all listed metals, cyanide, and total phenols. If the outfall is existing, you must provide the results of at least one representative analysis for that pollutant for a substantially identical existing outfall at the facility. If the outfall is proposed, you must either submit at least one representative analysis for a substantially identical existing outfall at the facility or, if not available, at least one representative analysis for a substantially identical outfall at another similar facility.

Pollutant and CAS No. (If available)	Mark "X"			Effluent												Instream		
	Existing Outfall (Testing Required)	Proposed Outfall – Parameter Believed Present	Proposed Outfall – Parameter Believed Absent	Maximum Daily Value		Maximum 30 Day Value (if available)		Long Term Average Value (if available)		# of Analyses	Frequency of Discharge (Days/Month Hours/Day)	EPA Approved Method Analysis Used[2]	Method Detection Limit (µg/L)	Receiving Water 7Q10 Flow (cfs)	Discharge Flow (cfs)	Background Instream Concentration (µg/L)	Instream Hardness (optional) (mg/L CaCO3)[3]	Instream Flow (optional) (cfs)
				Concen-tration (µg/L)	Mass (lbs)	Concen-tration (µg/L)	Mass (lbs)	Concen-tration (µg/L)	Mass (lbs)									
1M. Antimony, Total (7440-36-0)	X			<1.92						1						<1.92	-	-
2M. Arsenic, Total (7440-38-2)	X			<0.27						1						0.36	-	-
3M. Beryllium, Total (7440-41-7)	X			<2.20						1						<2.20	-	-
4M. Cadmium, Total (7440-43-9)	X			<0.08						1						<0.08	-	-
5M. Chromium, Total (744-47-3)	X			<1.64						1						<1.64	-	-
6M. Copper, Total (7440-50-8)	X			<0.90						1						0.94	-	-
7M. Lead, Total (7439-92-1)	X			<0.31						1						<0.31	-	-
8M. Mercury, Total (7439-97-6)	X			<0.010						1						<0.010	-	-
9M. Nickel, Total (7440-02-0)	X			<6.86						1						<6.86	-	-
10M. Selenium, Total (7782-49-2)	X			<0.95						1						<0.95	-	-
11M. Silver, Total (7440-22-4)	X			<0.15						1						<0.15	-	-
12M. Thallium, Total 74440-28-0)	X			<0.08						1						<0.08	-	-
13M. Zinc, Total (7440-66-6)	X			<16.45						1						<16.45	-	-
14M. Cyanide, Total (57-12-5)	X			<3.0						1						<3.0	-	-
15M. Phenols, Total	X			<6.0						1						<6.0	-	-

[1] Sampling results must be representative of the discharge.
[2] Test methods used must be in accordance with 40 CFR Part 136 and 40 CFR 122.21(g)(7)(i).
[3] Instream Hardness ($CaCO_3$) will be assumed to be either 50 mg/L or 100 mg/L based on the location of the discharge if Hardness data is not submitted.

mcgehee engineering corp

Date Printed: 4/8/2020

Client: McGiffert And Associates, LLC
P.O. Box 20559
Tuscaloosa, AL 35402

REPORT OF FINDINGS

Location: , MAA-Special, URBAN Narrows -- DSN002-MAX-Eff **Lab ID:** 20033019-01

Sample Date: 3/27/2020 @ 10:00:00 AM **Comments:**

Analyte	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Arsenic, Dissolved	BML	0.27 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Copper, Dissolved	BML	0.90 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	4/6/2020	KyleThomas
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Mercury, Total	BML	0.010 µg/L	EPA245.2	4/7/2020 1:01:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Phenols, Total	BML	6.0 µg/L	EPA420.1	4/3/2020	KyleThomas
Selenium, Total	BML	0.95 µg/L	EPA200.8	3/31/2020 4:52:18 PM	KyleThomas
Silver, Dissolved	BML	0.15 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	3/31/2020 4:56:19 PM	KyleThomas

NA = Not Analyzed *ND = No Discharge* *BML = Below Minimum Level*

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Date Printed: 4/8/2020

Client: **McGiffert And Associates, LLC**
P.O. Box 20559
Tuscaloosa, AL 35402

REPORT OF FINDINGS

Location: , MAA-Special, URBAN Narrows -- DSN004-MAX-Eff **Lab ID:** 20033021-01

Sample Date: 3/27/2020 @ 11:15:00 AM **Comments:**

Analyte	Result	Minimum Level / Units	Method	Analysis Date	Analyst
Antimony, Dissolved	BML	1.92 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Arsenic, Dissolved	BML	0.27 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Beryllium, Dissolved	BML	2.20 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Cadmium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Chromium, Dissolved	BML	1.64 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Copper, Dissolved	BML	0.90 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Cyanide, Total	BML	3.0 µg/L	SM4500-CN-E	4/6/2020	KyleThomas
Lead, Dissolved	BML	0.31 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Mercury, Total	BML	0.010 µg/L	EPA245.2	4/7/2020 1:06:00 PM	KyleThomas
Nickel, Dissolved	BML	6.86 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Phenols, Total	BML	6.0 µg/L	EPA420.1	4/3/2020	KyleThomas
Selenium, Total	BML	0.95 µg/L	EPA200.8	3/31/2020 5:20:33 PM	KyleThomas
Silver, Dissolved	BML	0.15 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Thallium, Dissolved	BML	0.08 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas
Zinc, Dissolved	BML	16.45 µg/L	EPA200.8	3/31/2020 5:24:35 PM	KyleThomas

NA = Not Analyzed *ND = No Discharge* *BML = Below Minimum Level*

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Dear, Clint D

From: Hansel Stewart <hstewart@mcgiffert.com>
Sent: Tuesday, August 23, 2022 2:50 PM
To: Dear, Clint D
Subject: RE: Narrows Facility - Updated Application
Attachments: MAA, Special, 20033020.pdf; MAA, Special, 20033021.pdf; MAA, Special, 20033022.pdf; MAA, Special, 20033019.pdf

Clint,

Great talking with you this morning, and I appreciate your time and willingness to listen to some of that historical junk.

As mentioned, attached is the lab data results that show the test method used for the parameter for each outfall 002 and 004 with in-stream upgradient samples as well.

This application was submitted back in June of 2022, and since then Urban has stopped using the outfall 002 and has closed the treatment facility. Thus, outfall 002 will need to be deleted from this permit re-issuance as well.

I am also getting requested form 452 signed for outfalls 001 & 003 that were originally requested to be deleted, as well as for 002 which now needs to be deleted as well.

Thanks,

Hansel

From: Hansel Stewart
Sent: Monday, August 22, 2022 11:49 AM
To: 'Dear, Clint D' <clint.dear@adem.alabama.gov>
Cc: Brent Kirby <BKirby@urbanoilandgas.com>
Subject: RE: Narrows Facility - Updated Application

Thanks Clint, I will get you the requested information.

Hansel

From: Dear, Clint D <clint.dear@adem.alabama.gov>
Sent: Monday, August 22, 2022 10:33 AM
To: Hansel Stewart <hstewart@mcgiffert.com>
Cc: Brent Kirby <BKirby@urbanoilandgas.com>
Subject: RE: Narrows Facility - Updated Application

Morning,

I've attached the discharge characterization page from the application. It states that a EPA Form 2C is attached with the application. I'm only asking for something was supposed to be submitted with the application originally. Other coalbed methane facilities currently submit the EPA Form 2C, so this is nothing new.

Also, attached is the modified 2C and it is incomplete. It's missing the EPA Approved Method section. I can't verify that the correct methods were used without that information. I asked for the lab data because it has the require information I need to draft the permit.

This is standard operating procedure on how I review applications in my area. If exceptions were given to the coalbed methane industry, then those exceptions would have been relayed to me by management. Until I'm informed of those exceptions, I will continue to hold coalbed methane facilities to the same standards I have for other mining facilities.

Thanks,
Clint

From: Hansel Stewart <hstewart@mcgiffert.com>
Sent: Monday, August 22, 2022 8:19 AM
To: Dear, Clint D <clint.dear@adem.alabama.gov>
Cc: Brent Kirby <BKirby@urbanoilandgas.com>
Subject: RE: Narrows Facility - Updated Application

Clint,

I will look back at this project and get with you soon.

However, I know we have in past submittals we have only been requested to provide the modified 2C as has been standard for the coalbed methane industry.

In addition, I will send you the raw lab data but ADEM asked we not send that in the past as well.

Thanks,

Hansel

Q. Hansel Stewart, PE
Principal/Project Manager
McGiffert and Associates, LLC
2814 Stillman Boulevard
Tuscaloosa, AL 35401
p: 205-759-1521 f: 205-759-1524
www.mcgiffert.com

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From: Dear, Clint D <clint.dear@adem.alabama.gov>
Sent: Monday, August 22, 2022 7:51 AM
To: Hansel Stewart <hstewart@mcgiffert.com>
Cc: Brent Kirby <BKirby@urbanoilandgas.com>
Subject: Narrows Facility - Updated Application

Morning,

For AL0066621 (Narrows Facility), I'm reviewing the permit application and need the below things:

EPA Form 2C – I have the modified 2C but I'm missing the completed EPA Form 2C.
2C Lab data – Need this to verify the sample results.
Form 452 – Currently Outfalls 001 and 002 are existing. The outfalls need to meet the requirements for release before I can delete them.

You can email these documents. If you have any questions, just let me know.

Thanks,

Clint Dear, Environmental Engineering Specialist
Mining and Natural Resource Section
Stormwater Management Branch
Water Division
Alabama Department of Environmental Management
(334) 274-4238

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
REQUEST FOR RELEASE FROM NPDES PERMIT MONITORING AND REPORTING REQUIREMENTS
(MINING OPERATIONS)

Instructions: Your NPDES permit requires that certain information be provided in writing to ADEM in order to obtain approval to terminate monitoring and reporting requirements for a permitted outfall and its associated drainage area. **Use one form per outfall.** Please complete all questions. Use "N/A" where appropriate. Incorrect/incomplete forms will be returned and may delay approval. Please attach a detailed explanation for any "No" responses or as necessary to explain any unusual circumstances. Please type or print legibly in blue or black ink.

You are advised that you must continue monitoring and reporting until the Department grants approval of your request in writing. Mail the completed form to: ADEM-Water Division, Stormwater Management Branch, P O Box 301463, Montgomery, AL 36130-1463.

1. Name of Permittee: Urban Oil & Gas Group, LLC

2. Postal Address of Permittee: 1000 E. 14th Street, Suite 300, Plano, TX 75074

3. Facility Name: The Narrows Facility

4. NPDES/SID Permit Number: AL0066621

5. ASMC/ADOL Permit Number(s): N/A (if applicable)

6. Phone: (972) 543 8823 Fax: (972) 543 7844 Email Address: bkirby@urbanoilandgas.com

7. Point Source (Outfall) Number: DSN-001

8. Location of Outfall:

   County: Jefferson Township: 18 South Range: 6 West Section: 8

ASMC PERMITTED OR BONDED FACILITIES

9. Yes ☐ No ☒ The Permittee has received a Phase III bond release from the Alabama Surface Mining Commission (ASMC) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ASMC bond release(s) is attached.

10. Yes ☐ No ☒ The Permittee has received approval from ASMC to remove and mine through the outfall(s), and the drainage previously treated by the mined-through outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: _____

NON-ASMC PERMITTED OR BONDED FACILITIES

11. Yes ☐ No ☒ The Permittee has received a 100% bond release from the Alabama Department of Labor (ADOL) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ADOL reclamation release(s) is attached.

12. Yes ☐ No ☒ Unless waived by the Department, the Permittee, in order to expedite review/approval of this request, has attached inspection reports prepared and certified by 1) a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction, or 2) a Certified Professional in Sediment And Erosion Control (CPESC), which certify that the facility has been fully reclaimed or that water quality remediation has been achieved. The first inspection should be conducted approximately one year prior to and the second inspection should be conducted within thirty days of the Permittee's request for termination of monitoring and reporting requirements. Permanent, perennial vegetation has been re-established on all areas mined or disturbed for at least one year since mining has ceased in the drainage basin(s) associated with the surface discharge, or all areas have been permanently graded such that all drainage is directed back into the mined pit to preclude any surface discharges. Responding "No" may significantly delay approval until an inspection can be performed by Department personnel.

ALL FACILITIES

13. Yes ☒ No ☐ All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted, controlled, or regularly monitored to prevent unpermitted and unauthorized mining, processing, transportation, or associated operations/activity.

14. Yes ☐ No ☒ The outfall is a pumped discharge and, (1) the pump has been removed and piping has been removed or effectively closed/sealed to prevent future discharge, or (2) the pump has been removed and the pumped drainage previously treated by the outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: _____

15. Yes ☒ No ☐ All surface effects of the mining activity such as fuel or chemical tanks/containers, wet preparation equipment (washers), old tools or equipment, junk, garbage, debris, fuel/chemical spills, contaminated soils, etc. have been removed/remediated and disposed of according to applicable State and federal regulations.

16. Yes ☒ No ☐ The Permittee's request for termination of monitoring and reporting requirements contained in this permit is supported by monitoring data covering a period of at least six consecutive months or such longer period as is necessary to assure that the data reflect discharges occurring during varying climatological conditions.

17. Yes ☒ No ☐ The Permittee hereby certifies that the samples collected and reported in the monitoring data submitted in support of the Permittee's request for monitoring termination or suspension are representative of the discharge and were collected in accordance with all permit terms and conditions respecting sampling times (e.g., rainfall events) and methods and were analyzed in accordance with all permit terms and conditions respecting analytical methods and procedures.

18. Yes ☒ No ☐ The Permittee hereby certifies that during at least the previous twelve (12) months prior to this request, there was no chemical treatment in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall.

19. Yes ☒ No ☐ Additional information is attached to 1) further support this request, 2) provide pertinent additional information, as required by the permit, that is not requested on this form that may impact the Department's determination regarding this request, or 3) explain a "no" response on this form, or 4) provide an explanation for circumstances which may potentially result in delay or non-approval of this request.

20. Print or type the name and title of the principal executive officer or authorized agent whose signature appears 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.

"I understand that it is the Permittee's responsibility to ensure and verify receipt of this request by the Department and that the Permittee is required to immediately notify the Department in writing should conditions or information provided in this request, upon which approval may be granted, change."

Brent Kirby, General Counsel - Director of Land/Legal
Name and Title of Responsible Corporate Official or Authorized Agent

Signature

8/23/22
Date

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
REQUEST FOR RELEASE FROM NPDES PERMIT MONITORING AND REPORTING REQUIREMENTS
(MINING OPERATIONS)

Instructions: Your NPDES permit requires that certain information be provided in writing to ADEM in order to obtain approval to terminate monitoring and reporting requirements for a permitted outfall and its associated drainage area. Use one form per outfall. Please complete all questions. Use "N/A" where appropriate. Incorrect/Incomplete forms will be returned and may delay approval. Please attach a detailed explanation for any "No" responses or as necessary to explain any unusual circumstances. Please type or print legibly in blue or black ink.

You are advised that you must continue monitoring and reporting until the Department grants approval of your request in writing. Mail the completed form to: ADEM-Water Division, Stormwater Management Branch, P O Box 301463, Montgomery, AL 36130-1463.

1. Name of Permittee: Urban Oil & Gas Group, LLC

2. Postal Address of Permittee: 1000 E. 14th Street, Suite 300, Plano, TX 75074

3. Facility Name: The Narrows Facility

4. NPDES/SID Permit Number: AL0066621

5. ASMC/ADOL Permit Number(s): N/A (if applicable)

6. Phone: (972) 543 8823 Fax: (972) 543 7844 Email Address: bkirby@urbanoilandgas.com

7. Point Source (Outfall) Number: DSN-002

8. Location of Outfall:

   County: Jefferson Township: 18 South Range: 6 West Section: 6

ASMC PERMITTED OR BONDED FACILITIES

9. Yes ☐ No ☒ The Permittee has received a Phase III bond release from the Alabama Surface Mining Commission (ASMC) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ASMC bond release(s) is attached.

10. Yes ☐ No ☒ The Permittee has received approval from ASMC to remove and mine through the outfall(s), and the drainage previously treated by the mined-through outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: _____

NON-ASMC PERMITTED OR BONDED FACILITIES

11. Yes ☐ No ☒ The Permittee has received a 100% bond release from the Alabama Department of Labor (ADOL) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ADOL reclamation release(s) is attached.

12. Yes ☐ No ☒ Unless waived by the Department, the Permittee, in order to expedite review/approval of this request, has attached inspection reports prepared and certified by 1) a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction, or 2) a Certified Professional in Sediment And Erosion Control (CPESC), which certify that the facility has been fully reclaimed or that water quality remediation has been achieved. The first inspection should be conducted approximately one year prior to and the second inspection should be conducted within thirty days of the Permittee's request for termination of monitoring and reporting requirements. Permanent, perennial vegetation has been re-established on all areas mined or disturbed for at least one year since mining has ceased in the drainage basin(s) associated with the surface discharge, or all areas have been permanently graded such that all drainage is directed back into the mined pit to preclude any surface discharges. Responding "No" may significantly delay approval until an inspection can be performed by Department personnel.

ALL FACILITIES

13. Yes ☒ No ☐ All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted, controlled, or regularly monitored to prevent unpermitted and unauthorized mining, processing, transportation, or associated operations/activity.

14. Yes ☐ No ☒ The outfall is a pumped discharge and, (1) the pump has been removed and piping has been removed or effectively closed/sealed to prevent future discharge, or (2) the pump has been removed and the pumped drainage previously treated by the outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: _____

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16. Yes ☒ No ☐ The Permittee's request for termination of monitoring and reporting requirements contained in this permit is supported by monitoring data covering a period of at least six consecutive months or such longer period as is necessary to assure that the data reflect discharges occurring during varying climatological conditions.

17. Yes ☒ No ☐ The Permittee hereby certifies that the samples collected and reported in the monitoring data submitted in support of the Permittee's request for monitoring termination or suspension are representative of the discharge and were collected in accordance with all permit terms and conditions respecting sampling times (e.g., rainfall events) and methods and were analyzed in accordance with all permit terms and conditions respecting analytical methods and procedures.

18. Yes ☒ No ☐ The Permittee hereby certifies that during at least the previous twelve (12) months prior to this request, there was no chemical treatment in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall.

19. Yes ☒ No ☐ Additional information is attached to 1) further support this request, 2) provide pertinent additional information, as required by the permit, that is not requested on this form that may impact the Department's determination regarding this request, or 3) explain a "no" response on this form, or 4) provide an explanation for circumstances which may potentially result in delay or non-approval of this request.

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"I understand that it is the Permittee's responsibility to ensure and verify receipt of this request by the Department and that the Permittee is required to immediately notify the Department in writing should conditions or information provided in this request, upon which approval may be granted, change."

Brent Kirby, General Counsel - Director of Land/Legal
Name and Title of Responsible Corporate Official or Authorized Agent

Signature

8/23/22
Date

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (ADEM)
REQUEST FOR RELEASE FROM NPDES PERMIT MONITORING AND REPORTING REQUIREMENTS
(MINING OPERATIONS)

Instructions: Your NPDES permit requires that certain information be provided in writing to ADEM in order to obtain approval to terminate monitoring and reporting requirements for a permitted outfall and its associated drainage area. Use one form per outfall. Please complete all questions. Use "N/A" where appropriate. Incorrect/Incomplete forms will be returned and may delay approval. Please attach a detailed explanation for any "No" responses or as necessary to explain any unusual circumstances. Please type or print legibly in blue or black ink.

You are advised that you must continue monitoring and reporting until the Department grants approval of your request in writing. Mail the completed form to: ADEM-Water Division, Stormwater Management Branch, P O Box 301463, Montgomery, AL 36130-1463.

1. Name of Permittee: Urban Oil & Gas Group, LLC

2. Postal Address of Permittee: 1000 E. 14th Street, Suite 300; Plano, TX 75074

3. Facility Name: The Narrows Facility

4. NPDES/SID Permit Number: AL0066621

5. ASMC/ADOL Permit Number(s): N/A (if applicable)

6. Phone: (972) 543 8823 Fax: (972) 543 7844 Email Address: bkirby@urbanoilandgas.com

7. Point Source (Outfall) Number: DSN-003

8. Location of Outfall:

   County: Jefferson Township: 18 South Range: 6 West Section: 5

ASMC PERMITTED OR BONDED FACILITIES

9. ☐ Yes ☒ No The Permittee has received a Phase III bond release from the Alabama Surface Mining Commission (ASMC) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ASMC bond release(s) is attached.

10. ☐ Yes ☒ No The Permittee has received approval from ASMC to remove and mine through the outfall(s), and the drainage previously treated by the mined-through outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: _____

NON-ASMC PERMITTED OR BONDED FACILITIES

11. ☐ Yes ☒ No The Permittee has received a 100% bond release from the Alabama Department of Labor (ADOL) for all areas disturbed in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall. Please ensure that a copy(s) of the applicable ADOL reclamation release(s) is attached.

12. ☐ Yes ☒ No Unless waived by the Department, the Permittee, in order to expedite review/approval of this request, has attached inspection reports prepared and certified by 1) a Professional Engineer (PE) registered in the State of Alabama or a qualified professional under the PE's direction, or 2) a Certified Professional in Sediment And Erosion Control (CPESC), which certify that the facility has been fully reclaimed or that water quality remediation has been achieved. The first inspection should be conducted approximately one year prior to and the second inspection should be conducted within thirty days of the Permittee's request for termination of monitoring and reporting requirements. Permanent, perennial vegetation has been re-established on all areas mined or disturbed for at least one year since mining has ceased in the drainage basin(s) associated with the surface discharge, or all areas have been permanently graded such that all drainage is directed back into the mined pit to preclude any surface discharges. Responding "No" may significantly delay approval until an inspection can be performed by Department personnel.

ALL FACILITIES

13. ☒ Yes ☐ No All mining, processing, or disturbance in the drainage basin(s) associated with the discharge has ceased and site access is adequately restricted, controlled, or regularly monitored to prevent unpermitted and unauthorized mining, processing, transportation, or associated operations/activity.

14. ☐ Yes ☒ No The outfall is a pumped discharge and, (1) the pump has been removed and piping has been removed or effectively closed/sealed, to prevent future discharge, or (2) the pump has been removed and the pumped drainage previously treated by the outfall(s) is routed and properly controlled/treated by another permitted and properly certified existing outfall. List approved/certified outfall receiving drainage: _____

15. Yes ☒ No ☐ All surface effects of the mining activity such as fuel or chemical tanks/containers, wet preparation equipment (washers), old tools or equipment, junk, garbage, debris, fuel/chemical spills, contaminated soils, etc. have been removed/remediated and disposed of according to applicable State and federal regulations.

16. Yes ☒ No ☐ The Permittee's request for termination of monitoring and reporting requirements contained in this permit is supported by monitoring data covering a period of at least six consecutive months or such longer period as is necessary to assure that the data reflect discharges occurring during varying climatological conditions.

17. Yes ☒ No ☐ The Permittee hereby certifies that the samples collected and reported in the monitoring data submitted in support of the Permittee's request for monitoring termination or suspension are representative of the discharge and were collected in accordance with all permit terms and conditions respecting sampling times (e.g., rainfall events) and methods and were analyzed in accordance with all permit terms and conditions respecting analytical methods and procedures.

18. Yes ☒ No ☐ The Permittee hereby certifies that during at least the previous twelve (12) months prior to this request, there was no chemical treatment in the drainage area(s), including the treatment basin, associated with the discharge from the permitted outfall.

19. Yes ☒ No ☐ Additional information is attached to 1) further support this request, 2) provide pertinent additional information, as required by the permit, that is not requested on this form that may impact the Department's determination regarding this request, or 3) explain a "no" response on this form, or 4) provide an explanation for circumstances which may potentially result in delay or non-approval of this request.

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

"I understand that it is the Permittee's responsibility to ensure and verify receipt of this request by the Department and that the Permittee is required to immediately notify the Department in writing should conditions or information provided in this request, upon which approval may be granted, change."

Brent Kirby, General Counsel - Director of Land/Legal
Name and Title of Responsible Corporate Official or Authorized Agent

Signature

8/23/22
Date

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and Associates, LLC
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Tuscaloosa, AL 35402

Telephone 205.759.1521
Fax 205.759.1524

www.mcgiffert.com

August 23, 2022

Mr. Eric Reidy
Chief, Mining and Natural Source Section
Stormwater Management Branch - Water Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36110-2059

RE: Urban Oil and Gas Group, LLC
Narrows WWTF No. 1
Notice of Facility Closure

Dear Mr. Reidy:

On behalf of Urban Oil and Gas Group, LLC (URBAN), we are providing this notice of the closure for the Narrows No. 1 produced water treatment facility that is currently permitted under the NPDES Narrows Facility Permit No. AL0066621. The two (2) cell water treatment facility is no longer utilized to provide produced well water to point of discharge DSN-001 and DSN-003.

The decommissioning of the Narrows No. 1 facility was previously discussed with ADEM permitting personnel and the following closure plan of action was performed:

Narrows No. 1 Facility – Closure Plan

- ***Dispose of Sludge*** – The sludge generated within treatment cells were sampled to aid in the preparation of a solid waste profile and approval was obtained, and the sludge was disposed of at an accepting landfill.
- ***Remove Facility Structures*** – All facility structures above ground were removed for reuse or disposed of in accordance with applicable ADEM requirements. This included items such as cell liners, fencing, piping, concrete pads, containment tanks, etc.
- ***Modify Impoundment*** – The impoundment cells were regraded to prevent collection and ponding of stormwater and associated runoff. This was accomplished by removal of dike sections and areas were re-graded to provide positive sheet flow drainage at a minimum 5% grade.
- ***Final Stabilization*** – All disturbed areas associated with the facility and discharge location were permanently stabilized to address future stormwater runoff water quality concerns. These areas have been inspected during the normal monthly stormwater inspections as required by the NPDES permit following the closure and there were no deficiencies observed and grass is currently growing.

Based on these actions, URBAN will submit ADEM Form 452 to request a monitoring release associated with outfall DSN-001 and DSN-003.

If you have any questions or concerns regarding this plan, please advise.

Sincerely,
McGIFFERT AND ASSOCIATES, LLC

Q. Hansel Stewart, PE
QHS/dm

K:\wpdata\LETTERS\8-23b-22.docx

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August 23, 2022

Mr. Eric Reidy
Chief, Mining and Natural Source Section
Stormwater Management Branch - Water Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36110-2059

RE: Urban Oil and Gas Group, LLC
Narrows WWTF No. 2
Notice of Facility Closure

Dear Mr. Reidy:

On behalf of Urban Oil and Gas Group, LLC (URBAN), we are providing this notice of the closure for the Narrows No. 2 produced water treatment facility that is currently permitted under the NPDES Narrows Facility Permit No. AL0066621. The two (2) cell water treatment facility is no longer utilized to provide produced well water to point of discharge DSN-002.

The decommissioning of the Narrows No. 2 facility was previously discussed with ADEM permitting personnel and the following closure plan of action was performed:

Narrows No. 2 Facility – Closure Plan

- ***Dispose of Sludge*** – The sludge generated within treatment cells were sampled to aid in the preparation of a solid waste profile and approval was obtained, and the sludge was disposed of at an accepting landfill.
- ***Remove Facility Structures*** – All facility structures above ground were removed for reuse or disposed of in accordance with applicable ADEM requirements. This included items such as cell liners, fencing, piping, concrete pads, containment tanks, etc.
- ***Modify Impoundment*** – The impoundment cells were regraded to prevent collection and ponding of stormwater and associated runoff. This was accomplished by removal of dike sections and areas were re-graded to provide positive sheet flow drainage at a minimum 5% grade.
- ***Final Stabilization*** – All disturbed areas associated with the facility and discharge location were permanently stabilized to address future stormwater runoff water quality concerns. These areas have been inspected during the normal monthly stormwater inspections as required by the NPDES permit following the closure and there were no deficiencies observed and grass is currently growing.

Based on these actions, URBAN will submit ADEM Form 452 to request a monitoring release associated with outfall DSN-002.

If you have any questions or concerns regarding this plan, please advise.

Sincerely,
McGIFFERT AND ASSOCIATES, LLC

Q. Hansel Stewart, PE
QHS/dm

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URBAN OIL & GAS GROUP, LLC

COALBED METHANE PROJECTS - ALABAMA

NPDES PERMIT AL0060267
NPDES PERMIT AL0076252
NPDES PERMIT AL0066621

BIBB, JEFFERSON, SHELBY, AND TUSCALOOSA COUNTIES, ALABAMA

BEST MANAGEMENT PRACTICES PLAN FOR NON-POINT SOURCE DISCHARGE CONTROL

UPDATED AUGUST 2018

PREPARED BY

McGiffert and Associates, LLC
Since 1949
CIVIL ENGINEERS

2814 STILLMAN BLVD. • P.O. BOX 20559
TUSCALOOSA, ALABAMA 35402-0559
WWW.MCGIFFERT.COM (205) 759-1521 FAX (205) 759-1524

BEST MANAGEMENT PRACTICES PLAN

Appendices

Appendix A: Erosion Control Standard Details

Appendix B: Typical Stream Crossing Drawings

BEST MANAGEMENT PRACTICES PLAN PERMIT REQUIREMENT CROSS-REFERENCE CHART		
Permit Citation	**Description**	**Section**
I.D.2	Stormwater Inspection Requirements	5.2
I.D.4.a	Reporting of Inspection and Monitoring	5.2 / 5.1
I.H.5.a	Duty to Provide Information	5.3
II.A.1	Facilities Operation and Management	1.1 / 1.2
II.A.2.a	Dilution Water	4.4
II.A.2.b.(1)	Prevent or Control Stormwater Pollution by Soil Particles	2
II.A.2.b.(2)	Prevent Spillage or Loss of Fluids	4.1
II.A.2.b.(3)	Disposal of Fluids	4.1
II.A.2.b.(4)	Minimize Stormwater Contact with Pollutants	3
II.A.2.b.(5)	Stormwater Volume and Velocity Controls	2.2
II.A.2.b.(6)	Minimize Exposed Soil	2.3 / 3.2
II.A.2.b.(7)	Minimize Disturbance of Steep Slopes	3 /3.4
II.A.2.b.(8)	Minimize Sediment Discharges	3 / 2 / 2.3
II.A.2.b.(9)	Minimize the Generation of Dust	4.5
II.A.2.b.(10)	Entrance/Exit Stabilization	2.2
II.A.2.b.(11)	Preserve Topsoil	2.3 B
II.A.2.b.(12)	Borrow Pits	N/A
II.A.2.b.(13)	Water Acquisition	4.3
II.A.2.b.(14)	Surface Water Preservation	4
II.A.2.c	Borrow Pits	N/A
II.A.2.d	Spill Prevention, Control, and Management	4.1
II.A.5	Removed Substances	2.3 / 4.1

SECTION 1: FACILITY INFORMATION AND INTRODUCTION

1.1 Facilities Operation and Management

The Operator shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Operator 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. The Alabama Department of Environmental Management (ADEM) will recognize good faith efforts undertaken by or on the behalf of the Operator. However, it is the responsibility of the Operator to implement and maintain all measures necessary to ensure compliance with applicable State Law and regulations set forth by ADEM through the EPA's National Pollutant Discharge Elimination System (NPDES) permit program.

In accordance with Part II.A.2.b of the NPDES permit, this Best Management Practices Plan (BMPP) has been developed as minimum requirements to address the control of all nonpoint source pollution associated with the Permittee's operations. This plan addresses current construction techniques and operational practices necessary to contain and manage any pollutants that may present a potential for discharge to receiving waters of the State.

1.2 Facility Information

Project/Site Name: The Narrows Coalbed Methane Project

NPDES Permit Number: AL0066621

Project Street/Location: 10750 Lock 17 Road; Adger, AL

County(ies): Jefferson and Tuscaloosa State: Alabama ZIP Code: 35006

Latitude/Longitude of the Project Office: 33° 26' 27.8" N, 87° 12' 27.1" W
Method for determining latitude/longitude: Google Earth

Project/Site Name: Cahaba Coalbed Methane Project

NPDES Permit Number: AL0076252

Project Street/Location: 3551 Coalmont Road; Maylene, AL

County(ies): Bibb, Shelby, and Tuscaloosa State: Alabama ZIP Code: 35114

Latitude/Longitude of the Project Office: 33° 14' 46.3" N, 86° 53' 9.0" W
Method for determining latitude/longitude: Google Earth

Project/Site Name: Blue Creek Field

NPDES Permit Number: AL0060267

Project Street/Location: 10251 Northside Road; Berry, AL

County(ies): Tuscaloosa State: Alabama ZIP Code: 35546

Latitude/Longitude of the Project Office: 33° 29' 20.5" N, 87° 30' 29.1" W
Method for determining latitude/longitude: Google Earth

1.3 Contact Information/Responsible Parties

Legal Business Name: Urban Oil & Gas Group, LLC Phone: (205) 330-2877

Name, Title: Scott White, Operations Superintendent Fax: (972) 543-7889

Address: 16030 Romulus Road Cell: (205) 310-5580

Buhl, AL 35446 Email: scott.white@urbanoilandgas.com

BMPP Development, QCP, and QCI Contact:

McGiffert and Associates, LLC
W. David McGiffert, PE/PLS/QCP
Q. Hansel Stewart, PE/QCP
Daniel Homan, QCI
2814 Stillman Boulevard
Tuscaloosa, Alabama 35401
Phone (205) 759-1521
Fax (205) 759-1524

1.4 Applicable Federal, State, or Local Programs

The Federal Clean Water Act of 1972 established water quality goals for all waters of the United States. In 1987, congress amended the Clean Water Act to provide a renewed effort to meet water quality goals. Related areas targeted for renewed emphasis in this Act are under Section 319, which deals with non-point source pollution (NPS), and Section 402, which addresses storm water discharges. In 1992 the US Environmental Protection Agency (EPA) implemented rules regulating stormwater discharges from most industrial facilities and larger municipalities.

The Alabama Department of Environmental Management (ADEM) regulates the EPA's National Pollutant Discharge Elimination System (NPDES) permit program at the state government level. ADEM modified the coalbed methane NPDES permits to include these stormwater discharge requirements. The coalbed methane operator's NPDES permit requires the operator to implement practices for reducing or eliminating pollutants in stormwater runoff. These practices are known as Best Management Practices (BMPs), and the combination of all the operator's BMPs (selection, implementation, maintenance, stabilization, etc.) are known as the BMP Plan.

EPA has published a document titled Storm Water Management for Construction Activities. This EPA document is intended to assist the construction industry in developing BMP plans for individual construction sites. Though many of the pollutants in stormwater runoff from coalbed methane operations may be associated with the construction of roads, well pads and gathering systems, there are some pollutants in stormwater runoff from coalbed methane operations that are not typical of construction projects. This document is intended to supplement EPA's guidance document in assisting coalbed methane operators to comply with their NPDES permits and protect water quality. Some examples of items that must be addressed by the coalbed methane operator in their BMP Plan are reduction of pollution in stormwater runoff from the construction and maintenance of access roads, well pads, gathering line right-of-ways, and stream crossings; and from other industrial effects such as leaking well heads, land application fields, pipe yards, compressor stations, vehicle maintenance areas, spills in material stockpile areas, borrow pits, etc.

The coalbed methane industry has attempted to prevent contamination of water bodies caused by sediment and other pollutants in stormwater runoff. This BMPP has been developed utilizing EPA, ADEM, and industry standards to address the control of pollution in stormwater discharges. This facility will periodically evaluate this BMP plan to determine if that plan should be updated to meet the requirements of the facility NPDES permit and protect water quality.

1.5 Introduction to Pollutants

Pollutants discharged in stormwater associated with coalbed methane operations are suspended solids which primarily result from sediment particles from soils. Other pollutants, such as oil and grease, pesticides, herbicides, etc., can also be transported once in contact with stormwater runoff or can attach to the sediments, and the sediments act as a carrier of these pollutants. Sediment reduction in stormwater runoff is important in reducing the discharge of other pollutants in stormwater.

Erosion is the primary process that contributes to sediment migration and stormwater pollution in runoff during rain events from coalbed methane operations. Erosion is the process of dislodging soil particles from the ground, and sedimentation is the deposition of these dislodged soil particles. Since the primary pollutant and carrier of other pollutants in stormwater runoff from coalbed methane operations are sediments, BMPs for the coalbed methane industry are similar to the BMPs used in the construction industry. Refer to Section 2.2 for a list of typical structural BMPs and how, if properly implemented, they reduce erosion and sedimentation transport to receiving waters.

It could be stated that items entering water bodies that changes the composition or condition of the water are pollutants. Some examples of pollutants that may be in stormwater runoff from coalbed methane operations are suspended solids (soils and other sediments), produced water, trash, sewage, paints and solvents, oil and grease, and even items such as fertilizers, pesticides, and detergents. Any dissolved (solids, oil and grease, fertilizers, herbicides, pesticides, putrescibles, etc.) or un-dissolved (silt and other sediments, tree debris, rocks, trash, etc.) components of a discharge into water are pollutants. Also, water that has undesirable characteristics such as an extremely low/high pH or water that can excessively change the receiving water's temperature is a pollutant.

Stormwater discharges can be either point source or non-point source discharges. Discharges to waters through a discrete conveyance such as a pipe or a ditch are point source discharges, and all other discharges are non-point source discharges. An example of a non-point source discharge from a coalbed methane facility would be sediment laden stormwater runoff from a poorly vegetated pipeline right-of-way. In addition, non-point source discharges include oil, grease, or other toxic chemicals that are introduced into stormwater runoff from rainfall events.

Description of typical pollutants

The major pollutants in stormwater runoff from coalbed methane operations may include:

A. Sediments – Sediments deposited in water bodies due to soil erosion are, according to some experts, the largest single pollution problem in the United States. Even though sedimentation is a process that occurs naturally, studies have shown that erosion rates from construction sites that have not implemented proper BMPs may be up to 10,000 times greater than under natural conditions. Sedimentation reduces stream capacities which can cause flash flooding and property damage, covers stream and lake bottoms killing benthic organisms (bottom dwelling plants and animals that are the base of the food chain), damages fish gills, decreases the ability of sunlight to penetrate the water decreasing photosynthesis necessary to generate oxygen in the water, changes the stream hydrology, destroys fish beds during spawning season, and carries other pollutants that attach to the sediment particles into water bodies.

B. Oil and Grease – Machinery used to extract coalbed methane utilizes hydrocarbon products. These hydrocarbons may include lubricants, solvents, fuels, antifreeze, etc. Handling of these products and the machinery using these products should be done with care and with desire to prevent these components from entering water bodies. Coalbed methane production does not typically produce oil and grease in the produced/process water stream. However, oil and grease may get into the produced water lines and gas/water separators from lubricants used in the pumping systems. Any pooled oil spills should be promptly removed with oil absorbent materials and properly disposed. Contaminated soils need to be remediated or properly disposed.

C. Fertilizers (Nutrients) – Nutrients, primarily phosphorous and nitrogen fertilizers, are sometimes applied to the construction area to stimulate vegetation growth. Both elements occur naturally in soils. Fertilizers when applied at proper rates rarely will cause problems in waters. Fertilizers cause problems when they are over applied, applied during or immediately before a rain event, applied during the wrong time of the year, or

broadcast directly to a water. Improper application of fertilizers may cause eutrophication. A eutrophic condition is when water becomes nutrient rich. Eutrophication causes algal blooms that rob the water of dissolved oxygen. Proper application of fertilizers will help prevent eutrophication. Also, nutrients will attach to sediments that are in stormwater runoff. Effective erosion and sediment controls will help prevent sediments from transporting these nutrients into waters.

D. Produced Water Leaks – Often produced water leaks occur at the well heads and from the gathering lines. Produced water from coalbed methane wells typically has high chloride concentrations. Chlorides discharged into freshwater systems can cause toxic conditions to fish and other aquatic wildlife if levels are high enough. Non-structural BMPs should be implemented to reduce occurrences of produced water leaks at well heads and pipelines. In addition, both structural and non-structural BMPs should be ready to quickly mitigate any potential pollution caused by these leaks.

E. Herbicides – Sometimes herbicides are used on well pads and gathering line right-of-ways. These materials are very toxic and should be applied according to the manufacturer's directions.

SECTION 2: GENERAL BEST MANAGEMENT PRACTICES FOR CONTROLLING SEDIMENT

2.1 Erosion and Sedimentation Controls

Implementation of erosion and sedimentation controls will be conducted under the guidance of a company representative experienced in construction techniques involving the proper installation and maintenance of BMPs. This representative shall have the authority to take special actions as necessary to assure that effective BMPs have been implemented and maintained to prevent water quality degradation. Factors that influence erosion and sedimentation are rainfall amounts and intensities, soil types, slope length and gradient, groundwater elevation, season, wind velocities, and geology.

The locations of selected BMPs should be chosen to control stormwater volume and velocity, according to characteristics of each BMP in the following categories: erosion reduction, runoff conveyance, sediment diversion, detention, filtration, and other sediment control and reduction properties. The selected BMPs shall be implemented and maintained to provide the previously listed characteristics to control stormwater runoff to minimize soil erosion, reduce runoff velocity, and minimize downstream channel and streambank erosion.

The company representative shall continually examine what effects variable operations create on-site and whether changing conditions require the need for additional BMPs to control pollutants in stormwater run-off. In areas where stormwater concentrations are high, a Qualified Credentialed Professional (QCP) as defined by ADEM may be needed in order to determine if adequte BMPs are being utilized and make recommendations for additional BMPs to be implemented to protect receiving waters.

2.2 Description of Typical Structural BMPs

Because there are so many influencing factors, implementation and layout of structural BMPs should be site specific. Multiple BMPs may be used in developing and implementing a BMP approach for the construction of well pads, roads, utility right-of-ways, and other appurtenances associated with coalbed methane operations. The following are descriptions of some BMPs that may be utilized during construction and maintenance at the facility:

- **Silt Fence Sediment Barriers** – A silt fence sediment barrier is a temporary sediment control device used to protect water quality in nearby streams, rivers, lakes and seas from sediment in stormwater runoff. Sediment is captured by silt fences primarily through ponding of water and settling, rather than filtration by the fabric. Sand and silt tends to clog the fabric, and then the sediments settle in the temporary pond. Their effectiveness in controlling sediment can be limited, due to problems with poor installation, proper placement, and/or inadequate maintenance.

- **Construction Exit Pad** – A construction exit pad is a stone-base structure designed to provide a buffer area where mud and collected soil can be removed from vehicle tires and avoid transporting it onto public roads. Roads adjacent to disturbed areas should be kept clean for the general safety of the public.

- **Sediment Control Logs** – A sediment control log is designed to reduce hydraulic energy and filter sediment from stormwater flows in low flow depressions and on slopes. These control logs are flexible and conform to the soil surface by wooden stakes. Proper installation, including keying in a trench and precise staking, will determine the effectiveness and lifespan of this temporary BMP.

- **Outlet Protection** – Outlet protection is designed to prevent channelized erosion by reducing stormwater velocity and dissipating the energy and have been shown in areas to slow stormwater exit velocity thereby reducing scour or erosion of the receiving stream at and down-gradient of the discharge point. It is constructed with loose rip rap to absorb the initial impact of stormwater discharging from a disturbed area prior to entering the receiving waters.

- **Water Diversion Berms** – Water diversion berms are generally narrow, earthen ridges built across roads or disturbed slopes. They divert stormwater off of roads and away from disturbed slopes to naturally vegetated areas which reduces stormwater concentrations and erosion. Berms should be maintained as needed until construction in an area is complete and the disturbed area has been stabilized with permanent vegetation. These type structures may require a splash pad or other energy dispersion structures at the discharge end to prevent erosion. In addition, if these structures are designed to carry concentrations of water at high velocities they may require lining with riprap and/or geotextiles to maintain their structural integrity.

- **Runoff Sump Sediment Traps with Outlet Protection** – Runoff sump sediment traps with outlet protection shall be is used to flatten the gradient of flow and slow the stormwater velocity while allowing sediment deposition within the storage basin impoundment area; also reducing turbidity.

- **Rock Filter Dams** – Rock filter dams are temporary erosion control items that shall be installed in natural or constructed drainage ways where high stormwater concentrations are anticipated. They should be located so that the impoundment area intercepts runoff from disturbed areas and has adequate storage capacity.

- **Temporary Sediment Traps** – Temporary sediment traps shall be used to slow stormwater velocity and allow for ponding which also encourages sediment deposition within the excavated area. If these type controls are an integral part of the BMP plan they should be properly installed prior to or concurrent with initial soil disturbances. In addition, sediment traps will not work if they are not continuously maintained.

- **Rip-Rap Check Dams** – Rip-rap check dams are temporary erosion control items that shall be installed across defined drainage ways where high stormwater concentrations are anticipated. The type, size, and class of rip-rap used to construct the dam shall be chosen in accordance with anticipated stormwater flows and velocities. Rip-rap check dams in series should be installed so that the toe of the up-gradient dam is the same elevation as the top of the down-gradient dam.

- **Slope Stabilization** – All disturbed slopes should be stabilized as soon as grading is complete in order to minimize erosion. On critical areas that may be susceptible to erosion because of steep slopes or concentrated flows, geosynthetics and/or rip-rap may be required. Some examples of geosynthetics are fiber mats, synthetic mats, geotextiles, porous concrete, and gabions. If geosynthetics are utilized, they must be implemented in accordance with the manufacturer's recommendations.

- **Soil Stabilization** – All areas shall remain vegetated and stable until such time that active construction for that area begins. Once construction is underway for a particular area, efforts shall be made to disturb as little of the area as possible. Roadsides, cut and fill slopes at drilling locations, and pipeline right-of-ways should be limed, fertilized, seeded, and mulched as necessary as soon as practical after construction and in accordance with accepted soil conservation practices. Mulching is important because the mulch helps prevent erosion and retains soil moisture until the grasses are established.

- **Final Stabilization** – Once construction is complete in an individual area, all areas that are disturbed, regardless of location, will be paved, covered with gravel, or vegetated as soon as practical. All erosion and sedimentation controls will be maintained until the disturbed area is covered or permanent vegetation is re-established.

Erosion Control Standard Details drawings for structural BMPs mentioned above show installation requirements that meet or exceed the *Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas* and the *Alabama Department of Transportation* (ALDOT) specifications where applicable, and have been included in *Appendix A* of this document.

2.3 Stabilization

Stabilization is the most critical component of protecting areas from erosion and stormwater pollution. Both Temporary and permanent stabilization should be implemented throughout the facility as construction progresses. Stabilization includes both vegetative cover as well as non-erodible cover including stone or other permanent ground cover materials.

All areas shall remain vegetated and stable until such time that active construction for that area begins. Once construction is underway for a particular area, efforts shall be made to disturb as little of the area as possible. Areas that will not be under active or progressive construction for a period of 13 days or more shall be temporarily grassed to stabilize the area in accordance with ADEM regulations. As construction progresses, non-erodible cover such as crushed stone shall be implemented to stabilize disturbed areas that will receive vehicular traffic. Disturbed areas not stabilized with non-erodible cover shall be stabilized with temporary or permanent vegetation in accordance with the Grassing Specifications detailed below.

All bare areas not under active or progressive construction must be temporarily grassed, to minimize the generation of dust or on-site erosion, depending on the timeframe to continue active construction. Final stabilization of disturbed areas should be initiated immediately whenever earth disturbing activities have permanently ceased on any portion of the site. If an unforeseeable event halts construction at the site for an unknown period of time, temporary stabilization practices shall be implemented in accordance with the details below until such time that construction can continue.

A. Grassing Specifications

1) Materials

No seed shall contain more than 1% weed seed. Limitations of noxious weed seeds will be as specified by rules and regulations for administration of the current State Seed Law. All seed shall meet the requirements of these specifications and comply with the current Seed Law, Act No. 424, General Acts 1963, and rules and regulations promulgated there under and any revision of the Act. Seed shall be certified by an Official Seed Certifying Agency, Alabama Crop Improvement Association, to meet high quality standards. Each bag shall bear a "Certified Seed" tag or label bearing the seal of the Official Seed Certifying Agency. They shall be tested within nine months prior to use in accordance with the latest edition of Rules for Seed Testing, approved by the Association of Official Seed Analysis.

2) Permanent Seeding

The required weight shown in the chart is the actual seed weight as delivered and considers the minimum required percentage of pure seeds and minimum required germination rates. Seeding mixtures shall be classed according to the time of year when seeding will take place. Areas subject to frequent mowing are roadway shoulders, medians and front slopes flatter than 3:1 extending 60 feet beyond the edge of pavement or to the toe of the front slope whichever is less. All other areas designated for seeding shall be considered to be areas not subject to frequent mowing. The following mixtures and application rates shall apply for permanent seeding mixtures:

AREAS SUBJECT TO FREQUENT MOWING REQUIRED POUNDS PER ACRE OF PURE LIVE SEED			
TYPE/DESCRIPTION	DATE OF PLANTING		
	Aug. 16 to Feb. 29	Mar. 1 to April 15	April 16 to August 15
Annual Ryegrass	10		
Hulled Bermuda grass		18	24
Unhulled Bermuda grass	30	12	
Annual Lespedeza (Kobe)			38
White Dutch Clover	5	6	
Notes	1		
Required Permanent Plant	Bermuda grass		
1. During this season Ryegrass, Bermuda grass and Clover are required where vegetation must be established within an area no further than 15 feet from the edge of mainline pavement.			

AREAS NOT SUBJECT TO FREQUENT MOWING REQUIRED POUNDS PER ACRE OF PURE LIVE SEED				
TYPE/DESCRIPTION	DATE OF PLANTING			
	Jan. 1 to Feb. 15	Feb. 16 to August 31	Sept. 1 to Nov. 15	Nov. 16 to Dec. 31
Annual Ryegrass	10	5	10	10
Hulled Bermuda grass		18	12	
Unhulled Bermuda grass	24	12	12	24
Tall Fescue	29		35	29
Weeping Lovegrass		2	2	
Annual Lespedeza (Kobe)		50		
Reseeding Crimson Clover	29		29	29
Pensacola Bahia Grass	29	29	29	29
Required Permanent Plant	Mixed			

3) Temporary Seeding

The required weight shown in the chart is the actual seed weight as delivered and takes into account the minimum required percentage of pure seeds and minimum required germination rates. Seeding mixtures shall be classed according to the time of year when seeding will take place.

The following mixtures and application rates shall apply for temporary seeding mixtures:

SEED TYPE	DATE OF PLANTING	SEEDING RATE / AC PLS
Millet, Brown top or German	Apr 1-Aug 15	40 lbs
Ryegrass	Sep 1-Oct 15	30 lbs
Common Bermuda grass	Mar 15-Jul 15	10 lbs

4) Fertilizer

The fertilizer shall be a commercial grade, complying with the current State Fertilizer Laws. Fertilizer shall be of a commonly accepted analysis and conform to the following table and points:

PERCENT BY WEIGHT			
Type	Nitrogen	Phosphorus	Potash
15-0-15	15	0	15
13-13-13	13	13	13
10-10-10	10	10	10
8-8-8	8	8	8
0-14-14	0	14	14
4-12-12	4	12	12
4-16-8	4	16	8
Super Phosphate		18	
Ammonium Nitrate	33.5		
Ammonium Sulphate	20.5		
Nitrate of Soda	16		
Muriate of Potash			60

i. An allowance of five percent variation or tolerance of the above proportions will be permitted based on relative commercial value.
ii. Cottonseed meal shall contain 41 percent protein or 6.56 percent nitrogen.
iii. If the fertilizer is furnished from bulk storage, the contractor shall furnish the supplier certification of analysis and weight.

5) Agricultural Limestone

The limestone shall have a neutralizing value of 90% calcium carbonate or better and meet the following gradation requirements:

- Sieve Size #10, 90% by weight passing.
- Sieve Size #60, 50% by weight passing.

6) Mulch

- Mulch materials shall be air dried and shall not be spoiled or rotted to the extent that plant stems are caked together.
- Mulch material containing noxious weed seeds will not be acceptable.
- Dry blown mulch shall be hay or straw. Mulch material application rate shall be 1 ½ to 2 tons per acre or conform to most recent version of Table MU-1 of the Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas. The mulch shall be spread by hand or machine to attain 75% groundcover.

- Mulch shall be anchored with a mulch anchoring tool or a regular form disk in areas subject to high wind conditions or on slopes greater than 4:1. The farm disk shall be set to run straight and weight should be adding to aid in the crimping process. However, the disk should not be sharp enough to cut the straw.

- Hydraulic mulch materials shall consist of paper, mechanically processed straw, wood, or natural fibers and tackifier.

- Bonded fiber matrix materials shall consist of organic defibrated fibers, cross linked insoluble hydro-colloidal tackifiers, and reinforcing natural or synthetic fibers.

7) Application

- The contractor shall dress the area to be seeded to a reasonably smooth surface, sloped to drain, and tie with surrounding contours.

- The contractor shall break all lumps, clods, and crusty surfaces by tillage, discing. All boulders, stumps, roots and other particles that would interfere with a mowing operation shall be removed.

- Fertilizer shall be spread uniformly in sufficient quantity to provide at least 120 pounds of nitrogen, 120 pounds of available phosphoric acid, and 120 pounds of total potash per acre as computed from the nominal contents of fertilizing ingredients.

- Agricultural lime shall be uniformly and evenly applied at a rate of 4,000 pounds per acre.

- The fertilizer and lime shall be thoroughly mixed into the soil by discing, or tilling

- Dry blown mulch shall be applied at the rate of not less than 4,000 lbs per acre and shall be done within 48 hours after seeding. On slopes steeper than 3H:1V, an adhesive applied at the manufacturer's recommended rate shall be used on the mulch. On slopes 3H:1V or flatter, a mulch crimper may be used instead of the adhesive.

- Hydraulic mulch shall be applied at the rate of 1,500 lbs per acre and shall be done concurrently with hydroseeding. In no case shall the applied rate be less than 1 ton per acre for hydraulically applied mulches.

- Bonded fiber matrix shall be applied at the rate of 4,000 lbs per acre and shall be done concurrently with hydroseeding.

B. Topsoil Preservation

Topsoil preservation is a necessary part of construction operations which involves removing and stockpiling the topsoil with the expectation of replacement following construction activities. Topsoil is necessary for providing a blend of structural nutrient rich material that is natural fertile and promotes thicker healthier vegetation growth. During the construction of access roads and well pads, slopes that are created are highly susceptible to erosion. The placement of topsoil on these slopes is the single most significant BMP that will ultimately provide for a stabilized vegetative cover. The lack of placing topsoil prior to grassing will make stabilization by grassing difficult and sometimes not possible due to the clayey or sandy soils lack of nutrients. Topsoil preservation is a construction technique utilized to prevent runoff and erosion and to lessen the degradation of water quality.

The topsoil should be removed with heavy equipment and then piled in large, deep piles for the duration of construction. When construction is complete, the soil is spread over disturbed areas to allow for the reestablishment of permanent vegetative cover. A topsoil material stockpile should have BMPs implemented as necessary around the perimeter. Areas that will not be under active or progressive construction for a period of 13 days or more shall be temporarily grassed to stabilize the area in accordance with ADEM regulations and the *Alabama Handbook for Erosion Control and Stormwater Management on Construction Sites and Urban Areas, Latest Edition.*

C. BMP Maintenance

Stream crossings, roads, roadsides, pipelines and drilling pads will be maintained to prevent erosion and sediment loss to stormwater runoff. A visually acceptable standard will be maintained during the entire life of the project.

All BMPs within current construction areas shall be inspected daily and any corrective actions needed shall be performed immediately. If current construction activities conflict with the BMP location, the corrective actions must be complete by the end of the workday. Sediment deposits shall be removed once they reach 50% of the structural BMPs original design volume. To prevent BMP failure and non-compliant discharges, it is strongly recommended that the BMPs be cleaned out after every appreciable rain event, regardless of sediment volume, in order to maintain a 100% holding capacity. The reclaimed sediment must be returned to the eroded area or elsewhere on-site and graded, seeded, and mulched to stabilize up-gradient of installed BMPs.

If an event occurs where sediment migrates past BMPs to a stormwater conveyance channel, sediment shall be removed in accordance with the following procedure:

- Sediment in or near conveyance channels shall be removed by utilizing minimal land disturbance techniques, including small equipment and hand labor if necessary.
- The reclaimed sediment must be returned to the eroded area or the designated material storage area. The sediment shall be graded, seeded, and mulched to stabilize up gradient of installed BMPs.
- Disturbed areas outside of the construction area caused by the removal of migrated sediment shall be stabilized with seed and mulch immediately following the reclamation process

All grassed areas shall be maintained until final stabilization has been achieved. This shall include mowing to release grass. The acceptance of designated grassed areas will be based on verification of a satisfactory stand of grass in the season for each seed species required by the mix designated for use. If a satisfactory stand of grass is not established, the area shall be re-seeded and repeated as many times as necessary to establish a satisfactory stand of grass. A satisfactory stand is defined as a cover of healthy, living plants, after true leaves are formed, of the seed species required by the mix designated for use in which gaps larger than five (5) inches square do not occur with uniform density.

SECTION 3: FACILITY CONSTRUCTION

Road construction is necessary to provide access to each well and other facilities with permanent structures. These access roads will allow movement of equipment in and out of the locations as required initially during construction as well as needed during subsequent operation, monitoring, and maintenance. The facility location placement and access routes shall be determined and selected while considering the surrounding topography and potential for minimizing the resulting land disturbance and possible adverse stormwater runoff management issues that could affect receiving streams. Facility locations and associated appurtenances shall be graded such that stormwater is directed away from disturbed areas which will reduce erosion of exposed soil material and minimize contact with possible pollutants.

3.1 Considerations for Road Siting

Consideration of the following, to the extent practical, shall be utilized during road siting:

- Existing roads should be used, where suitable, to prevent further soil disturbance.
- Ridgelines should be followed to minimize road grades and lessen the potential of watercourse disturbance.
- Road grades should be minimized whenever practical.

- Roads should be constructed following natural contours as much as possible.

3.2 Considerations for Road Construction

Consideration of the following, to the extent practical, shall be utilized during road construction:

- To control high velocity flow and potential erosion, velocity breakers (water diversion berms) should be utilized.

- Roads should be constructed with a crown along the centerline with properly constructed side ditches, and where appropriate, wing ditches (turnouts) should be constructed to move water off the road to naturally vegetated areas. These turnouts should be implemented at more frequent locations as road grades increase to prevent large volume and velocity of channelized runoff within the road side ditches. Silt fence sediment barriers and/or temporary sediment traps with outlet protection shall be implemented at the discharge of the turnouts to create temporary stormwater settling impoundments. Since the purpose of wing ditches is to move water off the road system and onto a well-vegetated area, temporary structural BMPs should be removed from the end of turnouts once the road is stabilized. Properly constructed rip-rap check dams should be used, if necessary, to reduce flow rates in ditches. Rip-rap and/or geotextile linings should be used, if necessary, to protect portions of a ditch from erosion.

- Whenever feasible, road construction should avoid areas of highly erodible soils, wetlands, or wet meadows. However, if it is necessary to construct roads in these areas, erosion control methods, as well as wetland road construction techniques, should be utilized to minimize the disturbance to these areas. If operations are not automatically authorized under Section 404 of the Clean Water Act (Nationwide permit) the operator must obtain authorization or the necessary permits from the Corps of Engineers (COE) prior to the disturbance of any wetland area. Additionally, a COE permit may be necessary under the requirements of Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research and Sanctuaries Act.

- Mine tailings (i.e., black or red rock), if used in roadbed construction, will be tested quarterly for pH and acidity. Records shall be maintained for a period of 3 years. This testing shall be for each source of "black or red" rock and shall be in a pH range of 6 to 9. No known hazardous or toxic materials will be utilized in roadbed construction. Mine tailings do not have the most desirable characteristics for road construction. If practical, gravel or crushed limestone should be used to construct roadbeds.

- Vegetated filter strips and undisturbed buffers of at least 25 feet should be implemented to assist with sediment deposition and maintained, whenever possible, between streams and roads. If terrain limitations necessitate, other permanent methods (geotextiles, rip-rap, matting, etc.) may be used instead of or in conjunction with vegetated filter strips, provided a receiving water is not altered or diverted.

- Measures will be taken to prevent construction materials, (dirt, boulders, rock, trees, etc.) from being deposited into adjacent water bodies. However, if these materials inadvertently enter the water body, measures will be taken to remove them immediately. These measures should be of such to prevent further environmental damage (i.e., it may be necessary to remove objectionable materials by hand if heavy equipment cannot be brought in without magnifying the problem).

- Road construction and roadway drainage should be conducted under the guidance of a person experienced in construction techniques and erosion and sedimentation control.

3.3 Considerations for Stream Crossings

Due to the topography and expansive reach of the coal degas operation area, stream crossings will be necessary by roads. Roadways may cause more watercourse disturbance, redirect flow, potentially limit movement of biota, and increase discharges of pollutants to the stream. It is possible, through planning and careful construction, that potential environmental damage can be lessened significantly and even eliminated.

The following guidelines, where practical, shall be used in developing road-stream crossings:

- Stream crossings should be minimized as much as practical. Existing culverts, bridges, fords and/or other crossings should be utilized whenever possible.

- Crossings, where practical and/or limiting environmental damage, should be made at right angles to the main stream channel.

- Each source of mine tailings (black or red rock), if used for fill material during construction of the stream crossing, will be tested quarterly for pH and shall be in a pH range of 6 to 9 pH units. Records shall be maintained for a period of 3 years. No known hazardous or toxic materials will be used.

A. Stream Crossings of Less than 10 cfs

Steams with flows less than 10 cfs are small in size and will require smaller amounts of fill and potential areas that could adversely affect water quality during and after construction. A typical crossing plan has been submitted to ADEM for pre-approval with this BMPP Plan that can be followed when new access roads are constructed across these type and size of streams. This crossing plan is based upon mean stream water flow (based on best available historical data) of less than 10 cfs. Applications of new proposed stream crossings utilizing this pre-approved typical plan should be submitted at least 30 days in advance of the beginning date. A minimum of 14 days is required by ADEM, after a complete and non-deficient plan is received, for application processing to make determination of administrative approval of the proposed crossing. The ADEM will make every effort to make the determination within 14 days of submission. ADEM will make every effort to process emergency request on an individual basis. The application for a new crossing utilizing the typical pre-approved plan shall meet the following criteria that have been previously agreed to by the coalbed methane industry and ADEM:

1. Crossing plan will be prepared and certified by a professional engineer registered in the State of Alabama.

2. Crossing plan will contain a brief narrative description of the project.

3. The plan will include a 1"-2,000' (or larger) USGS topographic map showing the location of area operations.

4. The plan will include plan and profile drawings of the typical crossing and associated water quality control protection measures based on various flow rates.

5. The typical design will be of such to allow an opening large enough to pass mean water flow.

6. Placement of rock fill without opening for passage of water and biota is not acceptable.

7. If the crossing is considered to be permanent (greater than 120 days) then the design criteria shall be based on a 25-year flood event.

8. If the crossing is considered to be a temporary structure (less than 120 days) then the design criteria shall be based on a 2-year flood event.

9. If operations are not automatically authorized under Section 404 of the Clean Water Act (Nationwide permit) the Operator must obtain authorization or the appropriate permit from the Corps of Engineers prior to the disturbance of any jurisdictional wetland area or stream channel.

10. After approval of a new proposed crossing application in accordance with the pre-approved typical crossing plan by ADEM, no notification will be required to ADEM before construction.

Typical stream crossing drawings have been prepared by McGiffert and Associates, LLC and are included in *Appendix B* of this document.

B. Stream Crossings of 10 cfs or Greater

When roads are necessary and must cross larger streams, a detailed design of the proposed crossing will be prepared to address long term stability and reduce potential adverse effects to a stream of greater size. A site specific stream crossing plan will be developed for crossings where the stream has a mean water flow of 10 cfs or greater or where there is greater than 200 cubic yards of fill below the plane of the ordinary high water mark. This plan will be submitted to ADEM for approval and the application should be submitted at least 30 days in advance of the beginning date. A minimum of 14 days is required by ADEM, after a complete and non-deficient plan is received, for application processing to make determination of administrative approval of the plan. The ADEM will make every effort to make the determination within 14 days of submission and make every effort to process emergency request on an individual basis. This application for a new crossing shall meet the following criteria that have been previously agreed to by the coalbed methane industry and ADEM:

1. Crossing plan prepared and certified by a professional engineer registered in the State of Alabama.

2. Crossing plan will contain a brief narrative description of the project.

3. The plan will include a 1"-2,000' USGS (or larger) topographic map showing the location of the crossing.

4. The plan will contain plan and profile drawings of the crossing and associated water quality control protection measures.

5. The design will be of such to allow an opening large enough to pass mean water flow.

6. Placement of rock fill without opening for passage of water or biota is unacceptable. A culvert should not be placed in such a manner to inhibit passage of water and biota during normal stream flows.

7. The structure, if permanent (greater than 120 day life), must be designed in accordance with engineering standards to ensure structural integrity and stability for safe passage of water during 25 years interval flood events.

8. Temporary structures (less than 120 day life), must be designed in accordance with engineering standards based on a 2 year interval flood event.

9. If operations are not permitted under Section 404 of the Clean Water Act (Nationwide permit) the operator must obtain individual permits from the Corps of Engineer prior to the disturbance of any wetland or stream channel. (If conditions of the applicable Nationwide Permit are not met then and individual permit will be required).

10. After approval of these plans by ADEM, 48 hour verbal notification will be required to ADEM before construction begins. This notification requires no action by ADEM before construction begins.

11. As built certification shall be submitted by a registered professional engineer, registered in the State of Alabama, within 45 calendar days of completion of the stream crossing.

12. It is noted that projects of this nature are site specific and ADEM reserves the right to request submission of information or accept reasonable alternatives on an individual basis, in order to make water quality certification determination.

3.4 Drilling Pad and Drilling Pit Construction

Drilling pad construction is necessary to allow the movement of a drilling rig into the location to drill a hole into the coal seams. This location is usually an all-weather installation to provide access for maintenance and observation of the well. The drilling pad is kept as small as possible to lessen the environmental disturbance. However, the pad should be sufficiently sized to allow placement and movement of equipment in locations that minimize the potential for discharges of pollutants. Typically during fracing operations several frac tanks must be placed on the location

along with other heavy equipment. The site should be adequately sized such that the frac tanks and pumps can be placed in a location that keeps any leakage or spillage from hose hook-ups and disconnection contained on the well pad.

A drilling or reserve pit is a temporary earthen pit used to store materials used or generated in the drilling or workover operation. These materials usually consist of water, shale cuttings removed from the drill hole, drilling fluids which normally are formulated using clay, water, and pH adjustment materials, and/or workover fluids which normally consist of water, clay, and biodegradable, environmentally safe polymers. The reserve pit may also be used as an emergency catch basin for such items as location runoff, water produced during drilling operations and/or oil from equipment which may be accidentally spilled. This pit essentially prevents fluids and solids from being discharged off the drilling pad and minimizes potential environmental damages.

The following guidelines will be implemented where practical in drilling pad and pit construction:

- Pad size will be minimized to the extent practical to lessen the amount of surface area disturbed.

- All slopes should be minimized (if possible the slopes should be no steeper than 3:1) and/or appropriate erosion control and construction techniques utilized to lessen erosion of those slopes. Steep and/or long slopes should be constructed with terraces or other diversionary structures. The edge of the top of the pad (flat section) should have a berm to prevent runoff down slopes. The runoff should be directed to a controlled drop structure. A typical drop structure may be piping with a splash pad at the bottom or a riprap lined channel with the riprap extending far enough to prevent erosion at the bottom. The discharge from the channel or pipe should be directed along an even contour elevation when possible and into an existing rooted undisturbed location.

- Well pads should be constructed in lifts that do not exceed twelve inches and each lift should be properly compacted (ASTM recommends 95% density based on standard proctor). In addition, large stones, tree debris or other objectionable materials should be removed from the fill material to allow for adequate compaction and prevent future sink holes or erosional features over time.

- The operator should use temporary and/or long term structural BMPs to control sedimentation until the site is permanently stabilized. These devices should be properly installed prior to or concurrent with the initial clearing and grubbing phase of construction. In addition, these sediment trapping devices should be installed in a location that doesn't interfere with the construction equipment (i.e., there should be adequate room between the toe of the well pad and the silt fence or hay bale barrier to allow movement by the heavy equipment used to construct the pad without damaging the sediment traps).

- Pads and/or pits should be constructed a sufficient distance from a waterbody for maintenance of a streamside management zone (SMZ). Where pads and/or pits are necessarily constructed adjacent to waterbodies, appropriate measure shall be taken to protect that waterbody and water quality. A streamside management zone is an area along a stream bank where existing vegetation is not disturbed which helps prevent pollutants from moving into the stream. Where sufficient SMZ area is not available, other measures of erosion control may be utilized in conjunction with available SMZ to lessen potential water quality damage. However, the watercourse should not be altered or diverted.

- Measures will be taken to prevent construction materials, (dirt, boulders, rock, trees, etc.) from being deposited into waterbodies. However, if these materials inadvertently enter the waterbody, measures will be taken to remove those immediately. These measures should be of such to prevent further environmental damage.

- Sites should be contoured during construction to prevent stormwater runoff from creating erosion paths. Stormwater, if practical, should not be directed across fill material and sheet flow drainage for runoff should be provided by the grading of the slopes and pad whenever possible.

- Temporary reserve pits are to be constructed in accordance with the requirements of the Alabama State Oil and Gas Board.

- Operators shall prevent, as practical, the placing of oil, trash, or other materials into a reserve pit which would increase the difficulty in cleanup of the pit or otherwise harm the environment. Such material shall be properly stored and disposed of according to applicable State or Federal regulations. No garbage is to be burned or buried on site. All garbage and trash shall be disposed of at an approved landfill site.

- Trees and stumps (not household garbage or construction debris) may be burned on location after notice to the Alabama Forestry Commission and under local, State and Federal regulations. Some areas of the State may not allow any burning during certain times of the year.

3.5 Pipeline Construction

Pipelines are necessary in coalbed methane operations to allow for the collection of produced water to a central water treatment facility and to discharge sites. In addition, pipelines are used to gather gas from individual wells and transport it to compression facilities. High pressure gas pipelines connect the compression facilities to high-pressure gas sales lines. Due to burial, pipelines usually generate a very short time disturbance to watercourses. Through proper erosion/sedimentation control techniques, as previously outlined, limited environmental damage should occur. The following guidelines shall be followed during the siting, construction, and maintenance of pipeline right-of-ways:

- Consideration of the following, to the extent practical, shall be utilized during pipeline siting:

    1. Gathering lines should follow road rights-of-way whenever possible.

    2. Stream crossings should be minimized if roadways cannot be followed. This may not be possible with high pressure line routing. If necessary to conduct stream crossings during pipeline construction care should be taken to minimize stream disturbance and erosion controls shall be used to prevent sedimentation of the stream body downstream of the crossing. If operations are not automatically authorized under Section 404 of the Clean Water Act (Nationwide permit) the operator must obtain authorization or other permits from the Corps of Engineers prior to the disturbance of any wetland area or stream channel.

    3. Grades should be minimized where possible. This helps to prevent erosion during construction as well as allow for better maintenance of the grassed right-of-way.

    4. Rights-of-way should be minimized within acceptable pipeline construction techniques. However, pipeline right-of-ways should be adequately sized to allow for the installation and maintenance of necessary erosion and sedimentation controls.

    5. To the extent practicable, utility right-of-ways should be constructed in phases and areas should progress linearly as the project progresses. This includes the planning of access by various construction trades and working in a systematic approach.

- Consideration of the following, to the extent practical, shall be utilized during pipeline construction:

    1. Sediment barriers and traps required to prevent sedimentation will be installed prior to or concurrent with the initial clearing and grubbing of the right-of-way in locations that do not interfere with the construction equipment.

    2. On extreme pipeline right-of-way grades, water bars, terracing or other diversionary structures should be used to reduce runoff velocities. These structures must be properly compacted and vegetated.

    3. Whenever feasible pipeline construction should avoid areas of highly erodible soils, wetland, and wet meadows. However, if necessary to construct pipelines in these areas, erosion control methods, as well as, wetland pipeline construction techniques should be utilized to minimize the disturbance to these areas.

4. Vegetated filter strips of sufficient length to assist sediment deposition shall be maintained between streams and pipelines. If terrain limitations necessitate, other permanent methods (geotextiles, riprap, matting, etc.) may be used instead of or in conjunction with vegetated filter strips.

5. Trenches should not be excavated until immediately prior to the pipeline installation and if possible spoil from the excavation shall be placed on the up gradient side of the ditch.

6. Trenches will be backfilled as soon as possible after installation of the pipeline according to accepted pipeline construction techniques.

7. To the extent practical, pipeline surface disturbance shall be minimized.

8. Pipeline construction should be conducted under the guidance of a person experienced in pipeline construction techniques and erosion control.

SECTION 4: BEST MANAGEMENT OPERATING PROCEDURES

4.1 Other Stormwater Pollution Controls

- Produced water leaks periodically occur from well heads and/or gathering systems. Produced water typically will have high concentrations of chlorides and elevated iron and other naturally occurring metals that may make contaminated stormwater toxic to plant and animal life. Regular inspection and maintenance of these facilities should minimize or prevent these pollutants in stormwater discharges. In addition to regular inspections and maintenance, properly insulating exposed pipes and valves is an example of an effective BMP for preventing produced water leaks due to freezing. Soils that have become contaminated due to produced water leaks may have to be disposed in a permitted landfill.

- Areas around the well head and pumping unit are required by the Oil and Gas Board to be clear of vegetation. Herbicides are utilized to stop and prevent growth in these areas and should be applied in accordance with the manufacturer's directions. This includes applying these substances during a period when rain is not expected. Also, areas that need help to grow vegetation to stabilize the area often need fertilizers which should only be applied during the time of year when the grasses can uptake the nutrients.

- Field offices, pipe yards and other staging areas are often places used to stockpile industrial materials, dry and liquid chemicals, fuels, etc. Also, vehicle fueling, cleaning and maintenance activities may be conducted at these facilities. The operator will address fuel and liquid chemical storage in their Spill Prevention Control and Countermeasures (SPCC) plan. These facilities should be inspected regularly and spilled fuels or chemicals should be cleaned up immediately with absorbent or adsorbent materials. There are several products on the market designed for cleaning up spills. They should be selected based on the fuels/chemicals stored at the facility. Soils that have become contaminated with oils, greases, solvents, antifreeze, etc., must be remediated or properly disposed consistent with applicable regulatory requirements. If caustic or acidic substances (i.e., NaOH, HCl, etc.) are stored at the site, appropriate neutralizers should be available. Materials should be stored in a manner preventing contact between incompatible substances. Some of the most effective BMPs for preventing the contamination of stormwater runoff from these facilities are proper employee training and good housekeeping.

- In drilling operations and secondary enhancement (fracing) operations there is some potential exposure of pollutants to stormwater that are unique to coalbed methane operations. The operator's SPCC plan address equipment fueling and leakage from drilling rigs and associated equipment. The well pad will be constructed such that any spills or leaks will flow to the temporary holding pit and not off the well pad location. This temporary holding pit is an integral part of the SPCC plan for the well pad during construction so adequate storage must be designed and maintained for containing spills, and for containing expected rainfall. These pits should be designed and constructed to prevent discharges to ground water, and absorbent/adsorbent materials

must be readily available to remove the spilled substances from the pit. In some circumstances a vacuum truck will be utilized to collect the spilled substances.

- Drilling mud should be adequately contained in temporary pits or containers to prevent discharges to surface and ground waters. In fracing operations the frac tanks should be located in an area that would contain any spills. The well pads should be adequately sized so that the frac tanks can be placed away from any ditches, stream or other water bodies. When air-drilling, care should be taken to prevent cuttings from migrating beyond the pit and potentially contaminating stormwater runoff.

- The unusable wastes resulting from oil or chemical consumption at this facility will be treated, disposed of and/or reused in accordance with applicable Alabama Department of Environmental Management (ADEM) regulations. In the event that waste, outside of typical debris, is generated or discovered during construction, a Hazardous Waste Determination shall be conducted per ADEM Administrative Code rule 335-14-3-.01(2). If the results of the determination prove to be hazardous, the Operator shall obtain a waste disposal approval for the generated material in question. Records of the test results, waste analysis, and other determinations shall be maintained for a minimum of three years from the date the waste was generated; per ADEM requirements.

4.2 Good Housekeeping

Good housekeeping practices include the preservation of the environment in as near an undisturbed condition as before the project began. This includes removal of all trash, litter, and other potential sources of pollution to the environment or waterways. Waste receptacles shall be easily accessible and visibly marked, and if necessary multiple receptacles shall be provided. Recycling receptacles shall also be provided if possible. The Operator shall determine the number of receptacles required for current construction needs and shall determine the location of receptacles as to prevent a conflict with current construction activities. The waste receptacle(s) shall not be located on or near where they may come into contact with concentrated stormwater flows. A waste receptacle shall be provided on the initial day of construction. The project area shall be inspected at the end of each workday and all trash shall be properly disposed or recycled. In the event that construction debris or worker trash is blown or washed off-site it shall be the responsibility of the Operator to return the material to the site for proper disposal. Portable toilet(s) shall be provided on level ground when necessary and not be located on or near where they may come into contact with concentrated stormwater flows.

Construction materials and sites should be maintained in a visually acceptable manner. The Operator will determine the location of the building material staging area(s) and the required BMPs needed to contain pollutants within the given area(s). The area(s) shall be easily accessible and shall not conflict with concentrated stormwater flows. Building materials shall not be stored on top of or against any BMP or in any other manner that conflicts with or interferes with the operation, inspection, and maintenance of the BMP.

4.3 Water Acquisition

Due to the nature of operations, it is often necessary to obtain water for use in drilling, completions, and maintenance of the coalbed methane well. The operator's NPDES permit requires the operator to develop and implement a Best Management Practices plan that specifically addresses water acquisition. This plan is based on best available technology for protecting water resources, and it identifies all water acquisition sites and specifies the method of withdrawal. Anyone overseeing water acquisitions should be familiar with the operator's BMP plan to assure that water resources are protected and to avoid violating the NPDES permit. Some typical guidelines for water acquisition are:

1. Trucks will avoid damage to shore lines and banks of streams. (i.e., Trucks will NOT be backed to the edge of the water). Suction lines will be laid to prevent SMZ damage.

2. Suction lines will not be allowed to back flush.

3. Damages that may result from this practice will be remediated as per this BMP plan.

4.4 Dilution Water

Dilution water shall not be added to achieve compliance with discharge limitations except when ADEM has granted prior written authorization for dilution to meet water quality requirements.

4.5 Ground Water

In accordance with the NPDES permit, any discharge to groundwater is not authorized. Should a threat of groundwater contamination occur, ADEM may require groundwater monitoring to properly assess the degree of contamination and may require that the operator undertake measures to abate any such discharge and/or contamination.

4.6 Water Use for Dust Suppression

Water used for dust suppression should be spread with a spray bar that has an on-off valve in the cab of the water truck to allow the driver to stop spraying when turning around or crossing a stream. The water truck should be driven at sufficient speed to prevent ponding or runoff from the road. No discharge should occur as a result of dust control spraying; however the BMPs discussed in this BMP plan shall be implemented to prevent any discharge from affecting the receiving water.

In some instances the operator will land apply temporary pit water (drilling and fracing fluids) to the roads for dust suppression. The operator's NPDES permit has specific requirements for land application of temporary pit water. If the operator plans to use temporary pit water for dust suppression, they must address this in their operations management plan, and the plan must be followed to protect water resources and to prevent violations of their NPDES permit.

SECTION 5: MONITORING, INSPECTIONS, & REPORTING

1. Monitoring

All stormwater discharges associated with coalbed facility operations and construction of access roads, well pads, and pipeline right-of-ways shall be monitored periodically for the presence of pollutants and the effectiveness of implemented BMPs.

2. Inspections

Complete and comprehensive inspections of all well pads, pipeline right-of-ways, treatment ponds, compressor stations, other facilities, related appurtenances, and implemented BMPs shall be performed as required by Part I.D.2 of the NPDES permit. A professional engineer, registered in the State of Alabama or personnel under his direct supervision shall perform inspections of a minimum of four percent (4%) every month until the expiration or termination of coverage under the NPDES permit. Different or additional 4% increments shall be inspected each month until all facilities (100%) have been inspected prior to repeating.

Any needed repairs or maintenance noted shall be done as soon as possible and in accordance with the NPDES permit requirements. Also, any spilled materials or waste must be cleaned up or mitigated immediately.

3. Reporting

In the event that a non-compliant effluent discharge from the site occurs and is identified by the Operator's representative, ADEM shall receive a verbal notification within 24 hours. An inspection shall be performed by the Facilities operation Manager that notes any deficiencies recognized and identifies corrective/remedial action to be taken. This information shall be documented on ADEM Forms 401 or 421 and submitted to ADEM. Paperwork shall then be submitted to ADEM within five (5) days of the noncompliance or within an ADEM accepted

alternative schedule. The steps taken to reduce or eliminate the non-compliance shall be performed in accordance with ADEM requirements. Completed actions shall be verified and documented by the Permittee's representative.

SECTION 6: FACILITY CHANGES AND CLOSURES

6.1 Exceptions and changes to the BMP Plan

Due to the site specific nature of many operations of the coalbed methane industry and growth within that industry (both regulatory and technical), alternate plans and changes to this plan may be submitted by the operator to ADEM for review and subsequent approval or disapproval on a case by case basis. These updated plans may be in lieu and/or in addition to the current Best Management Practices Plan.

This BMP plan will be reviewed on a biennial basis to allow the incorporation of new technology and regulation. Any significant changes or updates to the BMP Plan following this review will be submitted to ADEM for their records.

6.2 ADEM Assistance

ADEM will furnish, at the request of the operator, assistance in pre-assessing a project and/or operations to control the discharge of pollutants in storm water runoff. The ADEM will review, on a case by case basis, new technology or innovative designs proposed to be implemented in conjunction with or in addition to accepted practices, which are not detailed or covered under this document.

In areas where water-courses must be altered or diversions are necessary, coordination with the ADEM and the U.S. Army Corp of Engineers is required and will be on a case by case basis. It should be noted that other Local, State, and Federal agencies may provide additional assistance upon request in planning and implementing best management practices. This includes Local and County Commissions, Local Soil and Water Commissions, State of Alabama Department of Conservation and Natural Resources, Alabama Forestry Commission, Alabama Surface Mining Commission, and the USDA Natural Resources Conservation Service.

The operator and subcontractor shall be familiar with this plan and follow the guidelines set forth herein. Cooperation by the Coalbed Methane industry, subcontractors, and ADEM will allow for diligent implementation of this plan.

6.3 Well Closure

The wellbore will be plugged in accordance with the State of Alabama Oil and Gas Board Regulations. Reclamation of the well pad shall be in accordance with existing lease or surface owner provisions, unless in conflict with State and/or Federal regulations. If in conflict, the State and/or Federal Regulation shall control. The necessary BMPs shall be implemented during the reclamation process to protect water quality and all structural BMPs shall be removed once all areas have been stabilized and permanently closed.

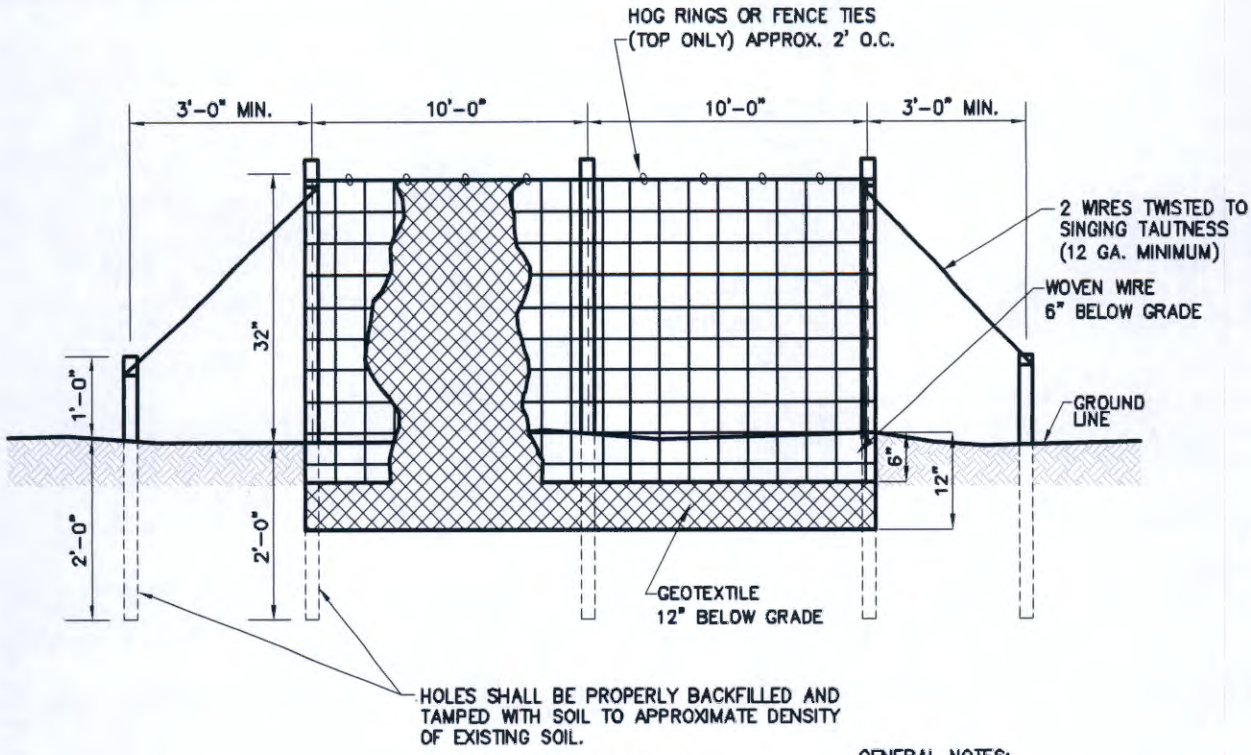
SECTION 7: EMERGENCY RESPONSE AND NOTIFICATION

During an emergency, i.e., oil or chemical spills, treatment facility upset or bypass, pit failure, stream crossing failure, etc, the operator should contact the appropriate emergency response phone numbers as listed in the Spill Prevention Control and Counter Measure Plan.

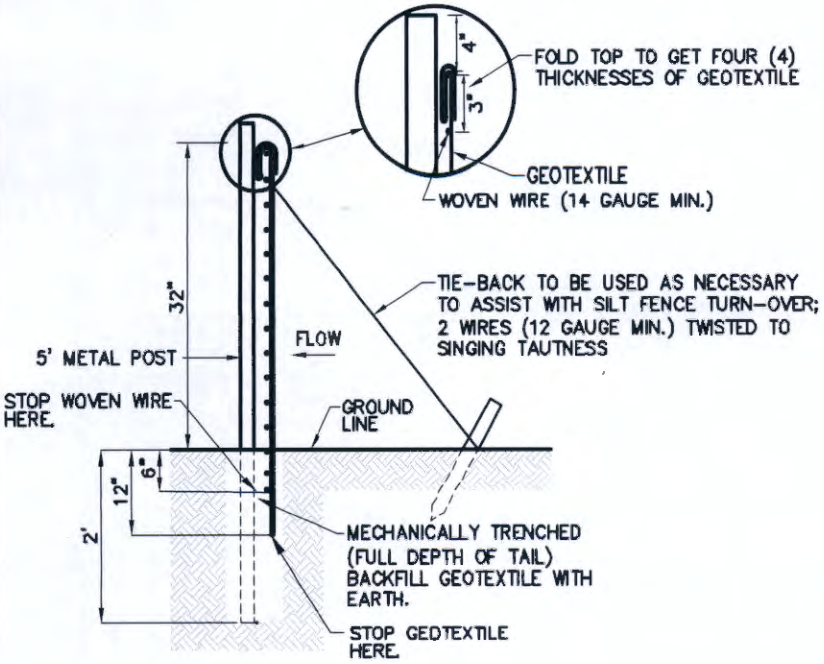
The National Response Center (NRC), which is operated by the U.S. Coast Guard, receives reports required when oil or hazardous materials are spilled. After receiving notification of an incident, the NRC will immediately notify the appropriate Federal On-Scene Coordinator and concerned Federal Agencies. Federal law requires that anyone who releases into the environment a reportable quantity of a hazardous substance (including oil when water is, or may be affected) or a material identified as a marine pollutant, must immediately notify the NRC. When in doubt as to whether the amount released equals reporting levels for these materials, the NRC should be notified. The phone number for the NRC in the United States is 1-800-424-8802.

The Alabama Emergency Management Agency should be contacted immediately if there is a spill of oil or hazardous materials (any petroleum product) that goes into a water or has the potential to go into a water. The phone number for the EMA is 1-800-843-0699.

Appendix A
Erosion Control
Standard Details



ELEVATION



SECTION

GENERAL NOTES:

1. SILT FENCES ARE TEMPORARY EROSION CONTROL ITEMS THAT SHALL BE ERECTED OPPOSITE ERODABLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS, CHANNELS, STREETS, CURBS, ETC.
2. SILT FENCE SHOULD BE PLACED WELL INSIDE CLEARING LIMITS. THIS WILL ALLOW ROOM FOR A BACK-UP FENCE IF FIRST BECOMES FULL. SILT FENCES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION OPERATION.
3. WHEREVER POSSIBLE, SILT FENCES SHALL BE CONSTRUCTED ACROSS A FLAT AREA IN THE SHAPE OF A HORSESHOE. THIS AIDS IN PONDING OF RUNOFF AND FACILITATES SEDIMENTATION.
4. SILT FENCE SHALL BE FASTENED TO UPSTREAM SIDE OF POST & WIRE BY HOG RINGS OR FENCE TIES. (17 GAUGE MIN.)
5. REMOVE SEDIMENT DEPOSITS WHEN THEY REACH A DEPTH OF 15" OR 1/2 THE HEIGHT OF THE FENCE AS INSTALLED TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN EVENT AND TO REDUCE PRESSURE ON THE FENCE
6. SHOULD THE SILT FENCE BECOME DAMAGED OR OTHERWISE INEFFECTIVE WHILE THE BARRIER IS STILL NECESSARY, IT SHALL BE REPAIRED PROMPTLY WITH A NEW SECTION OF FILTER OVERLAPPING A MINIMUM OF 12 INCHES ON EACH SIDE OF A BREAK.
7. AFTER THE CONSTRUCTION AREA IS STABILIZED AND EROSION ACTIVITY CURTAILED, SILT FENCES SHALL BE REMOVED.

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EROSION CONTROL DETAILS

REVISION

DATE	DESCRIPTION	BY
8/24/18	UPDATE PERMITTEE INFORMATION	D D H

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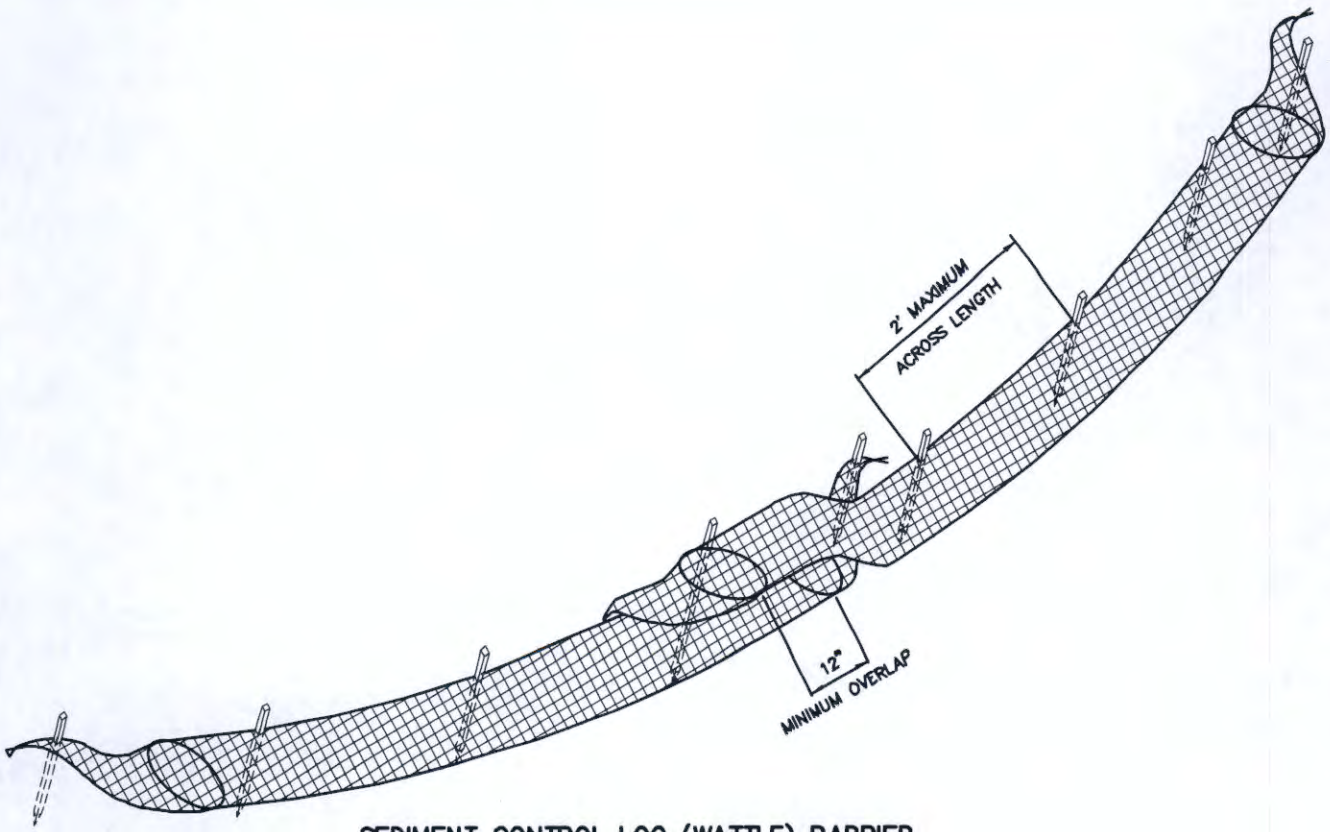
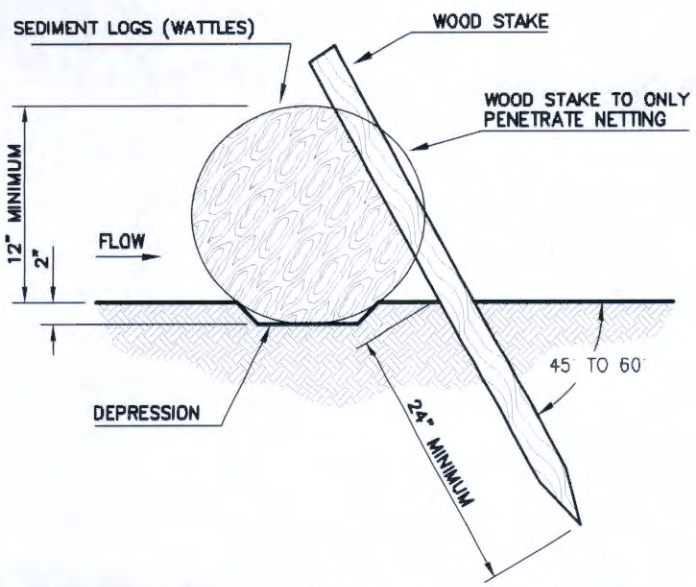
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: M A S
JOB No. 14-3094
FILE NAME: SAGA-BMPP
SHEET No. 1 of 8
CHECKED BY: QHS
DWG. No. 735-14



SEDIMENT CONTROL LOG (WATTLE) BARRIER

N.T.S.



SEDIMENT CONTROL LOG (WATTLE) BARRIER INSTALLATION DETAIL

NOTES:

1. SEDIMENT LOGS (WATTLES) ARE TEMPORARY EROSION CONTROL ITEMS THAT SHALL BE ERECTED TO REDUCE EROSIVE STORM WATER VELOCITIES AND COLLECT SEDIMENT ON THE UP-GRADIENT SIDE OF THE BMP.
2. SEDIMENT LOGS SHALL BE SECURED TO THE SUB-GRADE BY A 1" MINIMUM DIAMETER WOOD STAKE EVERY 2 LINEAR FEET ACROSS THEIR LENGTH.
3. SEDIMENT DEPOSITS MUST BE REMOVED AND STABILIZED WHEN THEY REACH A DEPTH OF 1/2 THE HEIGHT OF THE WATTLE TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN EVENT.
4. WORN, DAMAGED, OR ROTTEN WATTLES MUST BE REPLACED.
5. AFTER THE CONSTRUCTION AREA IS STABILIZED AND EROSION ACTIVITY CURTAILED, WATTLES MUST BE REMOVED.

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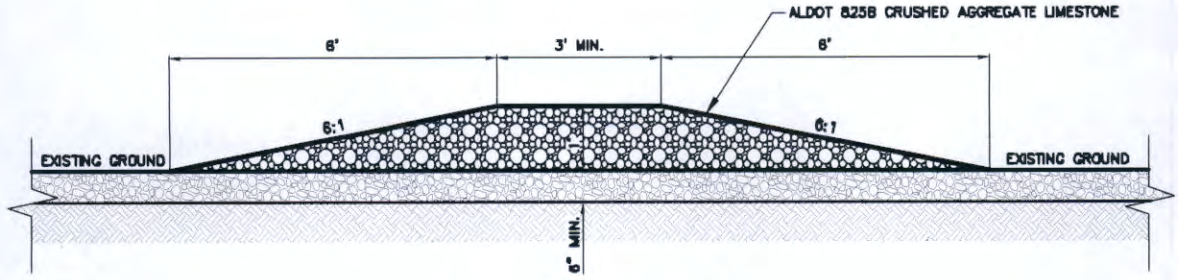

WATER DIVERSION BERMS IN GRAVEL ROADWAY

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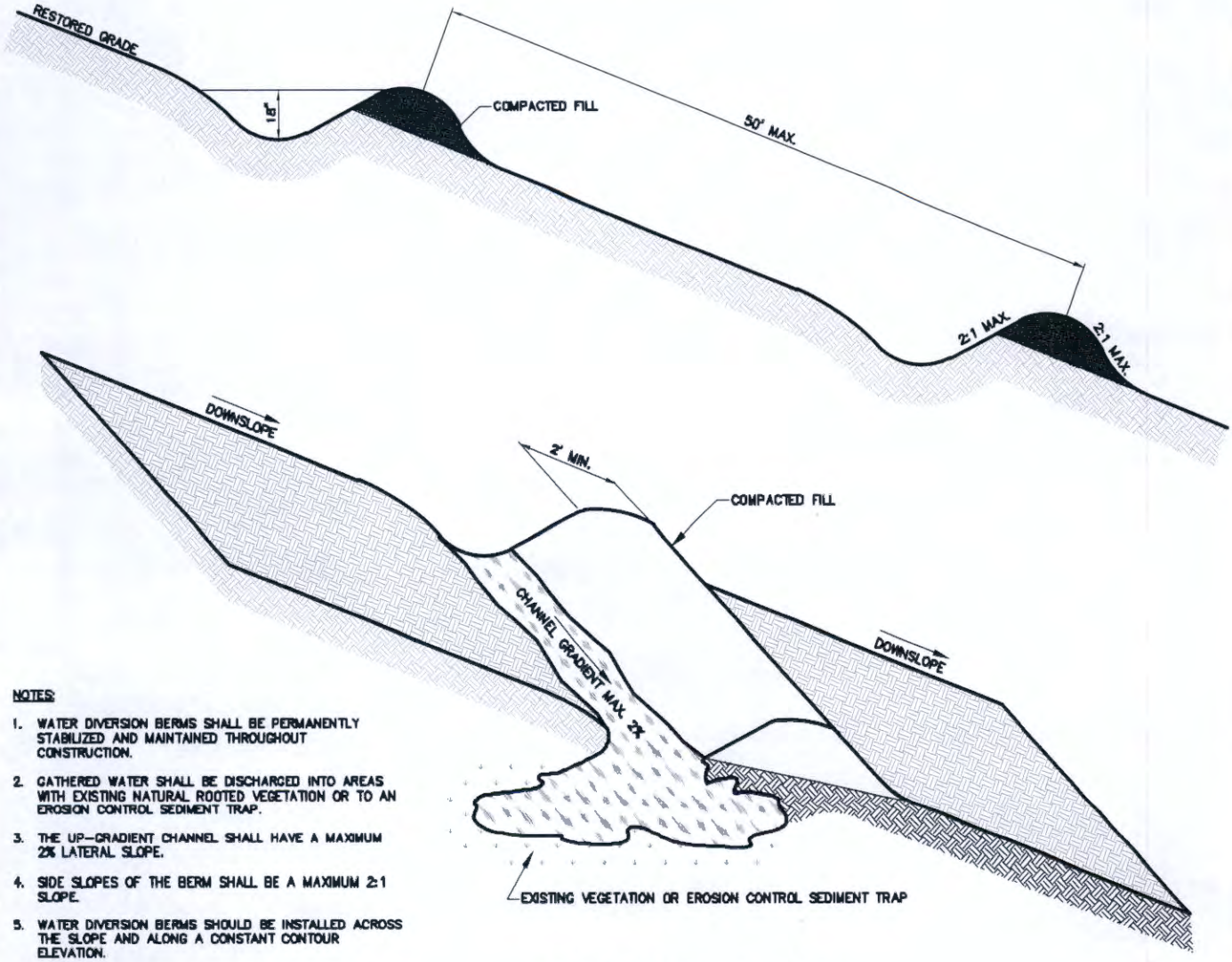

NOTES:

1. WATER DIVERSION BERMS SHALL BE PERMANENTLY STABILIZED AND MAINTAINED THROUGHOUT CONSTRUCTION.
2. GATHERED WATER SHALL BE DISCHARGED INTO AREAS WITH EXISTING NATURAL ROOTED VEGETATION OR TO AN EROSION CONTROL SEDIMENT TRAP.
3. THE UP-GRADIENT CHANNEL SHALL HAVE A MAXIMUM 2% LATERAL SLOPE.
4. SIDE SLOPES OF THE BERM SHALL BE A MAXIMUM 2:1 SLOPE.
5. WATER DIVERSION BERMS SHOULD BE INSTALLED ACROSS THE SLOPE AND ALONG A CONSTANT CONTOUR ELEVATION.
6. IN AREAS WHERE VEHICLES WILL CROSS THE BERM, GRAVEL SHALL BE INSTALLED INSTEAD OF A VEGETATION COVER TO STRENGTHEN THE SECTION FOR VEHICLE CROSSING.

WATER DIVERSION BERMS ON SLOPES

N.T.S.

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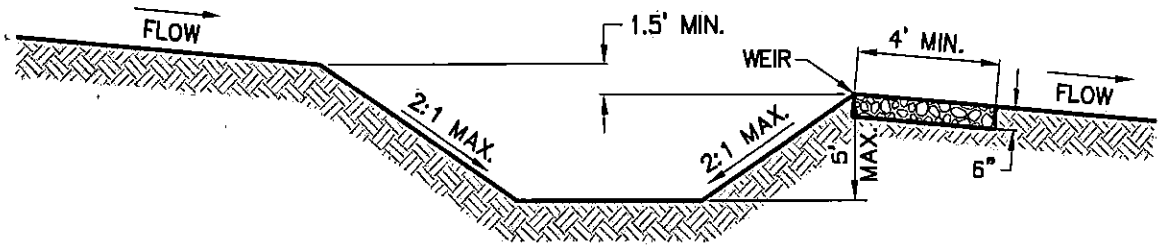
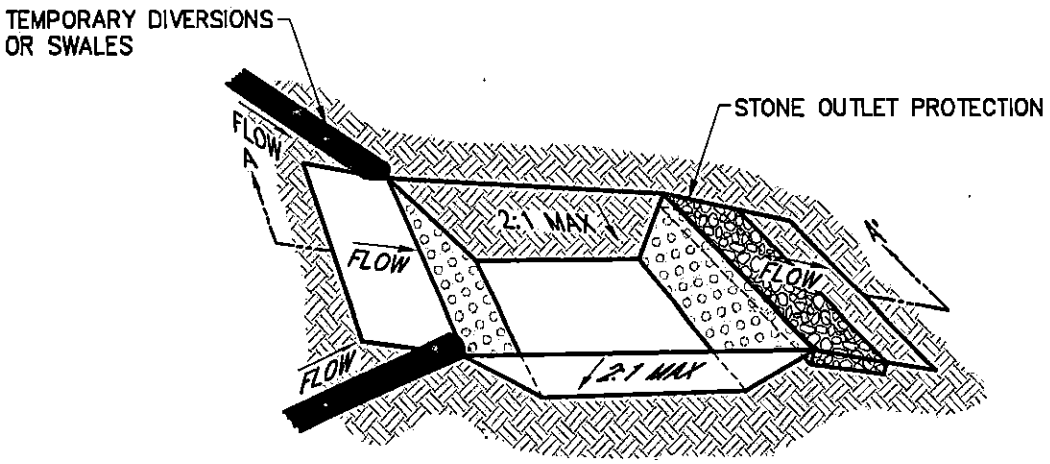


SECTION A–A'



RUNOFF SUMP SEDIMENT TRAP WITH OUTLET PROTECTION DETAIL

N.T.S.

NOTES:

1. SEDIMENT TRAP SHALL BE ACCESSIBLE FOR PERIODIC SEDIMENT REMOVAL.
2. SEDIMENT TRAP SHALL BE INSPECTED FOLLOWING EACH RAINFALL EVENT TO EVALUATE OPERATION AND ACCUMULATED SEDIMENT VOLUME.
3. REMOVE SEDIMENT FROM THE TRAP WHEN IT ACCUMULATES 1/2 THE DESIGN VOLUME.
4. SLOPES WITHIN THE SEDIMENT TRAP SHALL BE MACHINE COMPACTED TO ENSURE STABILITY.
5. IN THE EVENT THE TRAP MUST BE PUMPED DOWN, THE WATER SHALL BE DISCHARGED UP–GRADIENT OF EXISTING BMPS AND SHALL NOT BE DISCHARGED DIRECTLY TO RECEIVING WATERS.
6. OUTLET PROTECTION SHALL CONSISTS OF A MINIMUM 6" THICKNESS OF ALDOT No. 1 COURSE AGGREGATE OR RIP–RAP SIZED AS NEEDED TO PREVENT EROSION AT THE OUTLET DTERMINED BY RUN–OFF VOLUMES AND VELOCITIES.
7. OUTLET PROTECTION TO BE IMPLEMENTED AS REQUIRED BASED ON ANTICIPATED DISCHARGE FLOW.
8. AS CONSTRUCTION PROGRESSES AND DRAINAGE RUN–OFF AREAS CHANGE, THE SEDIMENT TRAP SHALL PROVIDE A STORAGE AREA OF 67 C.Y. PER ACRE OF THE CURRENT DRAINAGE AREA.

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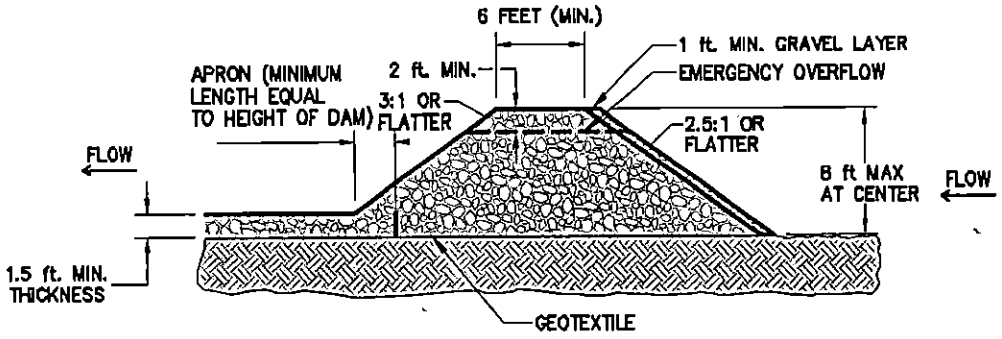
DWG. No. 735–14



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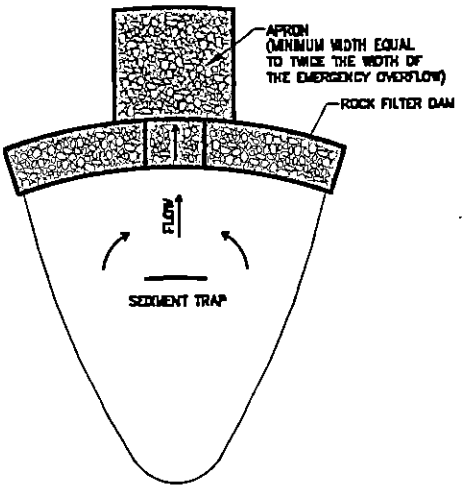

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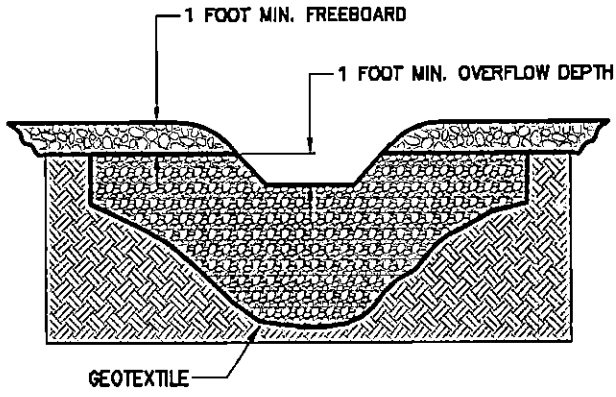

TYPICAL FRONT VIEW

ROCK FILTER DAM AND EROSION CONTROL SEDIMENT TRAP

N.T.S.

GENERAL NOTES:

1. SEDIMENT TRAP SHALL BE ACCESSIBLE FOR PERIODIC SEDIMENT REMOVAL.
2. DAM SHALL BE FACED WITH 1 FOOT OF SMALLER STONE ON UPSTREAM SIDE, (TYPICALLY No. 57 STONE).
3. REMOVE SEDIMENT FROM THE TRAP AREA WHEN IT ACCUMULATES ½ THE DESIGN VOLUME.
4. IF THE BASIN DOES NOT DRAIN BETWEEN STORM EVENTS DUE TO THE SMALLER STONE ON THE UPSTREAM FACE BEING CLOGGED, THE CLOGGED STONE SHOULD BE REPLACED WITH CLEAN STONE.

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COALBED METHANE
PROJECTS–ALABAMA BMP PLAN

BIBB, JEFFERSON, SHELBY, & TUSCALOOSA COUNTIES ALABAMA

EROSION CONTROL DETAILS

REVISION		
DATE	DESCRIPTION	BY
8/24/18	UPDATE PERMITTEE INFORMATION	D D H

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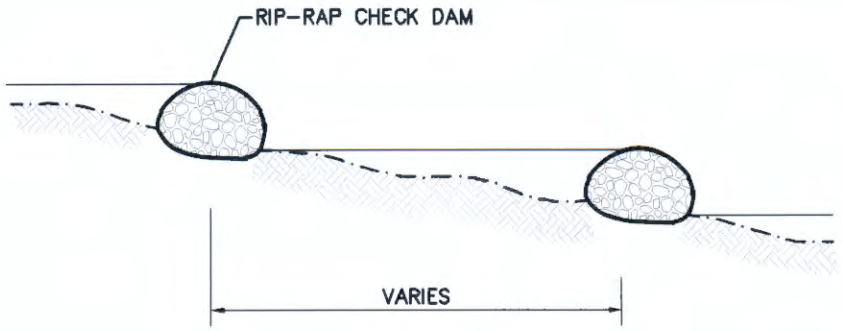
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: M A S
JOB No. 14-3094
FILE NAME: SAGA-BMPP
SHEET No. 5 of 8
CHECKED BY: QHS
DWG. No. 735-14



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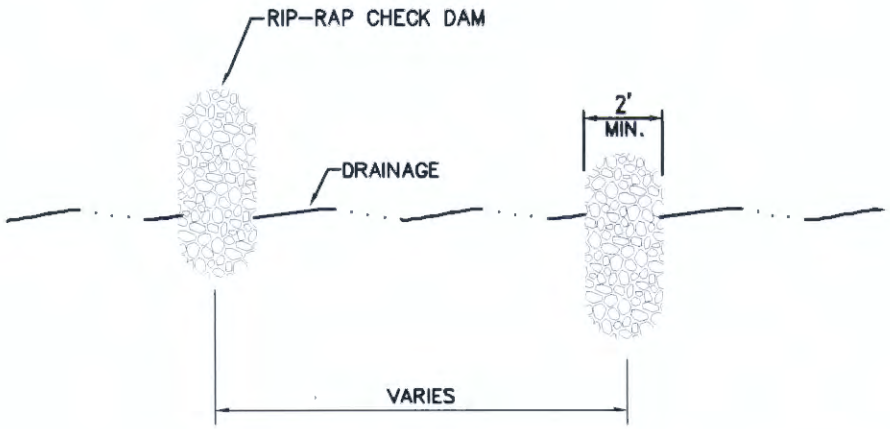
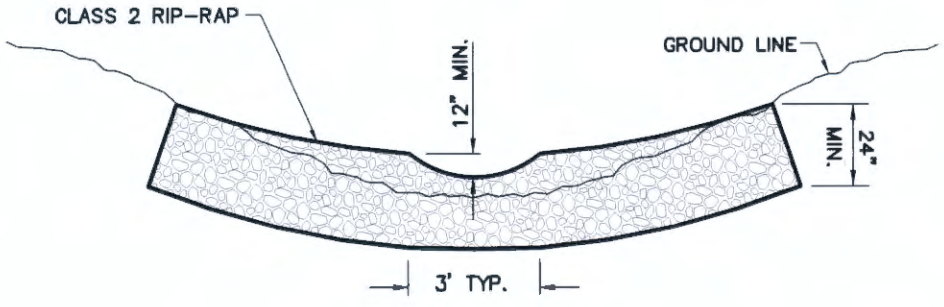


PLAN



TYPICAL SECTION

TYPICAL TEMPORARY RIP-RAP CHECK DAM DETAIL

N.T.S.

GENERAL NOTES:

1. RIP-RAP CHECK DAMS ARE PERMANENT EROSION CONTROL ITEMS THAT SHALL BE INSTALLED ACROSS DRAINAGE WAYS NEAR NEWLY GRADED AREAS.
2. RIP-RAP CHECK DAMS SHALL REMAIN IN PLACE AFTER DISTURBED AREA HAVE BEEN STABILIZED.

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DATE	DESCRIPTION	BY
8/24/18	UPDATE PERMITTEE INFORMATION	D D H

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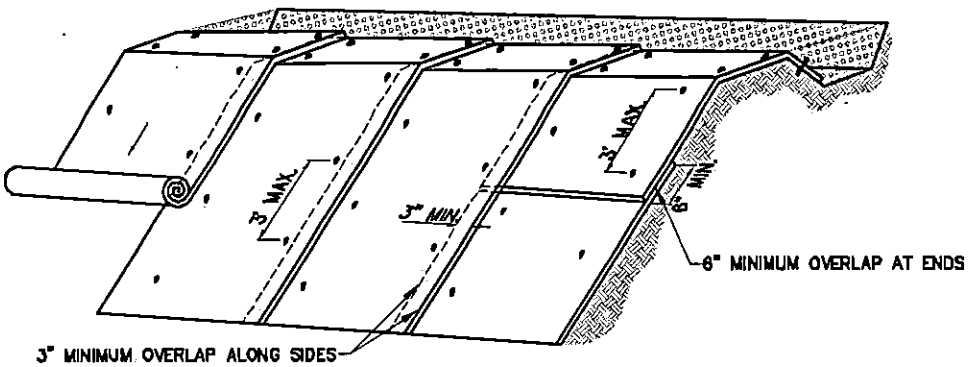

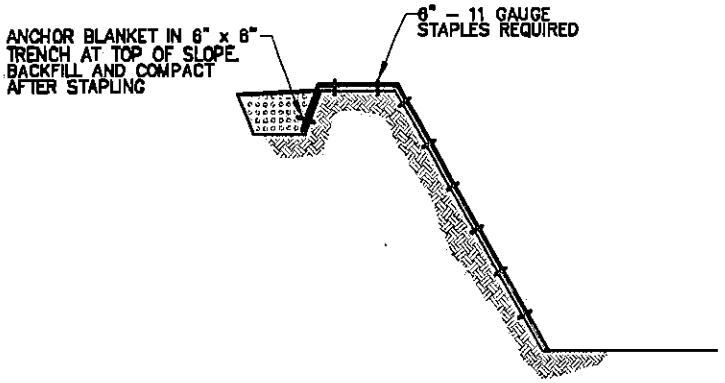

SECTION

SLOPE STABILIZATION

N.T.S.

GENERAL NOTES:

1. SLOPE SURFACE SHALL BE FREE OF ROCKS AND SOIL CLODS TO MAINTAIN GOOD SOIL CONTACT.
2. APPLY SEED, FERTILIZER, AND/OR LIME PRIOR TO THE INSTALLATION OF THE BLANKET.
3. STRIPS SHALL BE ROLLED OUT FLAT, PARALLEL TO DIRECTION OF FLOW WITHOUT BEING STRETCHED.
4. WHEN MULTIPLE STRIPS ARE REQUIRED TO COVER THE WIDTH OF THE SLOPE, THE SIDES SHALL OVERLAP A MINIMUM OF 3".
5. WHEN MULTIPLE STRIPS ARE REQUIRED TO COVER THE LENGTH OF THE SLOPE, THE ENDS SHALL OVERLAP A MINIMUM OF 6".
6. THE UPSLOPE END SHALL BE ANCHORED IN A 6" VERTICAL TRENCH AND BACKFILLED (NOTE: WHEN, IN THE OPINION OF THE QCP, CONDITIONS WARRANT, OTHER EDGES EXPOSED TO EXCESSIVE FLOW SHALL BE INSTALLED AS PREVIOUSLY SPECIFIED).
7. STAPLES SHALL BE U-SHAPED WIRE WITH A MINIMUM 11 GAUGE THICKNESS, AND THE LEGS SHALL BE AT LEAST 6" LONG WITH A 1" CROWN.
8. EACH STRIP SHALL BE STAPLED IN 3 ROWS, AT EDGES AND CENTER, WITH STAPLES SPACED NOT MORE THAN A 3 FOOT GRID.

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EROSION CONTROL DETAILS

REVISION

DATE	DESCRIPTION	BY
8/24/18	UPDATE PERMITTEE INFORMATION	D D H

SCALE: NOT TO SCALE
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: M A S
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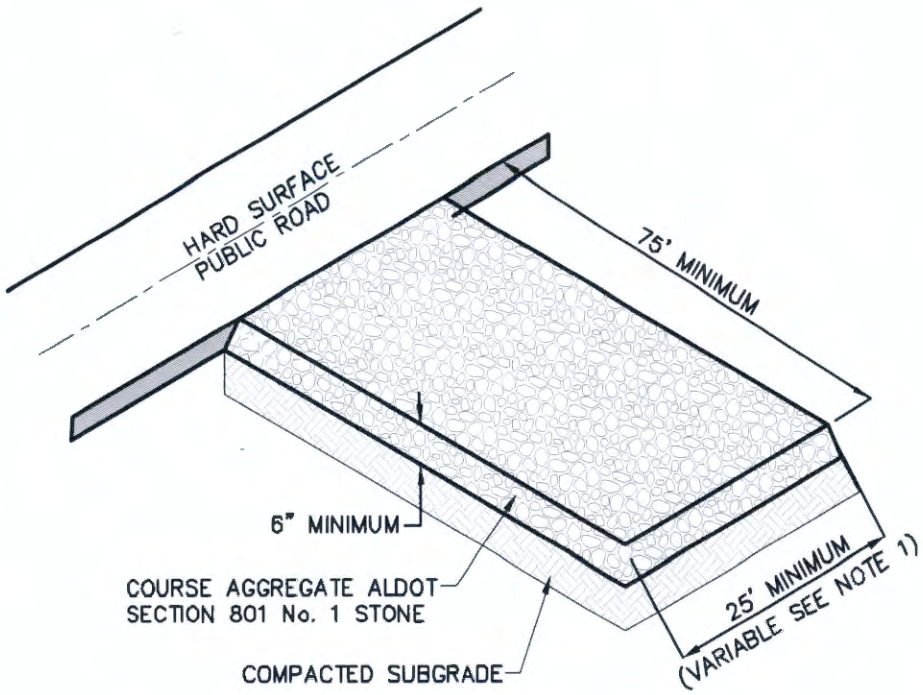
FILE NAME: SAGA-BMPP
SHEET No. 7 of 8
CHECKED BY: QHS
DWG. No. 735-14



CONSTRUCTION EXIT PAD

N.T.S.

NOTES:

1. WIDTH SHALL BE 25 FEET MINIMUM BUT MAY BE ADJUSTED TO EQUAL FULL WIDTH OF VEHICULAR EGRESS.
2. A CLASS IV NON-WOVEN GEOTEXTILE MEETING THE REQUIREMENTS SHOWN IN TABLE CEP-1 OF THE ALABAMA HANDBOOK SHOULD BE USED UNDER RACK WHEN SUBGRADE IS SOFT & WILL NOT SUPPORT TRAFFIC WHEN WET.
3. REMOVE LARGE CHUNKS OF MUD OR SOIL FROM EXIT PAD DAILY.
4. TOP-DRESS WITH CLEAN STONE AS NEEDED TO MAINTAIN EFFECTIVENESS.

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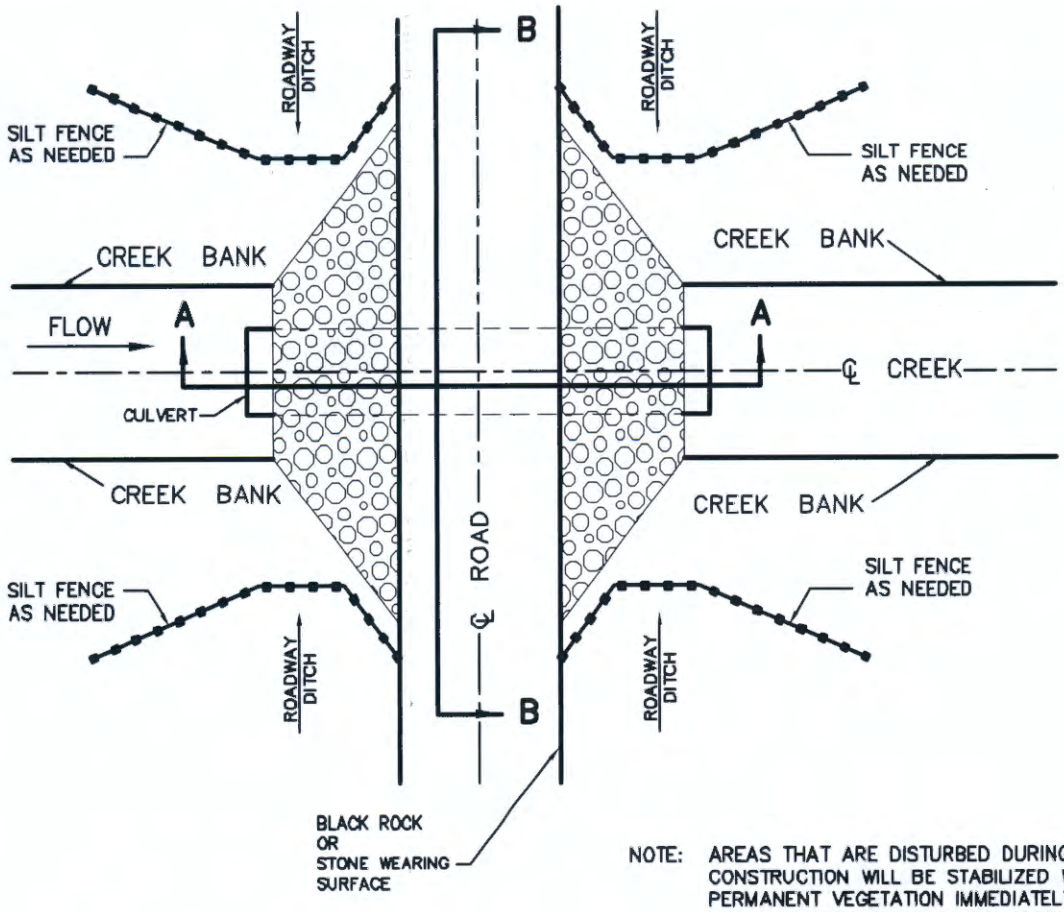
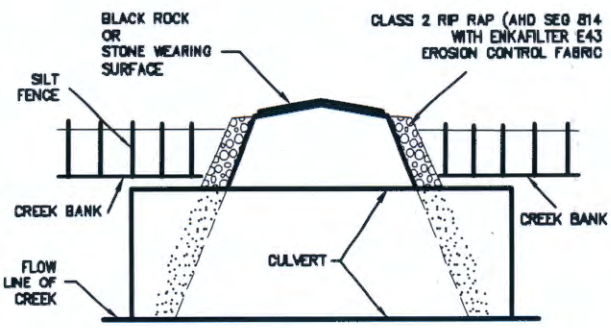
SCALE: NOT TO SCALE	
DATE OF FIELD SURVEY: N/A	
FB. N/A	PG. N/A
DRAWN BY: M A S	
JOB No. 14-3094	
FILE NAME: SAGA-BMPP	
SHEET No. 8 of 8	
CHECKED BY: QHS	DWG. No. 735-14

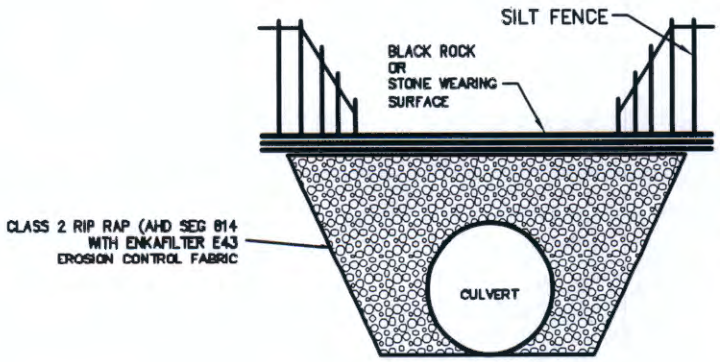
Appendix B
Typical Stream
Crossing Drawings



NOTE: AREAS THAT ARE DISTURBED DURING CONSTRUCTION WILL BE STABILIZED WITH PERMANENT VEGETATION IMMEDIATELY FOLLOWING DISTURBANCE ACTIVITIES.



SECTION A–A



SECTION B–B

TYPICAL ROAD CROSSING CREEK WITH LESS THAN 10 CFS FLOW DETAIL

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TYPICAL CREEK CROSSING DRAWING

REVISION

DATE	DESCRIPTION	BY
8/24/18	UPDATE PERMITTEE INFORMATION	D D H

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DATE OF FIELD SURVEY:	N/A
FB.	N/A PG. N/A
DRAWN BY:	D D H
JOB No.	14–3094
FILE NAME:	SAGA–BMPP–CRK DETS
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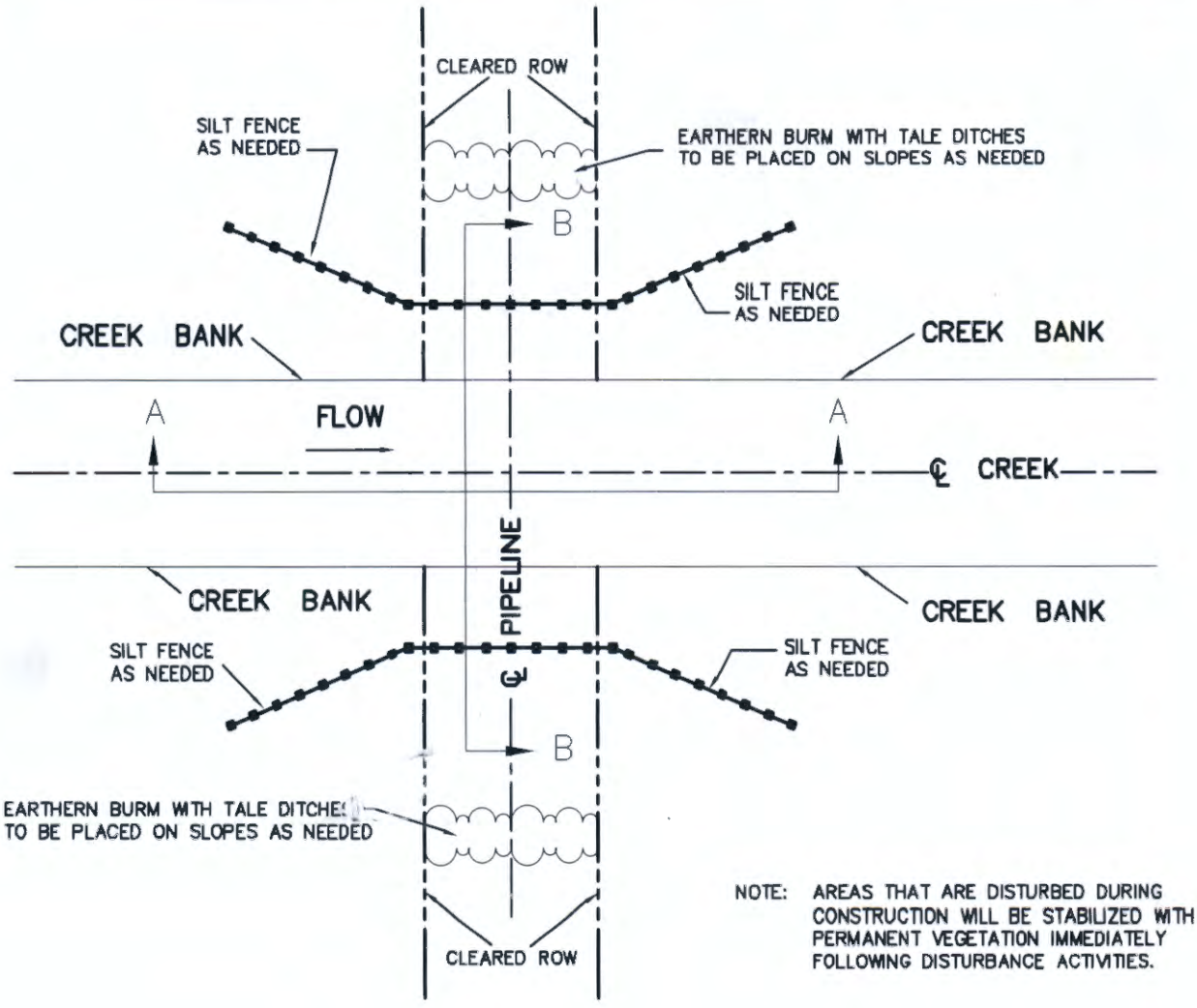
CHECKED BY:	QHS
DWG. No.	451–15



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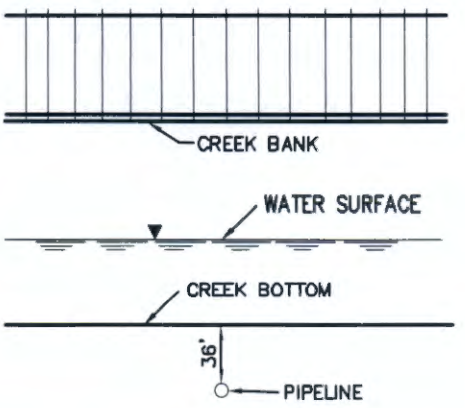

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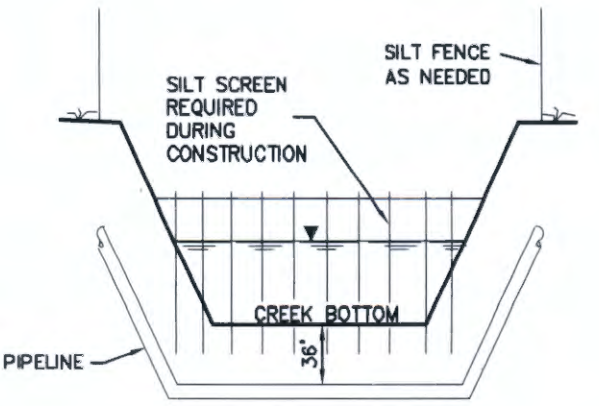

SECTION B–B

TYPICAL PIPELINE CROSSING CREEK WITH LESS THAN 10 CFS FLOW DETAIL

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TYPICAL CREEK CROSSING DRAWING

REVISION

DATE	DESCRIPTION	BY
8/24/18	UPDATE PERMITTEE INFORMATION	D D H

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DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: D D H
JOB No. 14-3094
FILE NAME: SAGA-BMPP-CRK DETS
SHEET No. 2 of 2
CHECKED BY: QHS
DWG. No. 451-15

URBAN OIL & GAS GROUP, LLC

THE NARROWS FACILITY COALBED METHANE PROJECT (OAK GROVE, STARVEACRE , & MCCALLA FIELDS)

JEFFERSON & TUSCALOOSA COUNTIES, ALABAMA

POLLUTION ABATEMENT PLAN

MARCH 2020

PREPARED BY

McGiffert and Associates, LLC
Since 1949
CIVIL ENGINEERS

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TABLE OF CONTENTS

I. INTRODUCTION

This document is in support of the reissuance of NPDES Permit No. AL0066621 for Urban Oil & Gas Group, LLC (Urban) to discharge their produced and processed water from the Narrows Facility to the Mud Creek and Valley Creek. Urban's Narrows Facility is located in West Jefferson County and North Tuscaloosa County, Alabama. See Item VII of ADEM form 549 m3 05/14 for a list of the Sections. This Pollution Abatement Plan (PAP) is being prepared in accordance with the rules and regulations of the Alabama Department of Environmental Management (ADEM), Water Division Water Quality and Control Program, Chapter 335-6-9.

The PAP is presented in one part that is a brief narrative presented herein. The location of existing wells, project roads, pipelines, and other appurtenances are shown on Urban's project drawing but the location of all proposed facilities has yet to be determined. This narrative is intended to address the format as outlined by the ADEM Water Division - Water Quality and Control Program, Rules and Regulations. Generally, the narrative will follow the outline of Chapter 335-6-9-.03, Surface Mining Rules, Water Division - Water Quality and Control Program, ADEM.

II. OPERATOR

The operator of this facility is Urban Oil & Gas Group, LLC and their mailing address is as follows:

Urban Oil & Gas Group, LLC
16030 Romulus Road
Buhl, AL 35446

III. GENERAL INFORMATION

The Urban Narrows Facility is an existing facility that is anticipated to be in operation for an additional ten or more years. It is planned to continue developing new coalbed methane wells and to enhance the development of existing coalbed methane wells within the project boundaries.

The coalbed methane facility has approximately 195 producing coalbed methane wells active and plans to drill additional wells as market conditions allow. Urban employs many full-time personnel at the facility and varying numbers of full-time contract workers, as well as many additional employees throughout the United States that are involved with this facility. Any new wells will be drilled to the appropriate coal seam or seams. The coal seam will be "fractured" or "developed" to enhance the flow of methane gas to the well bore. The methane gas will flow from the coal seam to the well bore and then to the methane gas gathering lines that will transport the produced methane gas to an existing compressor station that will transfer the gas to the gas main for conveyance to a sales station then to a cross-country natural gas pipeline.

Water is removed from the coal seams by means of a pump, typically a sucker rod positive displacement pump. The removal of "Produced Water" from the coalbed methane wells will allow the methane gas that is trapped in the coal seams to travel up the well bore to the gathering lines. The produced water is transported by water gathering lines to the Waste Water Treatment facility. Urban treats the produced water per NPDES requirements and discharges the produced water through discharge systems in Mud Creek and Valley Creek via the NPDES Permit Number No. AL0066621.

IV. TOPOGRAPHIC MAP

The topographical map in accordance with Item X of ADEM form 549 m3 05/14 is a reproduction of US Geological Survey Quadrangle Sheets with the project area outlined along with the location of existing and proposed coalbed methane wells. The location of the Waste Water Treatment facilities, discharge points, compressor stations, and sales stations are also shown are also shown.

V. METHOD OF DIVERTING SURFACE WATER RUNOFF

The project roads, pipeline rights-of-way, power line rights-of-way, staging areas and other disturbed areas will be constructed in accordance with the Best Management Practices Plan for this facility. Silt fence, water diversion berms, rock filter dams, check dams, and other BMPs will be utilized until the disturbed areas are stable. Stormwater inspections will be performed in accordance with the NPDES Permit. Maintenance of implemented BMPs will be performed as required to maintain integrity of their performance.

VI. RAW MATERIALS, PROCESSES AND PRODUCTS

Coalbed Methane Gas is the only product produced for sale. A well is drilled to the coal formation for extraction of Coalbed Methane Gas and produced water. The water will be removed from the well by means of a pump and transported by pipelines to the Urban Waste Water Treatment Facilities prior to discharge to Mud Creek and Valley Creek. The methane gas will be piped to Urban's compressor stations prior to being transported to the cross-country natural gas pipeline.

VII. SCHEMATIC DIAGRAM

A schematic flow diagram is enclosed as Attachment No. 1.

VIII. POST TREATMENT QUANTITY AND QUALITY OF EFFLUENT

The Urban Waste Water Treatment facilities currently treat produced wastewater from the coalbed methane wells prior to discharging thru the respective outfall discharges into Mud Creek and Valley Creek. There is the possibility that there will be numerous additional wells in the current project area, depending on current market activity. The additional wells would be drilled over a period of time. The overall water produced with the current wells should decrease as time progresses.

The disturbed areas of this facility will consist of project roads, pipelines, power line rights-of-way, well pads, and a staging area or storage yard for materials. All disturbed areas will either have a crushed stone surface or have established permanent vegetation prior to removal of silt fence, water diversion berms, rock filter dams, check dams, and other BMPs. The disturbed surfaces will be stabilized as soon as construction allows.

IX. WASTE TREATMENT FACILITIES

Waste generated as a result of facility operation will be treated and disposed of as required by all current ADEM regulations.

X. SEDIMENT CONTROL FOR FACILITY ROADS

Facility roads will have a rock wearing surface and the side slopes of the road way will be grassed with permanent vegetation. The facility roads will be constructed in accordance with the Best Management Practices Plan proposed for this facility.

XI. LOCATION OF ALL STREAMS ADJACENT TO DISTURBED AREAS

The topographical map submitted in accordance with Item X of ADEM form 549 m3 05/14 is a reproduction of US Geological Survey Quadrangle Sheets with the project area outlined showing the streams in the project area. The location of the existing wells, project roads, compressor stations, discharge locations, sales station, waste water treatment facilities, field office, and other disturbed areas are illustrated on the project drawing. Some potential wells and project roads have been shown on the drawing; however, additional development within the NPDES permitted boundary will be illustrated on an updated drawing as they are planned. This facility is a Coalbed Methane Project and will not have a typical surface mining operation.

XII. NON-POINT SOURCE POLLUTION

All disturbed areas will be grassed or have a stone surface. Prior to grassing and placing stone, BMPs will be utilized to contain silt within the project area. BMPs are covered more extensively in the Best Management Practices Plan prepared for this facility.

XIII. PUBLIC WATER SUPPLY IMPOUNDMENT

The receiving water bodies are Mud Creek and Valley Creek and are classified for fish and wildlife. Mud Creek and Valley Creek are not public water supplies.

XIV. SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

This facility has a Spill Prevention Control and Countermeasures Plan that is regularly evaluated and updated as required in accordance with 40 CFR Part 112 requirements.

XV. RUN-OFF CALCULATIONS

The only locations that may require pipes for storm water are along the roadways. Pipes used in the construction of roadways will be designed in accordance with the Best Management Practices Plan for this facility.

XVI. RECLAMATION PROCEDURE

When a pipeline or powerline right-of-way is constructed, all disturbed areas will be stabilized with vegetation or a stone wearing surface. Disturbed areas associated with the construction of roads, wastewater treatment facilities, and compressor stations will be stabilized with vegetation or stone. When a portion or all of this facility is no longer in use, the disturbed areas will be graded and permanent vegetation will be planted to control erosion. Project roads and well pads may remain in place at the request of the landowner. All other areas will be shaped with slopes less than 3:1 and grassed to control erosion.

XVII. BMP TYPICALS

BMPs shown on the typical drawings should be implemented to control potential runoff pollution, help prevent off-site sedimentation, and ultimately protect the receiving waters. The typical drawings provide a standard approach for implementation across the facility.

The following typical drawings can be found in the Spill Prevention Control and Countermeasures Plan and The Best Management Practices Plan for Nonpoint Source Discharge Control.

1. Typical Well Site Drilling/Completion Phase
2. Typical Completed Well Site
3. Silt Fence Type "A"
4. Sediment Control Log (Wattle) Barrier
5. Water Diversion Berm
6. Runoff Sump Sediment Trap with Outlet Protection
7. Rock Filter Dam and Erosion Control Sediment Trap
8. Temporary Rip-Rap Check Dam
9. Slope Stabilization
10. Construction Exit Pad
11. Typical Road Crossing Creek with less than 10 CFS flow
12. Typical Pipeline Crossing Creek with less than 10 CFS flow

XVIII. CHEMICAL/COMPOUNDS AND POTENTIAL TOXICITY SOURCES

The use of hydrocarbons by Urban personnel will be limited to lubricating oils in pump jacks and hydrocarbons used in pickup trucks or other vehicles and compression equipment. Chemicals may be used at the Waste Water Treatment facility to help test the waste water. Chemicals may also be used in the control of vegetation and fertilizers may be used to enhance the growth of vegetation.

Contractors employed by Urban will have established written Spill Prevention Control and Countermeasure Plan and a Best Management Practices Plan in place prior to working at this facility and follow the plans approved for this facility by ADEM.

Construction equipment used in the construction of the well pads, project roads and rights-of-way use oil and diesel fuel. Contractors employed at this facility will be required to conform to ADEM standards and their Spill Prevention Control and Countermeasure Plan in the handling of hydrocarbons.

Well Drilling and Well Completion contractors will operate on well pads that have a containment berm constructed around all equipment and drain to a drilling pit. Please refer to typical drawings found in the Spill Prevention Control and Countermeasures Plan and The Best Management Practices Plan for Nonpoint Source Discharge Control.

XIX. EPA FORM 2D AND/OR EPA FORM 2C

The ADEM required EPA Modified 2C Form has been submitted for this facility.

XX. COPY OF ASMC REQUIRED WATER QUALITY RELATED DATA AND INFORMATION

The Alabama surface mining commission does not regulate COALBED METHANE facilities.

XXI. DESIGN DATA

At this time there are not any proposed new structures, impoundments, or other features that have associated design data. The existing outfalls at this facility have been reviewed and approved by ADEM utilizing complete mix mass balance analysis with the receiving stream. These outfalls are not required to be evaluated by CORMIX modeling.

XXII. P.E. CERTIFICATION

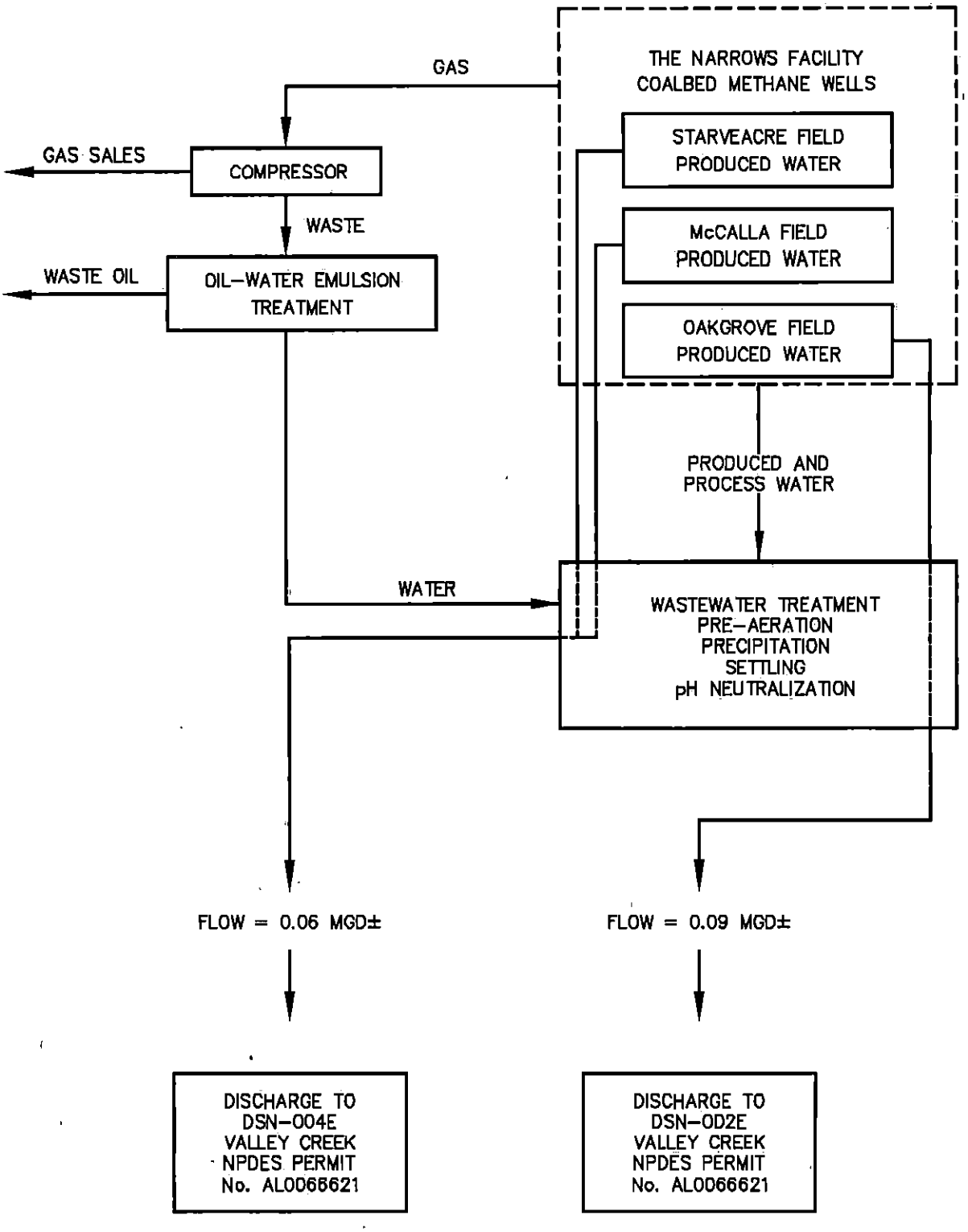
PREPARED BY:

McGiffert and Associates, LLC

Q. Hansel Stewart, P.E.
AL Reg. No. 30097-E
Date: 6/1/20

ATTACHMENT NO. 1

FLOW DIAGRAM



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THE NARROWS FACILITY

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FLOW CHART

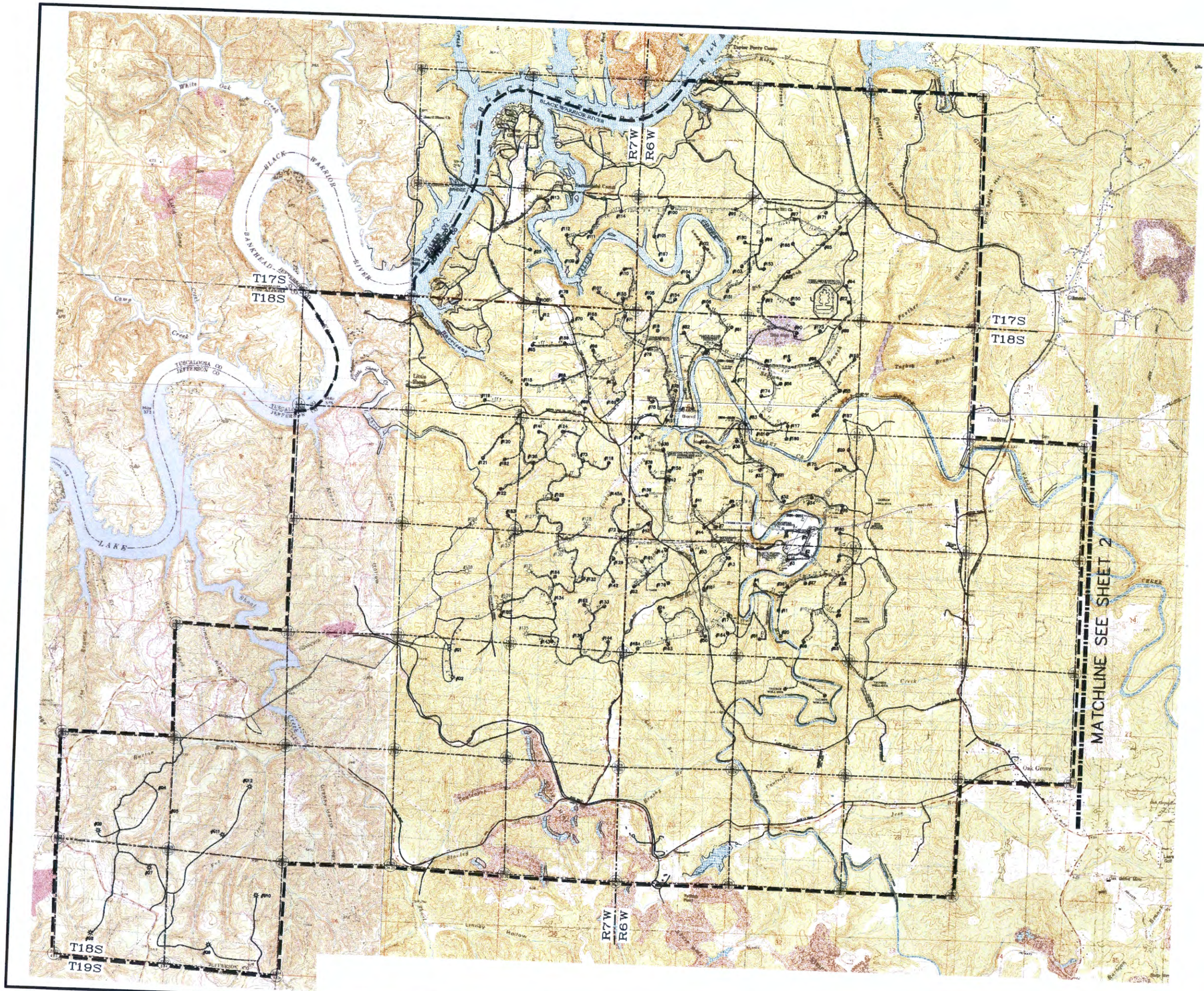
REVISION

DATE	DESCRIPTION	BY

SCALE: NOT TO SCALE
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: D D H
JOB No. 20–3035
FILE NAME: Urban–Narrows–Flow
SHEET No. 1 of 1
CHECKED BY: QHS
DWG. No. 109–20

ATTACHMENT NO. 2

FACILITY TOPOGRAPHIC MAP



N

GRAPHIC SCALE 1" = 2000'
0 2000' 4000' 8000'

LEGEND

⊕#36	INDICATES EXISTING WELL SITE
☼-#61	INDICATES PLUGGED & ABANDONED WELL
	INDICATES PROJECT ROAD
	INDICATES WATER MAIN & LOW PRESSURE GAS GATHERING MAIN (SAME DITCH)
	INDICATES LOW-PRESSURE GAS GATHERING
W	INDICATES WATER MAIN
HG	INDICATES HIGH-PRESSURE GAS TRANSMISSION
TP	INDICATES TRANSMISSION POWER LINE
SNG	INDICATES SOUTHERN NATURAL GAS TRANSMISSION PIPELINE
P	INDICATES PROJECT POWER LINE
	INDICATES NPDES PERMIT FIELD AREA BOUNDARY
•	INDICATES PROPOSED WELL
	INDICATES EXISTING PRIVATE ACCESS ROAD
	INDICATES CREEK CROSSING

URBAN OIL & GAS GROUP, LLC

THE NARROWS FACILTIY

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

TOPOGRAPHICAL MAP

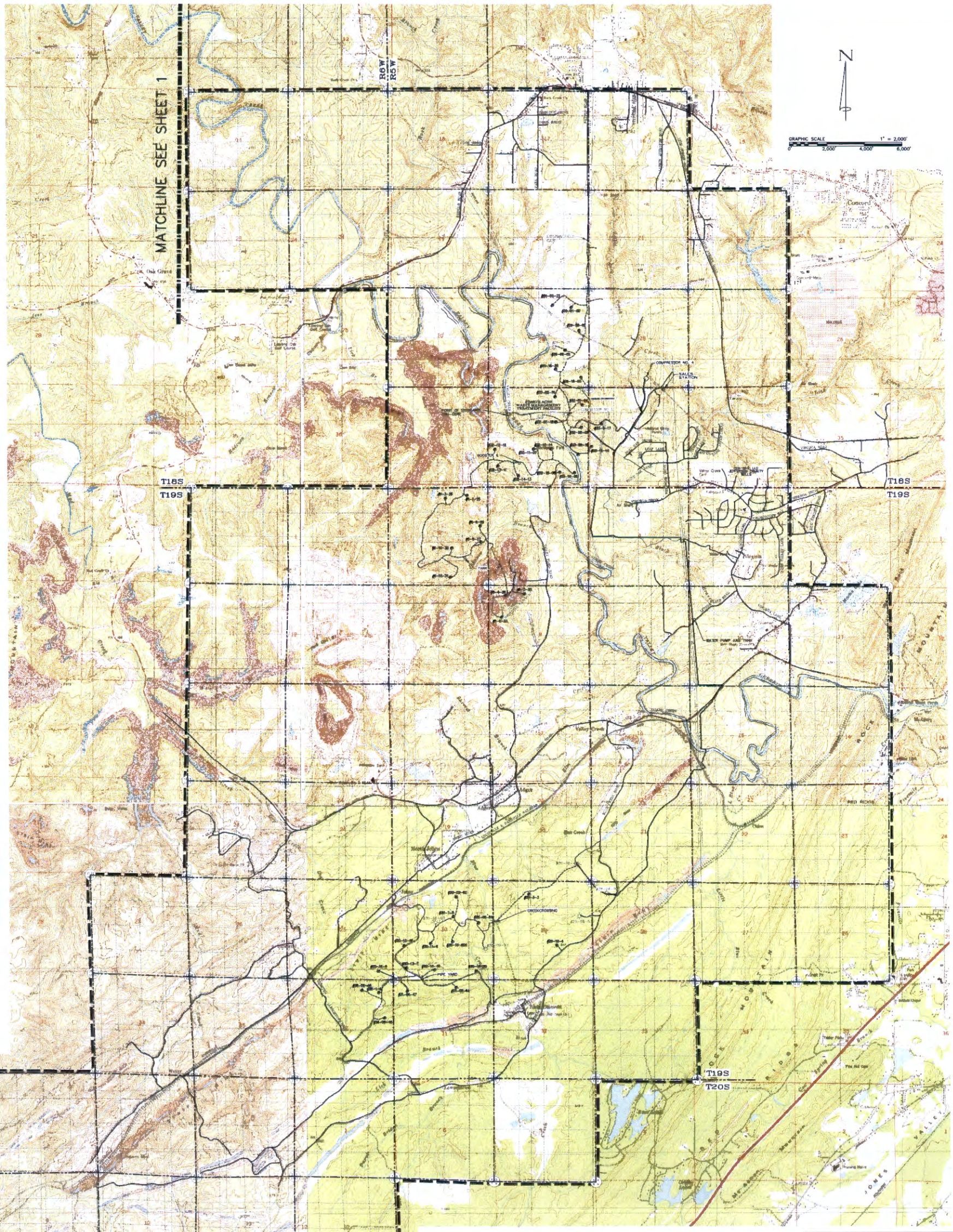
McGiffert and Associates, LLC
SINCE 1949
CIVIL ENGINEERS
2814 STILLMAN BLVD. • P.O. BOX 20559
TUSCALOOSA, ALABAMA 35402-0559
WWW.MCGIFFERT.COM (205) 759-1521 FAX (205) 759-1524

REVISION

DATE	DESCRIPTION	BY

FILE NAME: URBAN-NARROWS-TOPO
DATE OF SURVEY: N/A
FB. N/A PG. N/A
DRAWN ON: 03/11/20

SHEET No. 1 of 2



NOTES

1. INFORMATION OBTAINED FROM A COMBINATION OF WELL PLATS, U.S. GEOLOGICAL SURVEY QUADRANGLE SHEETS, STATE OIL AND GAS BOARD RECORDS, AERIAL PHOTOGRAPHS, URBAN OIL & GAS PERSONNEL AND OTHER SOURCES.
2. INFORMATION NOT FIELD VERIFIED.
3. A REPRODUCTION OF U.S. GEOLOGICAL SURVEY QUADRANGLE SHEET CONCORD ALABAMA AND A REPRODUCTION OF A PORTION OF U.S. GEOLOGICAL SURVEY QUADRANGLE SHEETS: ABERNANT, ADAMSVILLE, BESSEMER, GILMORE, GREENWOOD, McCALLA, OAK GROVE AND SYLVAN SPRINGS ALABAMA

LEGEND

- INDICATES EXISTING WELL SITE
- INDICATES PLUGGED & ABANDONED WELL
- INDICATES PROJECT ROAD
- INDICATES WATER MAIN & LOW PRESSURE GAS GATHERING MAIN (SAME DITCH)
- INDICATES LOW-PRESSURE GAS GATHERING
- INDICATES WATER MAIN
- INDICATES EXISTING PRIVATE ACCESS ROAD
- INDICATES EXISTING ALABAMA POWER COMPANY RIGHT-OF-WAY
- INDICATES HIGH-PRESSURE GAS TRANSMISSION
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REVISION

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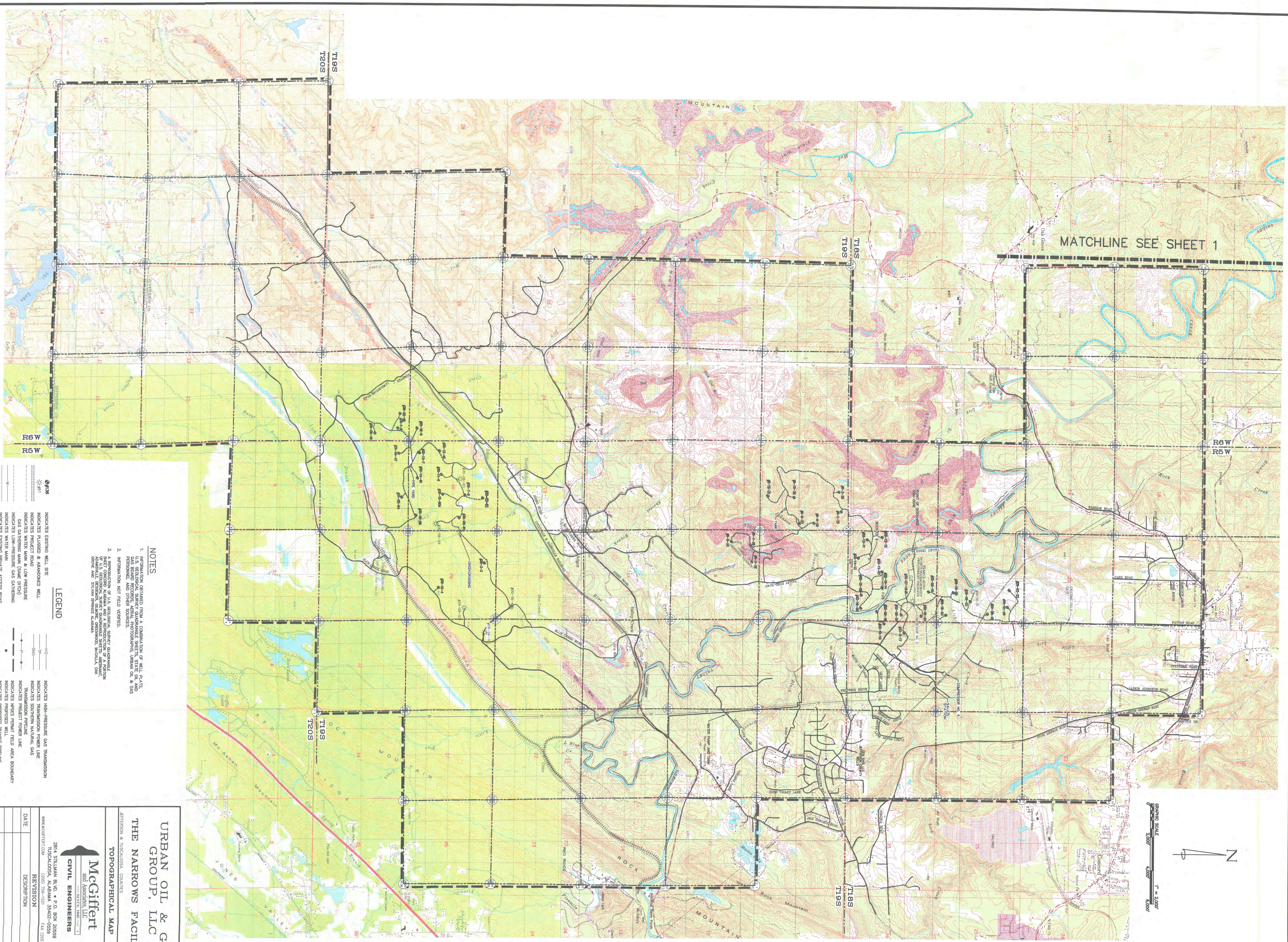
FILE NAME: URBAN-NARROWS-TOPO
DATE OF SURVEY: N/A
FB. N/A PG. N/A
DRAWN ON: 03/11/20
DRAWN BY: B.D.H.
SCALE: 1"=2000'
JOB No. 20-405

SHEET No. 2 of 2

CHECKED BY: QHS

DWG. No. 110-20

DWG. No. XXX-20



DWG. No. XXX-20

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LEGEND

- #136 — INDICATES EXISTING WELL SITE
- #61 — INDICATES PLUGGED & ABANDONED WELL
- INDICATES PROJECT ROAD
- INDICATES WATER MAIN & LOW PRESSURE GAS GATHERING MAIN (SAME DITCH)
- INDICATES LOW-PRESSURE GAS GATHERING
- W — INDICATES WATER MAIN
- INDICATES EXISTING PRIVATE ACCESS ROAD
- TP — INDICATES EXISTING ALABAMA POWER COMPANY RIGHT-OF-WAY
- HG — INDICATES HIGH-PRESSURE GAS TRANSMISSION
- TP — INDICATES TRANSMISSION POWER LINE
- SNG — INDICATES SOUTHERN NATURAL GAS TRANSMISSION PIPELINE
- P — INDICATES PROJECT POWER LINE
- INDICATES NPDES PERMIT FIELD AREA BOUNDARY
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- INDICATES CREEK CROSSING

URBAN OIL & GAS GROUP, LLC

THE NARROWS FACILTIY

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

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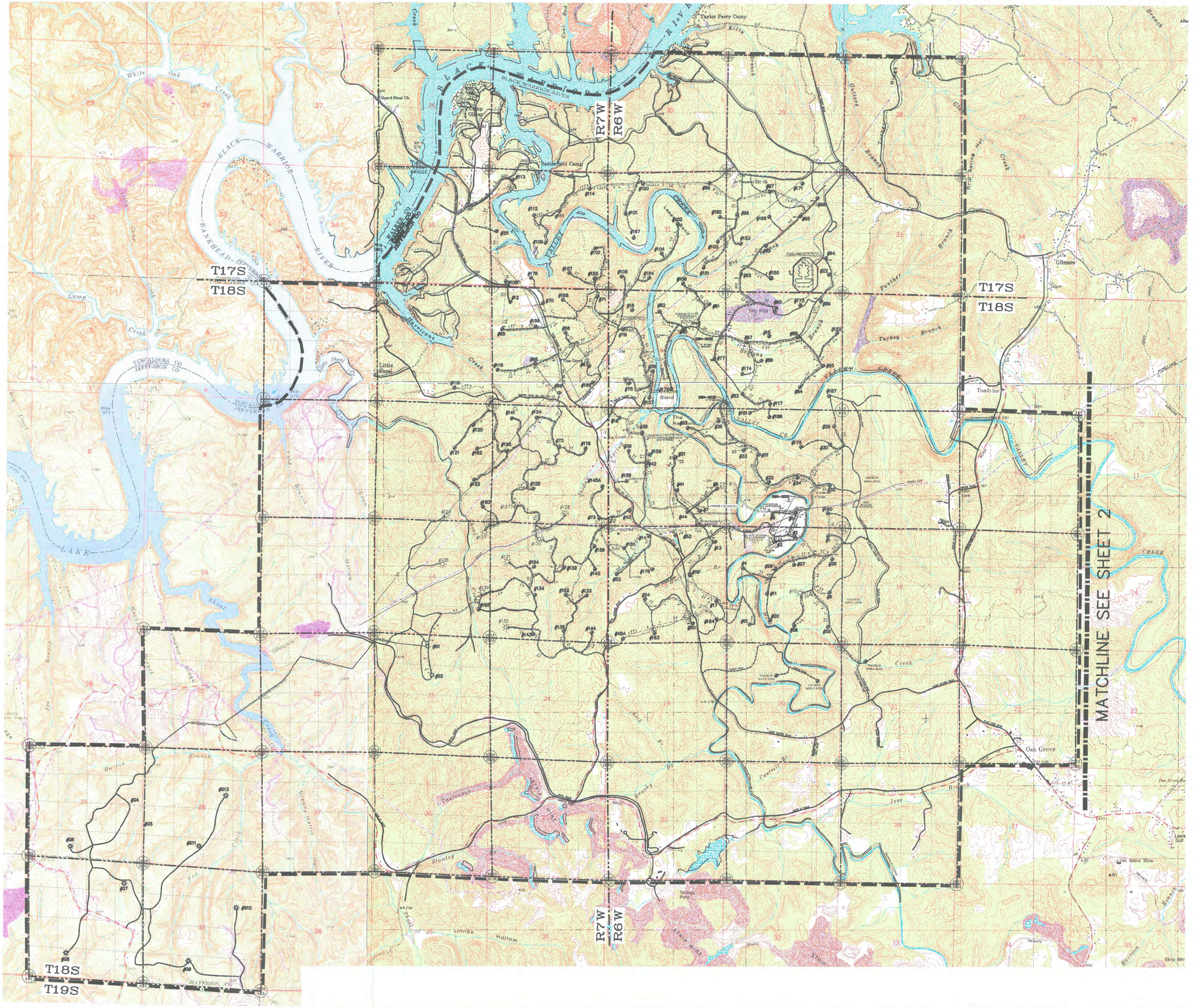

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GRAPHIC SCALE 1" = 2000'

0' 2000' 4000' 6000'

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URBAN OIL & GAS GROUP, LLC

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JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

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URBAN OIL & GAS GROUP, LLC

THE NARROWS FACILITY COALBED METHANE PROJECT (OAK GROVE, STARVEACRE, & MCCALLA FIELDS)

JEFFERSON & TUSCALOOSA COUNTIES, ALABAMA

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

UPDATED MARCH 2019

PREPARED BY

McGiffert and Associates, LLC
Since 1949
CIVIL ENGINEERS

2814 STILLMAN BLVD. • P.O. BOX 20559
TUSCALOOSA, ALABAMA 35402-0559
WWW.MCGIFFERT.COM (205) 759-1521 FAX (205) 759-1524

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Appendices

A. Log of Plan Review and Amendments
B. Site Drawings, Vicinity Map, Quadrangle Area Maps
C. Typical Well Site Plans
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E. Secondary Containment Drainage Report
F. Tank & Piping Inspection Checklist
G. Annual Inspection Record
H. Spill Incident Report Form
I. Discharge Prevention Briefing Log
J. Response Equipment Inspection Log

Plan Review and Amendments *§112.5*

A. Non-Technical amendments:

- Non-technical amendments are not certified by a Professional Engineer.
- Examples of such changes include but are not limited to: phone numbers, name changes, or any non-technical text change(s).

B. Technical Amendments:

- Technical amendments are certified by a Professional Engineer
- Examples of such change(s) include but are not limited to:
  - commissioning or decommissioning containers,
  - replacement, reconstruction, or movement of containers
  - replacement, reconstruction, or installation of piping
  - construction or Demolition that might alter secondary containment structures
  - changes of product(s) or service(s)
  - the addition or deletion of standard operation or maintenance procedures related to discharge prevention measures
- It is the responsibility of the facility to determine and confirm with the regulatory authority what constitutes a technical amendment as necessary.
- An amendment made under this section will be prepared within six (6) months of the change and implemented as soon as possible but no later six (6) months following the preparation of the amendment.
- Technical Amendments affecting various pages within the plan can be P.E. certified on those pages, certifying those amendments only and will be documented on the log form located in *Appendix A*.

C. Management Review:

- Management will perform a complete review this SPCC Plan at a minimum of every five (5) years and document the review on the form located in *Appendix A*.
- By signing the Log of Plan Review and Amendments form, the signor confirms that management has completed a review and evaluation of this SPCC Plan.

ONSHORE FACILITY - REGULATORY CROSS-REFERENCE		
Citation	**Description**	**Section**
§112.3(d)(1)	Professional Engineer Certification	1.2
§112.5(b)	Management of Plan Review and Amendments	Foreword
§112.7	General Requirements for SPCC Plans for all facilities and all oil types	1.0
§112.7	Management Approval	1.1
§112.7(a)(1)	Discussion of facility's conformance with rule requirements	1.12.1
§112.7(a)(2)	Deviations from Plan requirements	1.12.1
§112.7(a)(3)	Description of facility characteristics and facility diagrams	1.6.1, 1.6.2
§112.7(a)(3)(i)	Containers and Capacity	1.6.3
§112.7(a)(3)(ii)	Discharge Prevention Measures	1.7.1
§112.7(a)(3)(iii)	Discharge or Drainage Controls	1.7.2
§112.7(a)(3)(iv)	Discharge Discovery Response and Cleanup	1.8, 1.8.1
§112.7(a)(3)(v)	Disposal of Recovered Material	1.8.2
§112.7(a)(3)(vi)	Contact List and Phone Numbers	1.4
§112.7(a)(4)	Spill reporting information	1.6.2,1.6.3
§112.7(a)(5)	Emergency Response procedures	1.6.2,1.6.3
§112.7(b)	Experience Indicating Potential Failure	1.7.4
§112.7(c)	Secondary Containment and Diversionary Structures	1.7.2, 1.7.3
§112.7(d)	Impracticability and Contingency planning	1.11
§112.7(e)	Inspections, Tests, and Records	1.9
§112.7(f)	Personnel, Training, and Discharge Prevention Procedures	1.5
§112.7(g)	Security (excluding oil producing facilities)	1.10
§112.7(h)	Loading/Unloading racks	1.7.1
§112.7(j)	Conformance with State requirements	1.12.2
§112.8(a)	General Requirements	2.0
§112.8(b)(1&2)	Facility Drainage (diked area)	1.7.2
§112.8(b)(3&4)	Facility Drainage (undiked area)	1.7.3
§112.8(c)(1)	Bulk Storage Containers	1.6.3
§112.8(c)(2)	Capacity of Secondary Containment Area	1.7.2
§112.8(c)(3)	Precipitation Within Secondary Containment	1.7.2
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§112.8(c)(6)	Integrity Testing of Aboveground Tanks	2.7
§112.8(c)(7)	Leakage from Heating Coils	2.5
§112.8(c)(8)	Update or Engineer Containers to Avoid Discharge	2.6
§112.8(c)(9)	Effluent Treatment Observations	2.7
§112.8(c)(10)	Address Visible Discharge	2.8
§112.8(c)(11)	Mobile or Portable Storage Containers	2.9
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§112.8(d)(3)	Proper Design	1.7.2
§112.8(d)(4)	Regular Testing and Inspection	2.10
§112.8(d)(5)	Vehicle Warnings	1.7.1

SECTION 1

General Requirements

1.0 General Information

§112.7

Urban Oil & Gas Group, LLC (Urban) is concerned with the protection of human health and the environment and is committed to managing its operation in an environmentally safe manner. Urban will operate in such a manner as to protect the health and safety of its employees, contractors and the public, as well as the environment. Urban's goal through this Spill Prevention Control and Countermeasures Plan (SPCC) is to establish procedures, equipment, and other requirements to prevent the discharge of "oil" and chemicals from this project into waters of the United States. ("Oil" means oil of any kind or in any form, including but not limited to petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.)

1.1 Management Approval

§112.7

Management Approval

I hereby approve the contents of the facility's Spill Prevention Control and Countermeasure Plan (SPCC Plan) and have a level of authority to commit the necessary resources to implement the SPCC Plan, as set forth in this document, in accordance with the federal requirements of 40 CFR Part 112.

Signature: Scott White Date: 5-14-19

Company: Urban Oil & Gas Group, LLC

Name: Scott White

Title: Operations Superintendent

1.2 Professional Engineer Certification

§112.3(d)(1)

Professional Engineer Certification

By means of this Professional Engineer Certification, I hereby attest, to the best of my knowledge and belief, to the following:

- I am familiar with the requirements of 40 CFR Part 112 and have verified that this Plan has been prepared in accordance with the requirements of this Part.
- I or my agent have visited and examined the facility(s).
- I have verified that the Plan is adequate for the facility

Signature: Q. Hansel Stewart

Company: McGiffert & Associates, LLC

Name: Q. Hansel Stewart, PE

AL Reg. No.: 30097

(Seal)

Date: 5/16/19

As stated in the §112.3(d)(2), this certification will in no way relieve the owner of this facility of his duty to prepare and fully implement this SPCC plan in accordance with the requirements of part 112.

1.3 Substantial Harm Certification

§112 Attachment CII

CERTIFICATION OF THE APPLICABILITY
OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME:
The Narrows Facility
(Oak Grove, Starveacre, & McCalla Fields)

FACILITY ADDRESS:
10750 Lock 17 Road; Adger, AL 35006

Yes__ No _X_ 1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes__ No _X_ 2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes__ No _X_ 3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.

Yes__ No _X_ 4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula 1) such that a discharge from the facility would shut down a public drinking water intake[2]?

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

CERTIFICATION

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

Scott White
Name (please type or print)

Scott White
Signature

Operations Superintendent
Title

5-14-19
Date

[1]If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2]For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).(from 40 CFR 112 Appendix C, Attachment C-II)

1.4 Contact List and Phone Numbers Procedures

§112.7(a)(3)(vi)

In the event of an oil or chemical spill call one of the following in the order listed:

A) Name: Tommy Jones, Field Foreman
Urban Oil & Gas Group, LLC
3551 Coalmont Road
Maylene, AL 35114
Phone: (205) 491-7178 (field office) (205) 394-7210 (mobile)

B) Name: Scott White, Operations Superintendent
Urban Oil & Gas Group, LLC
16030 Romulus Road
Buhl, AL 35446
Phone: (205) 330-2877 (main office) (205) 310-5580 (mobile)

C) Name: Alabama Department of Environmental Management (ADEM)
Mining Unit
Field Operations Division
1400 Coliseum Blvd
Montgomery, AL 36110
(334) 271-7700 (8:00 AM-5:00 PM, Monday-Friday)
(334) 260-2700 (After Normal business hours)

D) Name: Alabama Department of Environmental Management (ADEM)
110 Vulcan Road
Birmingham, AL 35209
Phone: (205) 942-4378 (8:00 AM-5:00 PM, Monday-Friday)
(205) 933-0360 (After Normal business hours)
(800) 424-8802 (After Normal business hours)

E) Name: EMA
Phone: (800) 843-0699

F) Name: National Response Center
Phone: (800) 424-8802

1.5 Personnel, Training, and Discharge Prevention Procedures *§112.7(f)*

Urban shall be responsible for properly instructing employees in the operation and maintenance of equipment to prevent a discharge in accordance with this SPCC Plan and State and Federal regulations. All personnel, including contract personnel involved with oils or chemicals, will be trained and be familiar with this plan. This includes personnel that handle, whether directly or indirectly, oils or chemicals covered by this plan.

Urban shall schedule and conduct discharge prevention briefings for personnel at intervals frequent enough to maintain the knowledge and skills necessary to execute the provisions of this SPCC Plan. The briefings will include the review of events that have occurred on the site, equipment failures and malfunctions, and newly adopted preventive measures. Meetings will be recorded in *Appendix I.* Mr. Tommy Jones will designate a company employee as the facility supervisor responsible for discharge prevention at each facility.

1.6 Facility Layout and Information

1.6.1 Facility Layout *§112.7(a)(3)*

Urban operates coalbed methane gas production wells in West Jefferson and East Tuscaloosa Counties, Alabama. The Urban coalbed methane degasification field consists of wells within the Narrows Facility Coalbed Methane Project. Multiple facility sites that house oil or chemicals in aboveground tanks have been evaluated and included in this SPCC Plan. The multiple facility sites include 4 compressor station sites, 3 produced water treatment facilities, field office, 2 tank sites, and 2 sales stations sites. The field is located east of the Black Warrior River in the vicinity of Paul Allman Road and Camp Oliver Road. The field office is located at 10750 Lock 17 Road; Adger, AL 35006.

OAK GROVE FIELD SITE LOCATIONS:

1. **The Narrows Field Office,** Section 30 & 31, T 18 S, R 6 W, Jefferson County
2. **Water Treatment Facility #2,** Section 6, T 18 S, R 6 W, Jefferson County
3. **Compressor Station #1**, Section 7, T 18 S, R 6 W, Jefferson County
4. **Compressor Station #2**, Section 6, T 18 S, R 6 W, Jefferson County
5. **Booster Compressor at Well 6,** Section 8, T 18 S, R 6 W, Jefferson County
6. **Oak Grove Sales Station,** Section 7, T 18 S, R 6 West, Jefferson County
7. **Holding Tank,** Section 18, T 18 S, R 6 West, Jefferson County

STARVEACRE FIELD SITE LOCATIONS:

1. **Starveacre Water Treatment Facility,** Section 32, T 18 S, R 5 W, Jefferson County
2. **Compressor Station #4,** Section 28, T 18 S, R 5 W, Jefferson County
3. **Sales Station,** Section 28, T 18 S, R 5 W, Jefferson County
4. **Water Tank & Pump,** Section 18, T 19 S, R 9 W, Jefferson County

The project area and individual sites are shown on the attached Site Drawings, Vicinity Map, and Quadrangle Area Maps located in *Appendix B.*

The degasification wells produce methane gas which flows from the well head to separators, compressor stations, and de-hydration units prior to the entering the sales pipeline located at the sales station; approximately 4 miles west of Hueytown north of the Westwind Subdivision. Any produced oil or condensate/slop oil from the above mentioned processing of the gas is piped to slop oil tanks located at compressor sites. A typical slop oil tank is a 300 gallon HDPE storage tank that is located within a steel secondary containment system with a minimum of 110% holding capacity of the tank. Slop oil that accumulates within the tanks is collected and disposed of according to regulatory requirements as often as necessary to maintain storage and containment capacities. See McGiffert & Associates, LLC Dwg. No. 521-17 Sheet 4 of 4, for a typical well site oil separator design (*Appendix C*). In addition, water is produced from the wells and collected via a gathering system of pipelines and conveyed to the water treatment facility.

1.6.2 Facility Diagrams

§112.7(a)(3)&§112.7(b)

See *Appendix B* for the Site Drawings that include the physical layout of the facility marking the location and contents of each storage container.

1.6.3 Storage Tanks

§112.7(a)(3)(i)

OAK GROVE FIELD SITE LOCATIONS:

FACILITY/DESCRIPTION	CAPACITY	MATERIAL	CONTENTS/PRODUCT
Narrows Field Office			
Storage Tank	500	Steel	Empty
Storage Tank	500	Steel	Off Road Diesel
Storage Tank	55	Plastic	Sodium Hypochlorite
Storage Tank	55	Steel	Used Oil
Storage Tank	55	Plastic	Hydraulic Oil
Storage Tank	55	Plastic	Used Oil
Storage Tank	55	Steel	Methanol
Storage Tank	55	Steel	Methanol
Storage Tank	55	Steel	Antifreeze
Storage Tank	500	Steel	Off Road Diesel
Storage Tank	1000	Steel	Off Road Diesel
Water Treatment Facility No. 2			
Storage Tote	330 Gallon	Plastic	N/A
Storage Tank	550 Gallon	Plastic	Hydrochloric Acid

FACILITY/DESCRIPTION	CAPACITY	MATERIAL	CONTENTS/PRODUCT
Compressor Station No. 1			
Storage Tank	300 Gallon	Plastic	Water/Oil Emulsion
Storage Tank	210 BBL	Steel	Waste Oil
Storage Tote	250 Gallon	Plastic	Used Oil
Storage Tote	330 Gallon	Plastic	Anti-Freeze
Storage Tank	500 Gallon	Steel	Oil
Storage Tank	500 Gallon	Steel	Oil
Compressor Station No. 2			
Storage Tank	55 Gallon	Steel	Methanol
Storage Tank	500 Gallon	Steel	Oil
Storage Tote	330 Gallon	Plastic	Used Oil
Storage Tote	330 Gallon	Plastic	Anti-Freeze
Storage Tank	500 Gallon	Steel	Oil
Storage Tank	210 BBL	Steel	Water/Oil Emulsion
Storage Tank	300 Gallon	Plastic	Water/Oil Emulsion
Storage Tank	1,000 Gallon	Plastic	Empty
Storage Tank	550 Gallon	Steel	Empty
Storage Tank	1,000 Gallon	Steel	Empty
Storage Tank	1,000 Gallon	Steel	Empty
Oak Grove Sales Station			
Storage Tank	250 Gallon	Steel	Glycol
Holding Tank			
Storage Tank	7,600 Gallon	Plastic	Produced Water

STARVEACRE FIELD SITE LOCATIONS:

FACILITY/DESCRIPTION	CAPACITY	MATERIAL	CONTENTS/PRODUCT
Starveacre Water Treatment Facility			
Storage Tote	300 Gallon	Plastic	Empty
Storage Tank	550 Gallon	Plastic	Hydrochloric Acid
Booster Compressor at Well 6			
Storage Tank	500 Gallon	Steel	Water/Oil Emulsion
Storage Tank	250 Gallon	Steel	Oil
Storage Tank	55 Gallon	Steel	Oil (Screw Oil)
Compressor Station No. 4			
Storage Tank	500 BBL	Steel	Produced Water
Storage Tote	300 Gallon	Plastic	Anti-Freeze
Storage Tote	250 Gallon	Plastic	Oil
Storage Tank	264 Gallon	Steel	Oil
Storage Tank	264 Gallon	Steel	Oil
Sales Station			
Storage Tank	264 Gallon	Steel	Oil
Water Tank & Pump			
Storage Tank	8,800 Gallon	Steel	Produced Water

1.7 Discharge prevention

1.7.1 Discharge Prevention Measures

§112.7(a)(3)(ii)

Measures should be taken by Urban to prevent potential discharges of oil or chemicals at the facility. The following items include measures that should be evaluated to aid in preventing discharges:

- Terminal connections
- Oil or chemical transferring, loading, and unloading
- Aboveground pipeline and valves inspections
- Pipeline support design
- Aboveground pipeline protection

Terminal connections:

All pipelines with points of connection that may be used periodically and are not in service for extended periods of time should be capped or blank-flanged at the transfer point were hoses are typically attached. The securing of these terminal connections will seal the pipeline and prevent spills from an accidental opening of a valve or potential future operational modification that could inadvertently load the subject line and transfer point.

Oil or chemical transferring, loading, and unloading:

Effort should be made by Urban personnel to oversee any vendors that may load or unload oil at the facility. Before delivering any oil or chemical, the vendor should check tank levels or contact Urban personnel to verify adequate space for the delivery. Urban shall brief the vendor of proper techniques in loading the tank, including a step by step sequence of hose connection location, valve operation, and gauge level reading or tank probe alarm awareness if they exist. Unloading of oils or contained liquids by any vendor or Urban employee will be performed using sequences of hose connection, valve operation, and tank level reading that have been specifically developed for each tank or individual facility.

The transferring of oil from one tank to another through a permanent transfer pump and pipe system or through temporary hoses to a portable transfer tank should be performed in a manner approved by Urban that identifies procedures involving valve operation and sequencing of any new connections. Signs will be posted at the facility that will remind and prevent the moving of portable tanks connected to vehicles prior to properly disconnecting transfer hoses and closing valves. The intent of the postings should direct the operating personnel to examine the fittings, connections, valves, pipelines, hoses, and drains for any signs of potential leaks before loading/unloading or departure.

Aboveground pipeline and valves inspections:

Valves and piping will be inspected on a normal schedule to evaluate and record their condition as well as associated flanges, expansion joints, pipe supports, locking valves status, and leaking residue at locations where there is a potential for leaking. These inspections should be performed by Urban personnel that are familiar with the piping system operation and product that is being piped. The results of the inspection should be recorded on the attached form located in *Appendix F*.

Pipeline support design:

Effort should be taken when designing or maintaining pipeline supports to evaluate material use and the potential for abrasion and corrosion. Cushions should be utilized between the piping and the support to reduce the potential for leaks caused by corrosion or abrasion.

Aboveground pipeline protection:

Guardrails, guard posts, or other barriers should be used to protect any above ground piping from traffic when a potential for damage exists. Structurally competent protection as well as warning signs should especially be implemented in areas where piping is located outside of the secondary containment.

1.7.2 Secondary Containment Structures

§112.7(a)(3)(iii) &112.8(b)(1 and 2)

This plan provides for the containment of various sizes of fuel, oil, gasoline, waste oil and chemical tanks whose construction material is compatible with the product being stored and are located above ground at the facilities. The area around the above ground tanks is enclosed by a complete drainage trench and/or containment dike or wall arranged so that the spill will terminate and be safely confined within the retaining walls or in a containment area. The aboveground tanks at the facility sites are shown on the attached facility diagrams located in *Appendix B*, and are located within secondary containment areas constructed with an earthen soil berm and in limited locations steel or concrete may be used.

The earthen containment berms are made of a clayey soil with a low permeability and will be maintained with like cohesive soil material as needed when repairs are required due to settlement or damage that might reduce the holding capacity. The earthen berms should not exceed a 2 to 1 (Horizontal to Vertical) slope embankment with a top minimum width of 2 feet. Protection of the soil containment berm from erosion and weathering is maintained and consists of a stabilizing stone cover or HDPE plastic material.

The secondary containment areas have been sized to provide a minimum of 110 percent of the largest tank or greater and noted on the facility diagrams. A spill or inadvertent release from the tanks will be contained within the secondary containment area. Any spill or leak will be properly removed and the containment area cleaned to provide for the required storage capacity and prevent collected stormwater contamination.

Small amounts of precipitation will evaporate or absorb into a soil bottom, however drainage of stormwater could be required at impermeable secondary containment structures or earthen containment structures when significant amounts of precipitation occurs. A secondary containment drain exists within most of the containment areas to allow for draining accumulated stormwater. All drain valves will stay closed in a locked position, or will be plugged and capped. Any stormwater will be inspected for the presence of oil or other chemicals that could contaminate the water or create a sheen that is visible. Any presence of a sheen or contaminate will require further investigation, sampling, and potential cleanup prior to a release of the stormwater. The containment area should be inspected at a regularly scheduled frequency for the presence of stormwater that would reduce the capacity of the containment area in the case of a spill.

The routine secondary containment inspection will be performed utilizing the attached Secondary Containment Inspection Checklist located in *Appendix D*, and any release of drainage from the secondary containment will be recorded on the attached Secondary Containment Drainage Report located in *Appendix E*.

1.7.3 Diversionary Structures and Equipment *§112.7(c)*

Urban has six compressor station sites, three water treatment facilities, two sales stations, and two tank sites presently in use. The typical compressor station site has provisions for compressors and associated storage tanks. Each compressor should be equipped with a skid "drip pan" which drains to an Oil Water Emulsion sump tank that is steel. In addition, there is typically an oil lube tank located adjacent to the compressor skid along with secondary containment. Any drips or leaks from the compressor for piping and fittings is collected by the skid "drip pan" and stored in the slop tank that is regularly monitored and scheduled for removal of product when 50 percent capacity is reached.

Individual sites that contain storage tanks and secondary containment consisting of earthen berms have been graded so that stormwater is diverted away from structures to the site discharge point(s). Only rain that falls directly into the containment areas at these locations is collected within the containment areas, and adjacent stormwater runoff is diverted around these areas to protected discharge points that utilize vegetation or rip-rap to reduce stormwater velocity prior to discharge.

Well site locations are initially constructed with a reserve pit and a berm around the perimeter of the work area which allows drainage to the reserve pit. The reserve pit and berm will be utilized during the drilling and completion operations. These will serve to contain spills of oil, chemicals, or drilling fluids. See McGiffert and Associates, LLC Dwg. No. 521-17 sheet 1 of 4, for a typical well site plan during drilling/completion (*Appendix C*). The reserve pit will be constructed to have a retention volume to contain all spills within the well site and still maintain a 2 foot freeboard. In the event the reserve pit cannot maintain an operating level of 3 feet, the pit will be pumped down and the fluid removed to an approved disposal facility or a second pit will be constructed. See McGiffert and Associates, LLC Dwg. 521-17 sheet 2 of 4, for Retention Structure Design Data (*Appendix C*). Once the well site has been completed and is ready to enter production, the site will be grassed and stabilized around the perimeter. See McGiffert and Associates, LLC Dwg. No. 521-17 sheet 3 of 4, for a typical completed well site (*Appendix C*).

1.7.4 Experience Indicating Potential Failure *§112.7(b)*

Experience does not indicate a potential for equipment failure at the facility sites. If equipment used in the loading or unloading of oils or chemicals causes a tank to overflow, rupture, or leak; the equipment should be evaluated for issues that could occur in a similar fashion in the future. If this occurs at any of the sites, this plan should be updated to include a prediction of the failure and associated possible flow rate, total quantity, and direction of spill release travel.

1.8 Spill Response and Cleanup *§112.7(a)(iv)*

1.8.1 Response *§112.7(a)(4) & §112.7(a)(5)*

In the event of an oil or chemical spill call the person listed on the contact list located in section 1.4 of this SPCC to receive further instructions. The employee on duty will be trained to attempt to stop the continuation of the discharge. Urban shall maintain onsite or have readily available flotation booms and sufficient material to contain and absorb fuel and chemical spills and leaks. A

record of response equipment inspections located in *Appendix J* will be maintained to insure proper materials, accessibility, and operation.

ADEM must be notified when 300 c.y. of material is contaminated by a petroleum spill or when the reportable quantity of a chemical is spilled. Report the following information:

1. Name, address, and telephone number of person reporting spill
2. Exact location of facility and spill
3. Company name, telephone number, and address
4. Material spilled
5. Estimated quantity
6. Source of spill
7. Cause of spill
8. Nearest down-stream body of water to receive spill
9. Request actions to take for containment and clean-up

In the event of a discharge or spill take the following actions:

1. Take prompt necessary measures to stop the discharge such as turning of pumps, shutting valves, or isolating lines.
2. Identify the source of the discharge, type of liquid discharged, and an approximate volume of discharge.
3. Evaluate the possibility of a fire hazard to inform the Fire Department accordingly.
4. Evaluate the potential risks to persons located on property surrounding the discharge. Notify emergency personnel accordingly.
5. Take action to contain the discharge on site by use of temporary dams or absorbent materials such as sand, booms, or pads to soak up and contain the spill in place.
6. Once the spill is contained, place the absorbed material in appropriate drums on the site prior to properly disposing in an ADEM approved manner

1.8.2 Cleanup

§112.7(a)(4) & §112.7(a)(5) & §112.8(c)(10)

If a spill, either within or adjacent to the containment structures, should occur, the usable oil or chemical will immediately be transferred to other storage containers. The unusable wastes resulting from oil or chemical spills will be treated, disposed of and/or reused in accordance with applicable Alabama Department of Environmental Management (ADEM) regulations.

Records documenting oil or chemical spills will be maintained for a minimum of three years by the General Manager. The records document should include dates of spills, corrective actions, disposal records, characterization records, and clean-up procedures. It will also include the cause of the spill and the corrective actions to prevent its reoccurrence. See *Appendix H* of this plan for the Spill Incident Report Form.

1.9 Inspections Tests and Records

§112.7(e)

Urban will take an active approach with evaluations to prevent the potential for a discharge of oil or other related chemicals at the facility. This includes the evaluation and recording required by Secondary Containment Inspection Checklist (*Appendix D*), the Secondary Containment Drainage Report (*Appendix E*), the Tank & Piping Inspection Checklist (*Appendix F*), and the Annual Inspection Record (*Appendix G*). The secondary containment, tanks, piping, and containment drainage should be inspected on a quarterly basis by the facility site supervisor. All of the facilities should be inspected on an annual basis, following the annual inspection record located in *Appendix G*, by the facility site supervisor and the field manager or appointed representative to identify any potential issues not recognized during the quarterly inspections.

Urban shall properly maintain tanks and keep them in good condition. Tanks should be subject to periodic integrity testing, taking into account tank design and using such techniques as hydrostatic testing, visual inspection or a system of non-destructive shell thickness testing. Comparison records should be kept where appropriate, and tank supports and foundations should be included in these inspections. In addition, the outside of the tank should frequently be observed by operating personnel for signs of deterioration, leaks which might cause a spill, or accumulation of oil inside dike areas.

1.10 Security

§112.7(g)

Urban is aware that the implementation of security measures at facility sites must be tailored to specific needs based on equipment conditions, construction activities, and the surrounding residents. Each site has been examined for the adequacy of implemented security measures and the need of additional measures will be regularly monitored. In the event that additional security measures are required at a facility site, Urban will immediately implement the necessary additions in order to protect the site, equipment, and attempt to prevent possible discharge that could occur due to vandalism. The following security measures are currently in place or will be implemented at the facility sites:

1. Fences – security fences around the perimeter of the sites have been constructed to restrict access
2. The secondary containment areas that are equipped with a drain are closed and in the locked position. Drains without a valve have been plugged with a cap.
3. Master flow valves are securely locked in the closed position to reduce the potential for vandalism.
4. The facility sites are illuminated after dark by lights so that a discharge may be discovered and vandalism discouraged.

1.11 Impracticality

§112.7(d)

The measures noted in 40 CFR 112 are practical and relative to this Plan.

1.12 Conformance and Deviation

1.12.1 Conformance with Rule Requirements *§112.7(a)(1)&(2)*

Urban has prepared this plan with the intention to conform to all the requirements set forth in 40 CFR Part 112. Urban has attempted to operate and maintain the facility covered by this plan in accordance with this plan and all State of Alabama and Federal regulations regarding spill prevention control and countermeasure requirements.

1.12.2 Conformance with Other Applicable Requirements *§112.7(j)*

This SPCC Plan conforms to the requirements set forth by the 40 CFR 112. This Plan does not incorporate any additional requirements of the city or county in which the facility is located. If Urban becomes aware of any deviations following the implementation of this plan, Urban will review and amend the plan as necessary.

SECTION TWO

Onshore Facilities

(excluding production facilities)

2.0 General Requirements

§112.8(a)

Urban shall operate in compliance with the requirements of Section 112.7, as outlined in this SPCC Plan, and the specific discharge prevention and containment listed in Section 112.8 as set forth below.

2.1 Facility Drainage

§112.8(b)(1&2)

2.1.1 Drainage from Diked Areas

Drainage within diked areas is discussed in detail in Section 1.7.2. Flapper valves are not used in secondary containments areas.

2.1.2 Drainage from Undiked Areas

A majority of aboveground piping is located within the secondary containment area and will be contained if a leak occurs. Areas outside of the containment areas are where piping is underground. The location where loading of portable tanks or trucks occur within a diversionary structure area and the potential for a discharge is discussed in Section 1.7.1 of this Plan.

2.2 Bulk Storage Containers

§112.8(c)(1)

The storage tanks located at the facility sites are constructed of steel, plastic, and fiberglass, which are appropriate materials used for storing petroleum and chemical products under variable climate temperatures. The tanks used have been designed not to add pressure to the tank other than from the petroleum contained within it.

2.3 Secondary Containment Areas

2.3.1 Containment Area Capacity

§112.8(c)(2)

The area around the above ground tanks is enclosed by a complete diversionary structure and/or containment dike or wall arranged so that the spill will terminate and be safely confined within the retaining walls or in a containment area. The containment area exceeds the volume of the largest tank by 10%. This is addressed in section 1.7.2 of this plan.

2.3.2 Containment Stormwater Control

§112.8(c)(3)

This is addressed in section 1.7.2 of this plan and provides a method of inspection and discharge of precipitation in accordance with the sheen rule and 40 CFR 112.7(a)(3)(iii).

2.4 Tank Protection and Testing

§112.8(c)(4&5)

There are no underground or partially buried storage tanks at this facility. A concrete pad and metal containment have been provided at each compressor location to collect operation residuals from the compressor skids. The concrete collection systems will be visually inspected on a regularly as needed basis to determine the required maintenance. The concrete and metal collection systems are open to atmospheric pressure; therefore, leaks should be visible on the surface of the structure.

2.5 Leakage from Heating Coils

§112.8(c)(7)

Heating coils are not used at this facility.

2.6 Update or Engineer Containers to Avoid Discharge

§112.8(c)(8)(iv)

Urban uses direct vision gauges and visual gauging as a fast response system for determining the liquid level of bulk storage containers. An Urban employee must be present to monitor the filling, unloading, and transfer operations of each bulk storage container.

2.7 Visual Observation Requirements

§112.8(c)(9)

Urban does not use an oil effluent treatment system at this facility.

2.8 Promptly Address Visual Discharges

§112.8(c)(10)

This is addressed in section 1.7.2 of this plan. Any visual discharge resulting in a loss of a petroleum product or chemical from a container seam, gasket, piping, pump, valves, rivets, bolts, or any other connection to the container should be immediately cleaned up. The containment area should also be cleaned as well to remove any accumulation or liquid and prevent contamination with stormwater or soaking into an earthen containment area.

2.9 Mobile or Portable Storage Containers

§112.8(c)(11)

Urban utilizes aboveground storage containers that are within the secondary containment areas which are shown on the schematic drawings located in *Appendix B* of this Plan. Any portable containers used will be loaded and unloaded as discussed in section 1.7.1 of this plan.

2.10 Facility Transfer Operations

§112.8(d)(1,2,& 4)

Loading and/or off-loading of oils or chemicals to and/or from transport vehicles will meet applicable requirements of the Occupational Safety and Health Administration and the Department of Transportation. Truck drivers should follow correct operating procedures when unloading diesel fuel, gasoline, waste oil and chemicals and stay with the equipment at all times during unloading operations. Periodic visual inspection of liquid level indicators will be performed by the assigned Production Supervisor, or his designee, to help reduce the likelihood of an accidental spill. Periodic inspection of transport unloading hoses, the replacement of hoses as necessary, and use of the proper hose drainage procedure to prevent hose rupture during unloading and spillage from hoses after disconnection will be implemented as preventive operation procedures. All aboveground valves, piping and appurtenances will be regularly inspected to assess the general condition. All aboveground storage tanks, valves, aboveground piping, spill containment, dispensers, and emergency response equipment and supplies will be inspected and a log will be maintained in the forms found in *Appendix D, F, and J* to record the inspections. Urban will visually examine and pressure test individual elements as frequently as needed to insure preventive maintenance practices.

APPENDIX A
Log of Plan Review and Amendments

Log of Plan Review & Amendments

Urban Oil & Gas Group, LLC - The Narrows Facility

Jefferson & Tuscaloosa Counties

Facility 5 Year Reviews

Complete Plan Review and Evaluation Required every 5 years from initial development or previous review

Review and Evaluation Date	Name, Title, Signature	Plan Amendment Required (Yes/No)	Description of Review/Amendment	Amendment			
				Date	Pages	PE Cert (Yes/No)	Implemented Date

This SPCC Plan should be reviewed and amended in accordance with 112.5 when there is a change in the facility design, construction, operational maintenance that materially affects its potential for a discharge or at least once every five years.

Facility Changes Record

Have changes to the facility design, construction, operation, or maintenance occurred

2019			2019			2019			2020			2020		
Quarterly Check (Date)	Yes	No	Quarterly Check (Date)	Yes	No	Quarterly Check (Date)	Yes	No	Quarterly Check (Date)	Yes	No	Quarterly Check (Date)	Yes	No

- If Yes Review and Evaluation Required
- If no Plan is Current

Log of Plan Review & Amendments

Urban Oil & Gas Group, LLC – The Narrows Facility

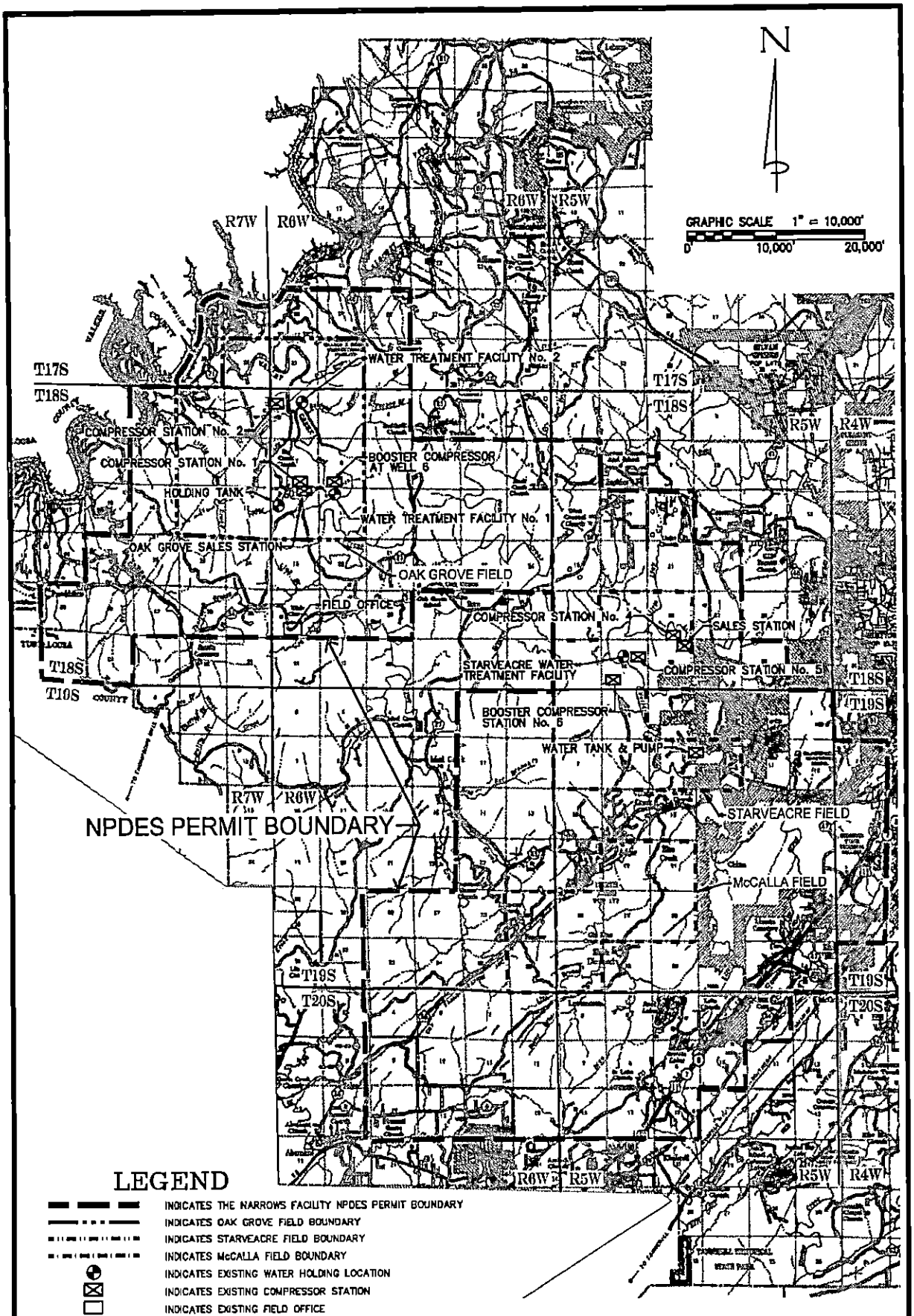
Jefferson & Tuscaloosa Counties

Facility Changes Review/Amendment

Facility Changes		Review and Evaluation of Plan (Date)	Name, Title, Signature	Plan Amendment Required (Yes/No)	Description of Review/Amendment	Amendment			
Date	Description					Date	Pages	PE Cert (Yes/No)	Implemented Date

APPENDIX B
Site Drawings

VICINITY MAP



LEGEND

- INDICATES THE NARROWS FACILITY NPDES PERMIT BOUNDARY
- INDICATES OAK GROVE FIELD BOUNDARY
- INDICATES STARVEACRE FIELD BOUNDARY
- INDICATES McCALLA FIELD BOUNDARY
- INDICATES EXISTING WATER HOLDING LOCATION
- INDICATES EXISTING COMPRESSOR STATION
- INDICATES EXISTING FIELD OFFICE

THIS DRAWING IS A REPRODUCTION OF THE ALABAMA JEFFERSON & TUSCALOOSA COUNTIES HIGHWAY MAP.

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TUSCALOOSA, ALABAMA 35402-0559
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VICINITY MAP

REVISION

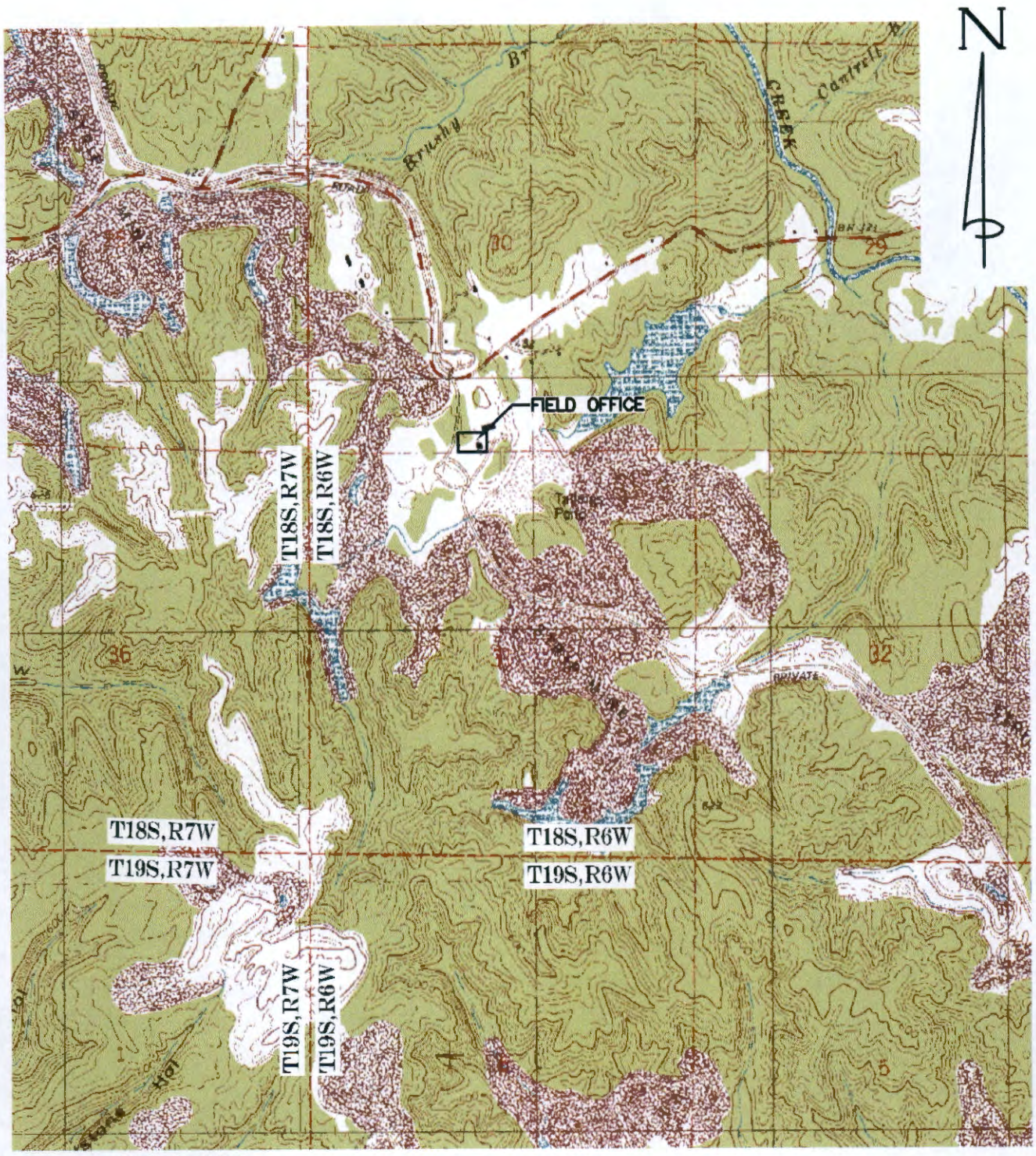
DATE	DESCRIPTION	BY
7/24/18	GENERAL REVISIONS	D D H

URBAN OIL & GAS GROUP, LLC
THE NARROWS FACILITY
COALBED METHANE PROJECT

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-Narrows-SPCC17-WDMP		SHEET No. 1 of 1	
DATE OF FIELD SURVEY: N/A	JOB No. 17-3109	CHECKED BY: QHS	DWG. No. 522-17
FIELD BOOK: N/A	SCALE: 1"=10,000'		
PAGE: N/A	DRAWN BY: D D H		

QUADRANGLE AREA MAPS



LEGEND

- INDICATES EXISTING WATER HOLDING LOCATION
- INDICATES EXISTING COMPRESSOR STATION
- INDICATES EXISTING FIELD OFFICE

GRAPHIC SCALE 1" = 2,000'

0' 2,000' 4,000'

REPRODUCTION OF A PORTION OF US GEOLOGICAL SURVEY QUADRANGLE SHEET OAK GROVE ALABAMA

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THE NARROWS FACILITY
COALBED METHANE PROJECT

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

QUADRANGLE AREA MAP

REVISION

DATE	DESCRIPTION	BY

SCALE: 1"=2,000'
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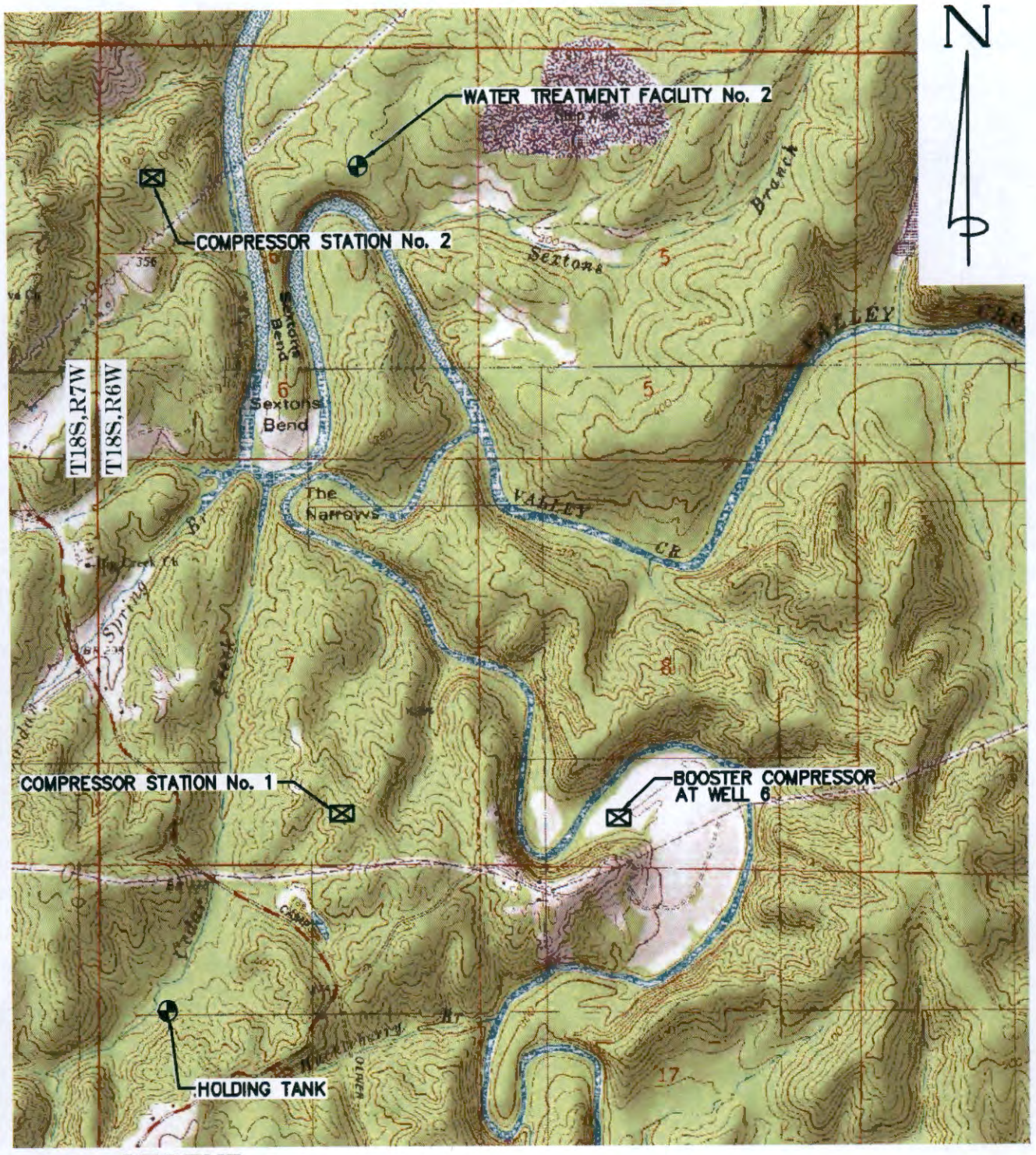
FB. N/A PG. N/A
DRAWN BY: D D H
JOB No. 17-3109
FILE NAME: URBAN-Narrows-SPCC17-Quad
SHEET No. 1 of 3
CHECKED BY: QHS
DWG. No. 519-17



LEGEND

INDICATES EXISTING WATER HOLDING LOCATION

INDICATES EXISTING COMPRESSOR STATION

GRAPHIC SCALE 1" = 2,000'

0' 2,000' 4,000'

REPRODUCTION OF A PORTION OF US GEOLOGICAL SURVEY QUADRANGLE SHEET OAK GROVE ALABAMA

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THE NARROWS FACILITY
COALBED METHANE PROJECT

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

QUADRANGLE AREA MAP

REVISION

DATE	DESCRIPTION	BY

SCALE: 1"=2,000'
DATE OF FIELD SURVEY: N/A
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JOB No. 17-3109
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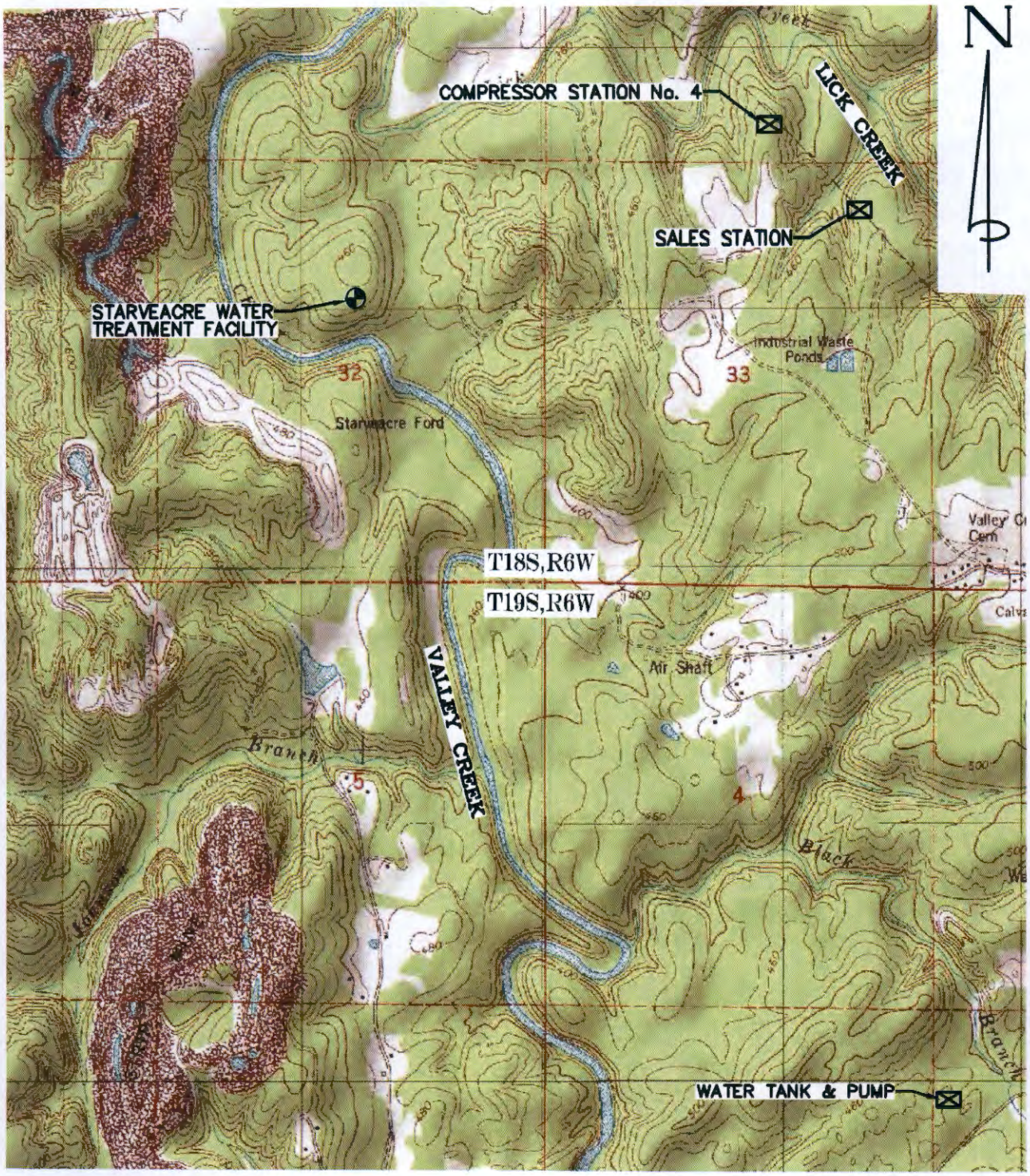
SHEET No. 2 of 3
CHECKED BY: QHS
DWG. No. 519-17



LEGEND

INDICATES EXISTING WATER HOLDING LOCATION

INDICATES EXISTING COMPRESSOR STATION

GRAPHIC SCALE 1" = 2,000'

0' 2,000' 4,000'

REPRODUCTION OF A PORTION OF US GEOLOGICAL SURVEY QUADRANGLE SHEET CONCORD ALABAMA

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THE NARROWS FACILITY
COALBED METHANE PROJECT

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

QUADRANGLE AREA MAP

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

SCALE: 1"=2,000'
DATE OF FIELD SURVEY: N/A
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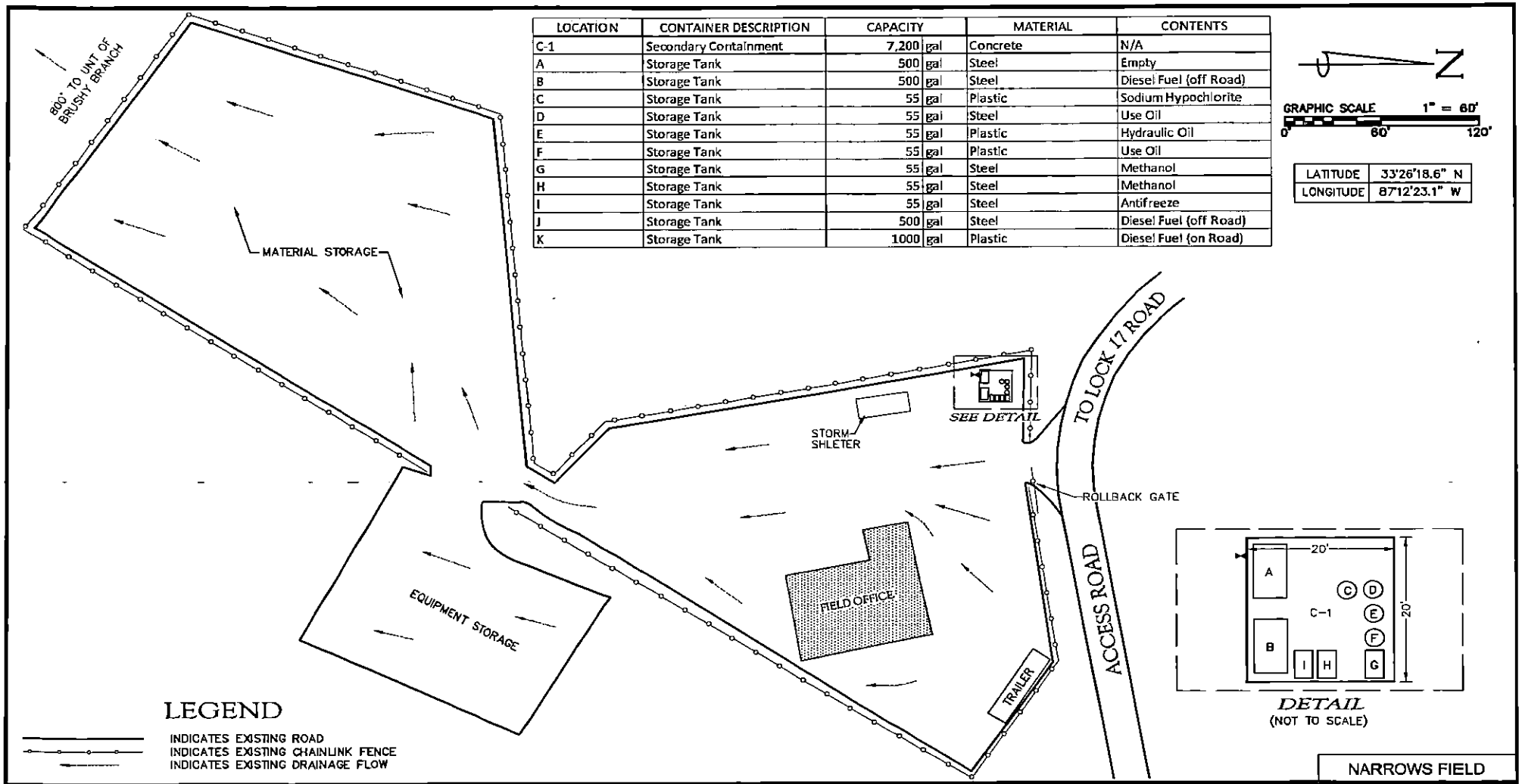
DRAWN BY: D D H
JOB No. 17-3109
FILE NAME: URBAN-Narrows-SPCC17-Quad
SHEET No. 3 of 3
CHECKED BY: QHS
DWG. No. 519-17

TOPOGRAPHICAL LAYOUT DRAWINGS



LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	7,200 gal	Concrete	N/A
A	Storage Tank	500 gal	Steel	Empty
B	Storage Tank	500 gal	Steel	Diesel Fuel (off Road)
C	Storage Tank	55 gal	Plastic	Sodium Hypochlorite
D	Storage Tank	55 gal	Steel	Use Oil
E	Storage Tank	55 gal	Plastic	Hydraulic Oil
F	Storage Tank	55 gal	Plastic	Use Oil
G	Storage Tank	55 gal	Steel	Methanol
H	Storage Tank	55 gal	Steel	Methanol
I	Storage Tank	55 gal	Steel	Antifreeze
J	Storage Tank	500 gal	Steel	Diesel Fuel (off Road)
K	Storage Tank	1000 gal	Plastic	Diesel Fuel (on Road)

GRAPHIC SCALE 1" = 60'
0' 60' 120'

LATITUDE	33°26'18.6" N
LONGITUDE	87°12'23.1" W

NARROWS FIELD

McGiffert and Associates, LLC
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SCHEMATIC DRAWING

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

THE NARROWS FACILITY COALBED METHANE PROJECT

THE NARROWS FIELD OFFICE

SECTION 30 & 31, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM		SHEET No. 1 of 11	
DATE OF FIELD SURVEY: 6-17-14	JOB No. 17-3109	CHECKED BY: QHS	DWG. No. 520-17
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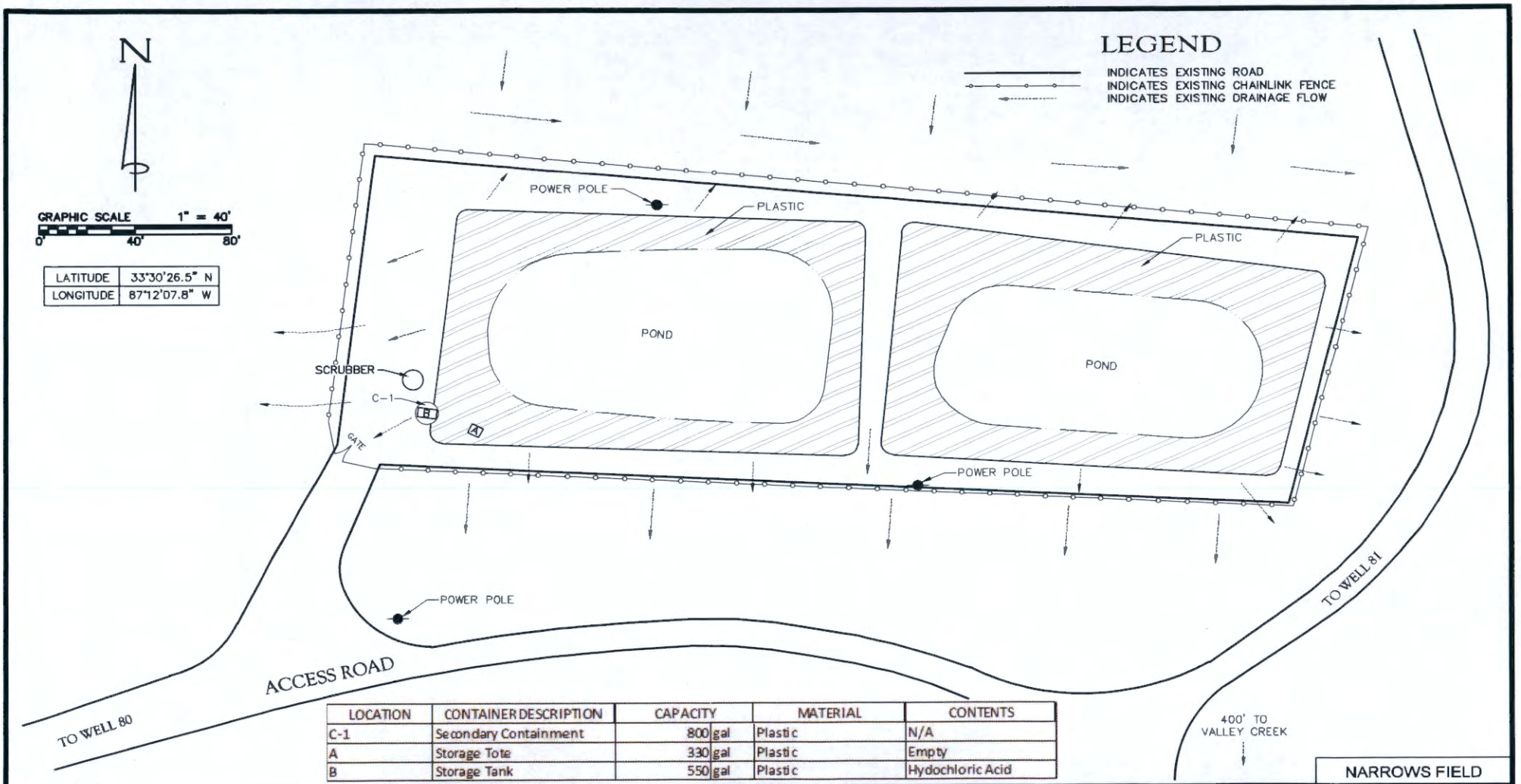

LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	800 gal	Plastic	N/A
A	Storage Tote	330 gal	Plastic	Empty
B	Storage Tank	550 gal	Plastic	Hydochloric Acid

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SCHEMATIC DRAWING

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

THE NARROWS COALBED METHANE PROJECT

WATER TREATMENT FACILITY NO. 2

SECTION 6, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM
DATE OF FIELD SURVEY: 6-17-14
FIELD BOOK: N/A
PAGE: N/A
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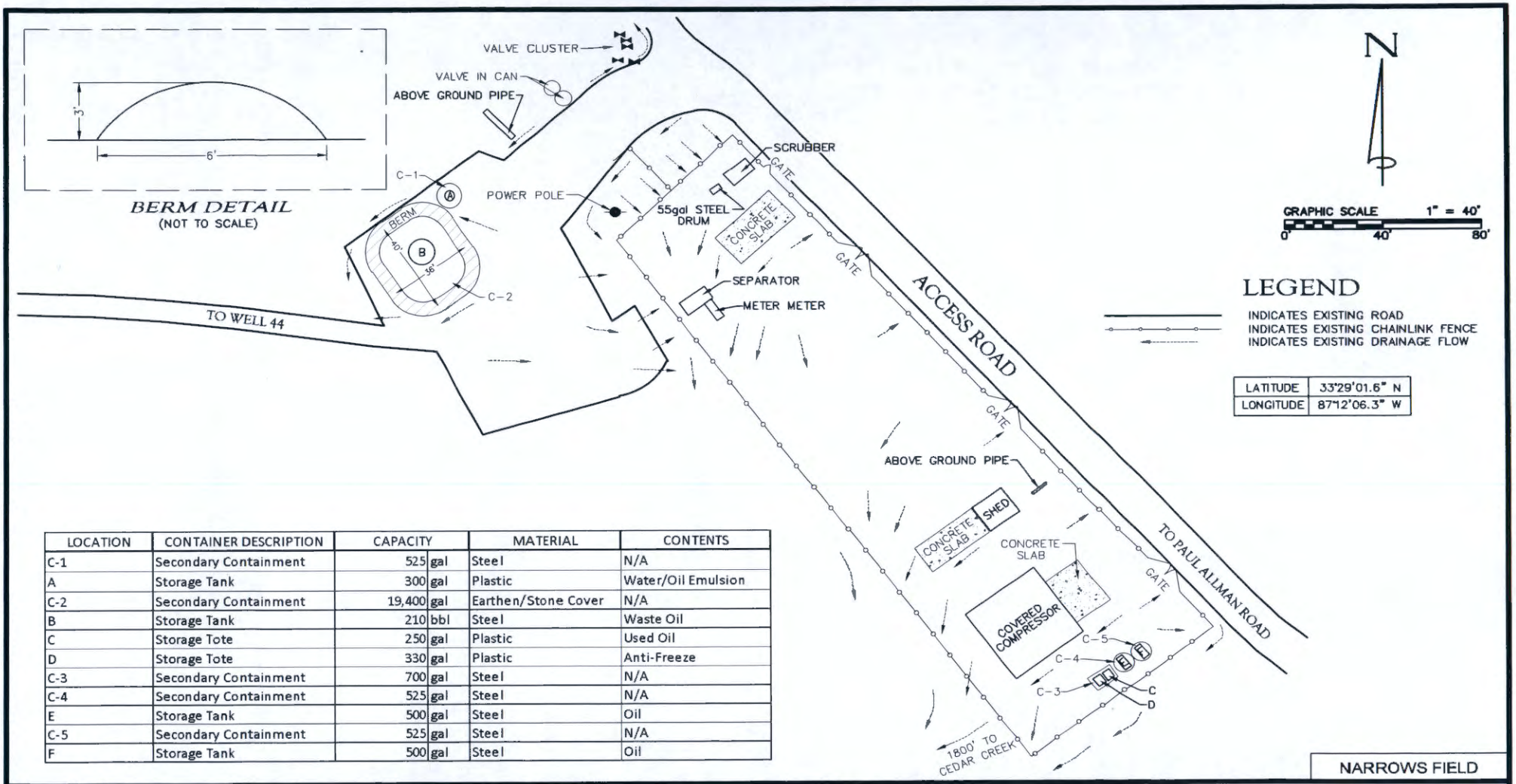
CHECKED BY: QHS
SHEET No. 2 of 11
DWG. No. 520-17



LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	525 gal	Steel	N/A
A	Storage Tank	300 gal	Plastic	Water/Oil Emulsion
C-2	Secondary Containment	19,400 gal	Earthen/Stone Cover	N/A
B	Storage Tank	210 bbl	Steel	Waste Oil
C	Storage Tote	250 gal	Plastic	Used Oil
D	Storage Tote	330 gal	Plastic	Anti-Freeze
C-3	Secondary Containment	700 gal	Steel	N/A
C-4	Secondary Containment	525 gal	Steel	N/A
E	Storage Tank	500 gal	Steel	Oil
C-5	Secondary Containment	525 gal	Steel	N/A
F	Storage Tank	500 gal	Steel	Oil

NARROWS FIELD

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SCHEMATIC DRAWING

REVISION

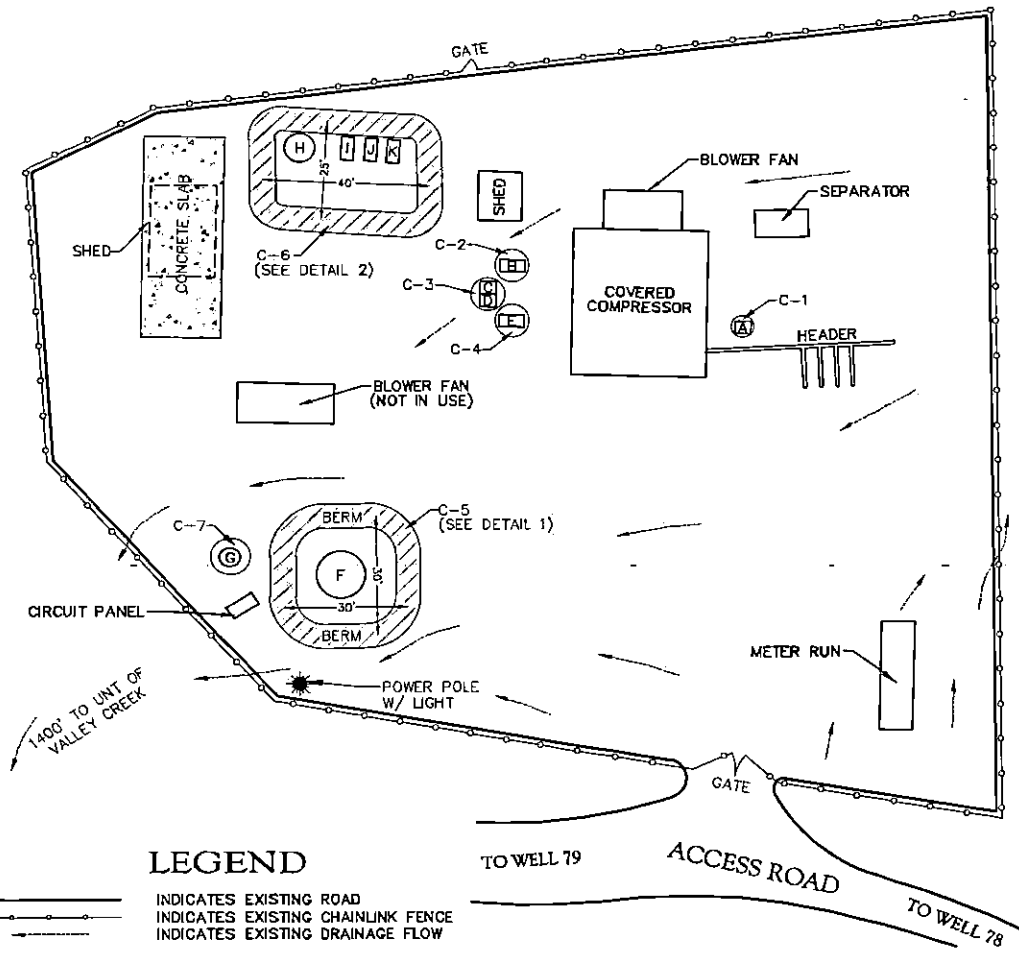
DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

THE NARROWS COALBED METHANE PROJECT

COMPRESSOR STATION NO. 1

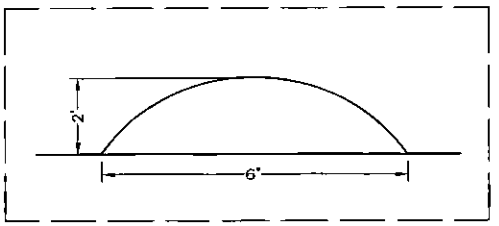
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM
DATE OF FIELD SURVEY: 6-17-14
FIELD BOOK: N/A
PAGE: N/A
JOB No. 17-3109
SCALE: 1"=40'
DRAWN BY: D D H
CHECKED BY: QHS
SHEET No. 3 of 11
DWG. No. 520-17

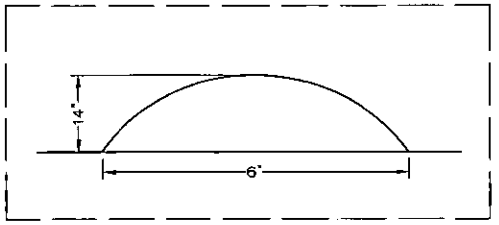


LEGEND

- INDICATES EXISTING ROAD
- INDICATES EXISTING CHAINLINK FENCE
- INDICATES EXISTING DRAINAGE FLOW



BERM DETAIL 1
(NOT TO SCALE)



BERM DETAIL 2
(NOT TO SCALE)

N

GRAPHIC SCALE 1" = 30'
0' 30' 60'

LATITUDE	33°30'25.2" N
LONGITUDE	87°12'38.1" W

LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	525 gal	Plastic	N/A
A	Storage Tank	55 gal	Steel	Methanol
C-2	Secondary Containment	525 gal	Steel	N/A
B	Storage Tank	500 gal	Steel	Oil
C-3	Secondary Containment	525 gal	Steel	N/A
C	Storage Tote	330 gal	Plastic	Used Oil
D	Storage Tote	330 gal	Plastic	Anti-Freeze
C-4	Secondary Containment	525 gal	Steel	N/A
E	Storage Tank	500 gal	Steel	Oil
C-5	Secondary Containment	10,900 gal	Earthen/Stone Cover	N/A
F	Storage Tank	210 bbl	Steel	Water/Oil Emulsion
C-6	Secondary Containment	7,100 gal	Earthen/Stone Cover	N/A
C-7	Secondary Containment	525 gal	Steel	N/A
G	Storage Tank	300 gal	Plastic	Water/Oil Emulsion
H	Storage Tank	1,000 gal	Plastic	Empty
I	Storage Tank	550 gal	Steel	Empty
J	Storage Tank	1,000 gal	Steel	Empty
K	Storage Tank	1,000 gal	Steel	Empty

NARROWS FIELD

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REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H
3/13/19	GENERAL UPDATE	D D H

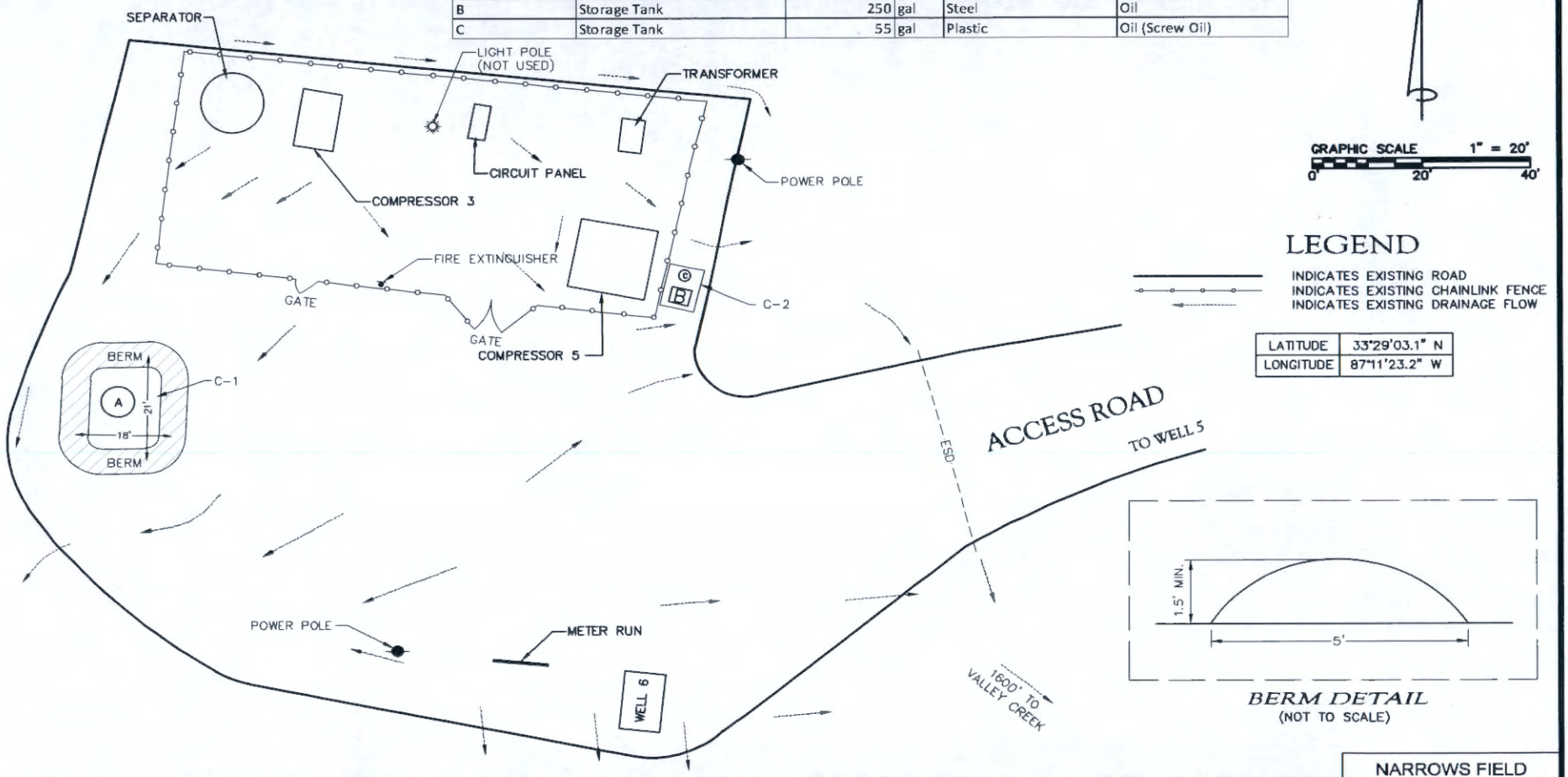
THE NARROWS COALBED METHANE PROJECT

COMPRESSOR STATION NO. 2

SECTION 6, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM		SHEET No. 4 of 11	
DATE OF FIELD SURVEY: 6-17-14	JOB No. 17-3109	CHECKED BY: QHS	DWG. No. 520-17
FIELD BOOK: N/A	SCALE: 1"=30'		
PAGE: N/A	DRAWN BY: D D H		

LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	800 gal	Earthen/Stone Cover	N/A
A	Storage Tank	500 gal	Plastic	Water/Oil Emulsion
B	Storage Tank	250 gal	Steel	Oil
C	Storage Tank	55 gal	Plastic	Oil (Screw Oil)



LATITUDE	33°29'03.1" N
LONGITUDE	87°11'23.2" W

BERM DETAIL
(NOT TO SCALE)

NARROWS FIELD

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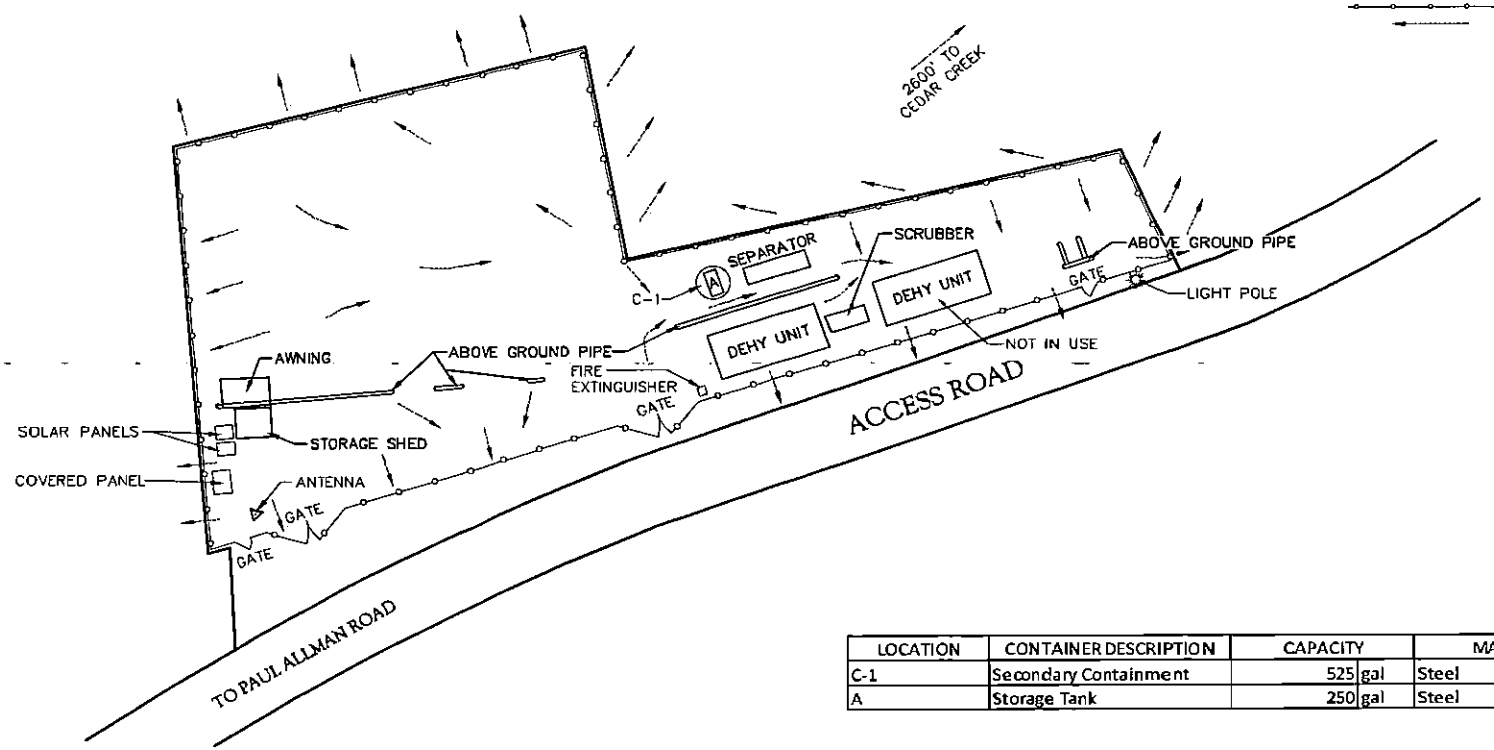
DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

THE NARROWS COALBED METHANE PROJECT

BOOSTER COMPRESSOR AT WELL 6

SECTION 8, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM		SHEET No. 5 of 11	
DATE OF FIELD SURVEY: 1-18-18	JOB No. 17-3109	CHECKED BY: QHS	DWG. No. 520-17
FIELD BOOK: N/A	SCALE: 1"=20'		
PAGE: N/A	DRAWN BY: D D H		



GRAPHIC SCALE 1" = 30'
0' 30' 60'

LEGEND

INDICATES EXISTING ROAD
INDICATES EXISTING CHAINLINK FENCE
INDICATES EXISTING DRAINAGE FLOW

LATITUDE	33°28'57.7" N
LONGITUDE	87°12'03.7" W

LOCATION	CONTAINER DESCRIPTION	CAPACITY		MATERIAL	CONTENTS
C-1	Secondary Containment	525	gal	Steel	N/A
A	Storage Tank	250	gal	Steel	Glycol

NARROWS FIELD

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DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H
3/13/19	GENERAL UPDATE	D D H

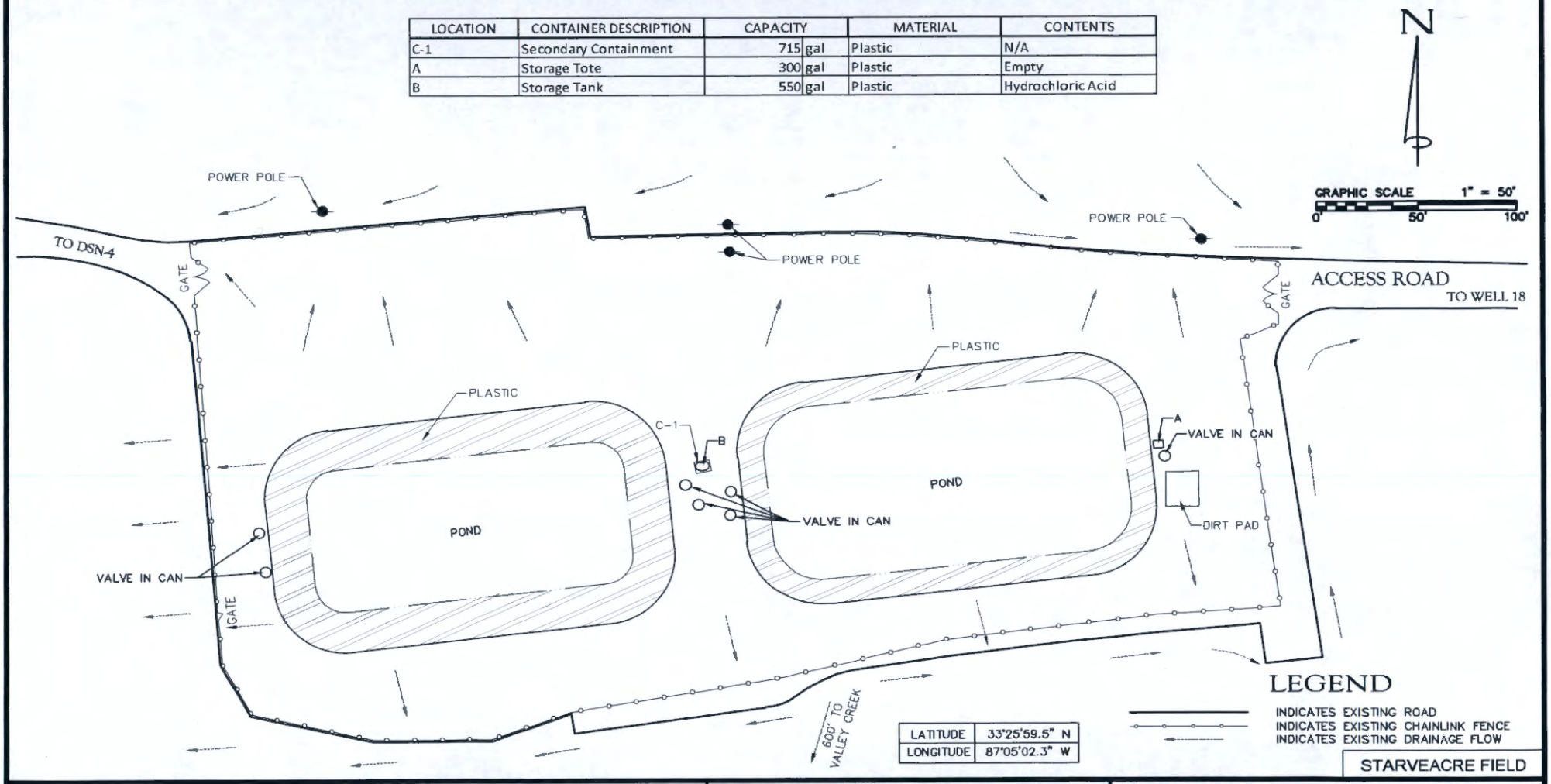
THE NARROWS COALBED METHANE PROJECT

OAK GROVE SALES STATION

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM
DATE OF FIELD SURVEY: 6-17-14
FIELD BOOK: N/A
PAGE: N/A
JOB No. 17-3109
SCALE: 1"=30'
DRAWN BY: D D H
CHECKED BY: QHS
SHEET No. 6 of 11
DWG. No. 520-17

LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	715 gal	Plastic	N/A
A	Storage Tote	300 gal	Plastic	Empty
B	Storage Tank	550 gal	Plastic	Hydrochloric Acid



LATITUDE	33°25'59.5" N
LONGITUDE	87°05'02.3" W

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SCHEMATIC DRAWING

REVISION

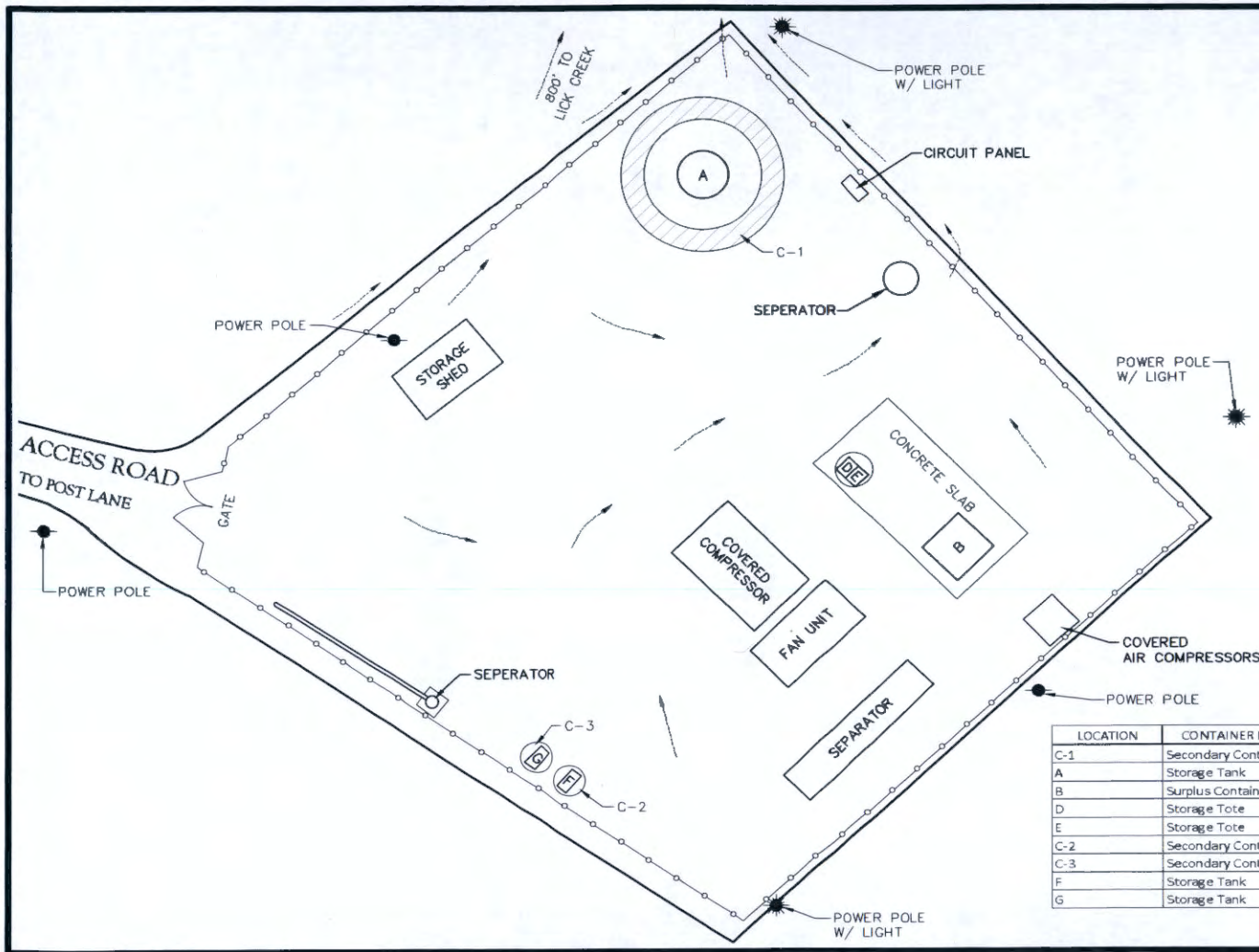
DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

THE NARROWS COALBED METHANE PROJECT

STARVE ACRE WATER TREATMENT FACILITY

SECTION 32, TOWNSHIP 18 SOUTH, RANGE 5 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM
DATE OF FIELD SURVEY: 6-10-14
FIELD BOOK: N/A
PAGE: N/A
JOB No. 17-3109
SCALE: 1"=50'
DRAWN BY: D D H
SHEET No. 7 of 11
CHECKED BY: QHS
DWG. No. 520-17



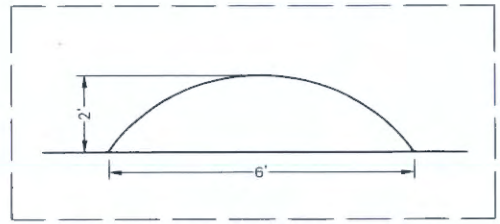
GRAPHIC SCALE 1" = 30'

0' 30' 60'

LEGEND

INDICATES EXISTING ROAD
INDICATES EXISTING CHAINLINK FENCE
INDICATES EXISTING DRAINAGE FLOW

LATITUDE	33°26'17.3" N
LONGITUDE	87°03'54.7" W



BERM DETAIL
(NOT TO SCALE)

LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	10,500 gal	Earthen/Stone Cover	N/A
A	Storage Tank	500 bbl	Steel	Produced Water
B	Surplus Containments	N/A	Steel/Plastic	N/A
D	Storage Tote	300 gal	Plastic	Anti-Freeze
E	Storage Tote	250 gal	Steel	Oil
C-2	Secondary Containment	526 gal	Steel	N/A
C-3	Secondary Containment	526 gal	Steel	N/A
F	Storage Tank	264 gal	Steel	Oil
G	Storage Tank	264 gal	Steel	Oil

STARVEACRE FIELD

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REVISION

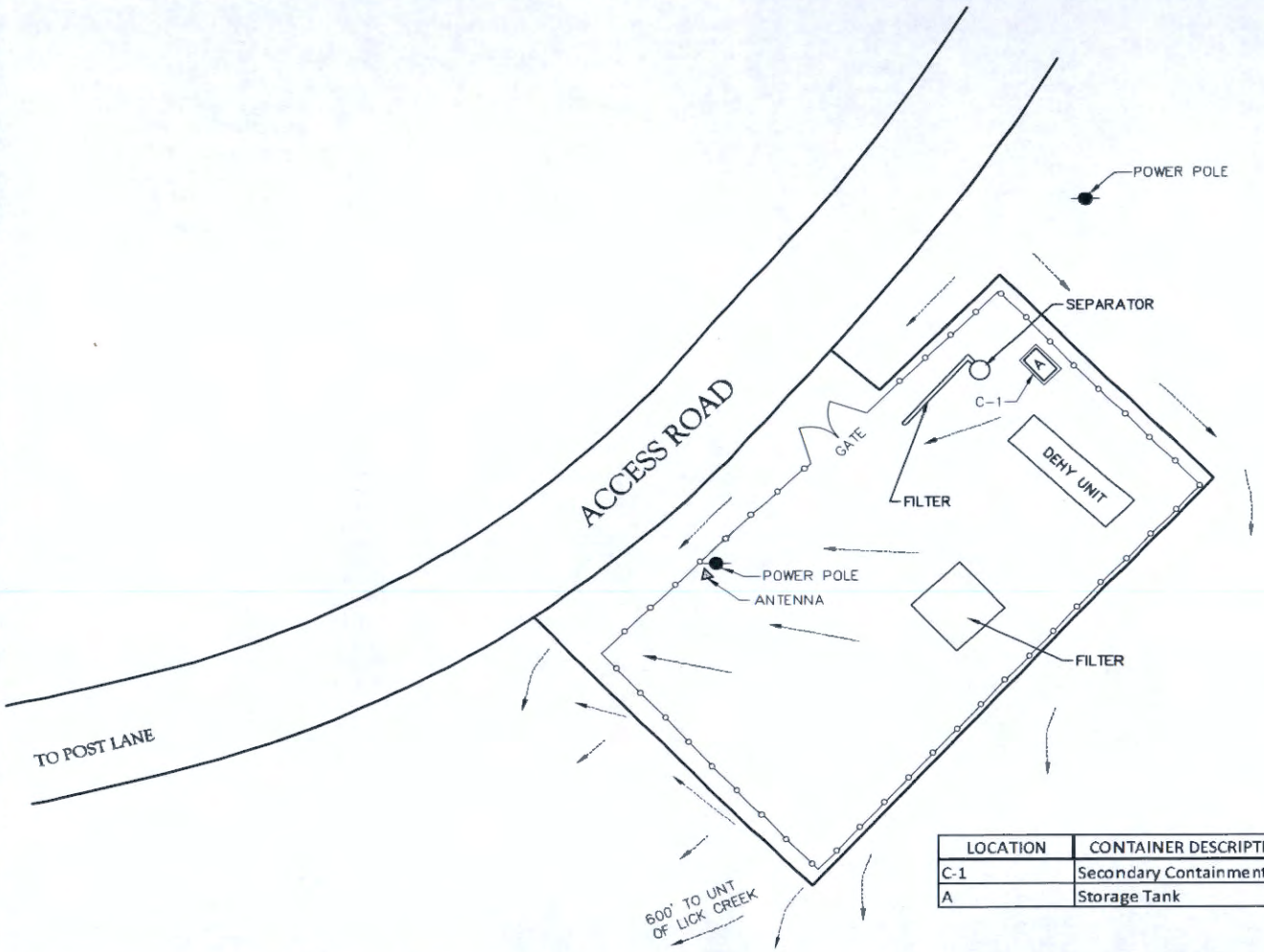
DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H
3/13/19	GENERAL UPDATE	D D H

THE NARROWS COALBED METHANE PROJECT

COMPRESSOR STATION No. 4

SECTION 28, TOWNSHIP 18 SOUTH, RANGE 5 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM
DATE OF FIELD SURVEY: 1-18-18
FIELD BOOK: N/A
PAGE: N/A
JOB No. 17-3109
SCALE: 1"=30'
DRAWN BY: D D H
CHECKED BY: QHS
SHEET No. 8 of 11
DWG. No. 520-17



N

GRAPHIC SCALE 1" = 20'

0 20' 40'

LEGEND

INDICATES EXISTING ROAD
INDICATES EXISTING CHAINLINK FENCE
INDICATES EXISTING DRAINAGE FLOW

LATITUDE	33°26'13.5" N
LONGITUDE	87°03'44.7" W

LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
C-1	Secondary Containment	359 gal	Steel	N/A
A	Storage Tank	264 gal	Steel	Oil

STARVEACRE FIELD

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SCHEMATIC DRAWING

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

THE NARROWS COALBED METHANE PROJECT

SALES STATION

SECTION 33, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM
DATE OF FIELD SURVEY: 1-18-18
FIELD BOOK: N/A
PAGE: N/A
JOB No. 17-3109
SCALE: 1"=20'
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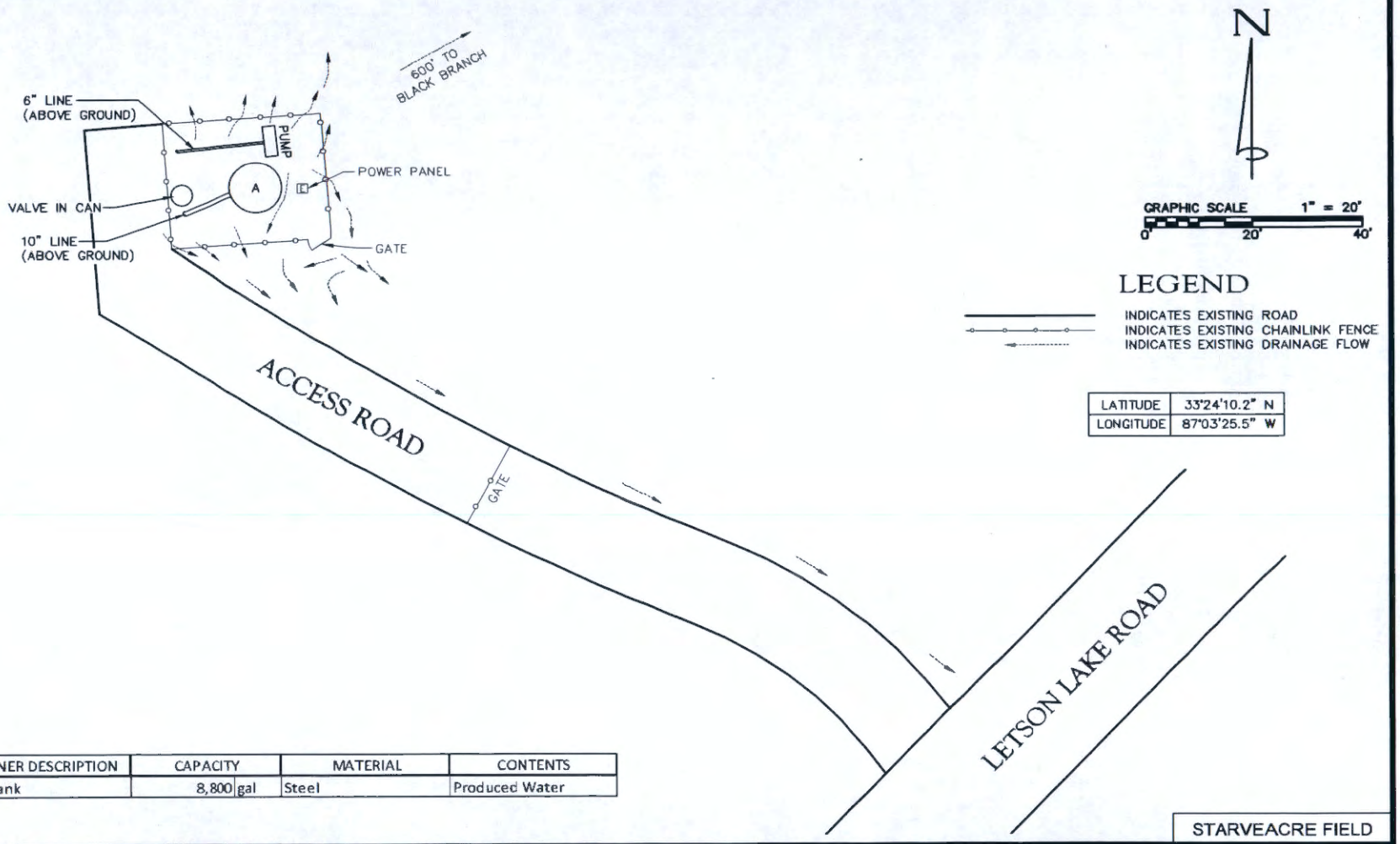
CHECKED BY: QHS
SHEET No. 9 of 11
DWG. No. 520-17



LOCATION	CONTAINER DESCRIPTION	CAPACITY	MATERIAL	CONTENTS
A	Storage Tank	8,800 gal	Steel	Produced Water

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DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

THE NARROWS COALBED METHANE PROJECT

WATER TANK & PUMP

SECTION 10, TOWNSHIP 19 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM		SHEET No. 10 of 11	
DATE OF FIELD SURVEY: 6-10-14	JOB No. 17-3109	CHECKED BY: QHS	DWG. No. 520-17
FIELD BOOK: N/A	SCALE: 1"=20'		
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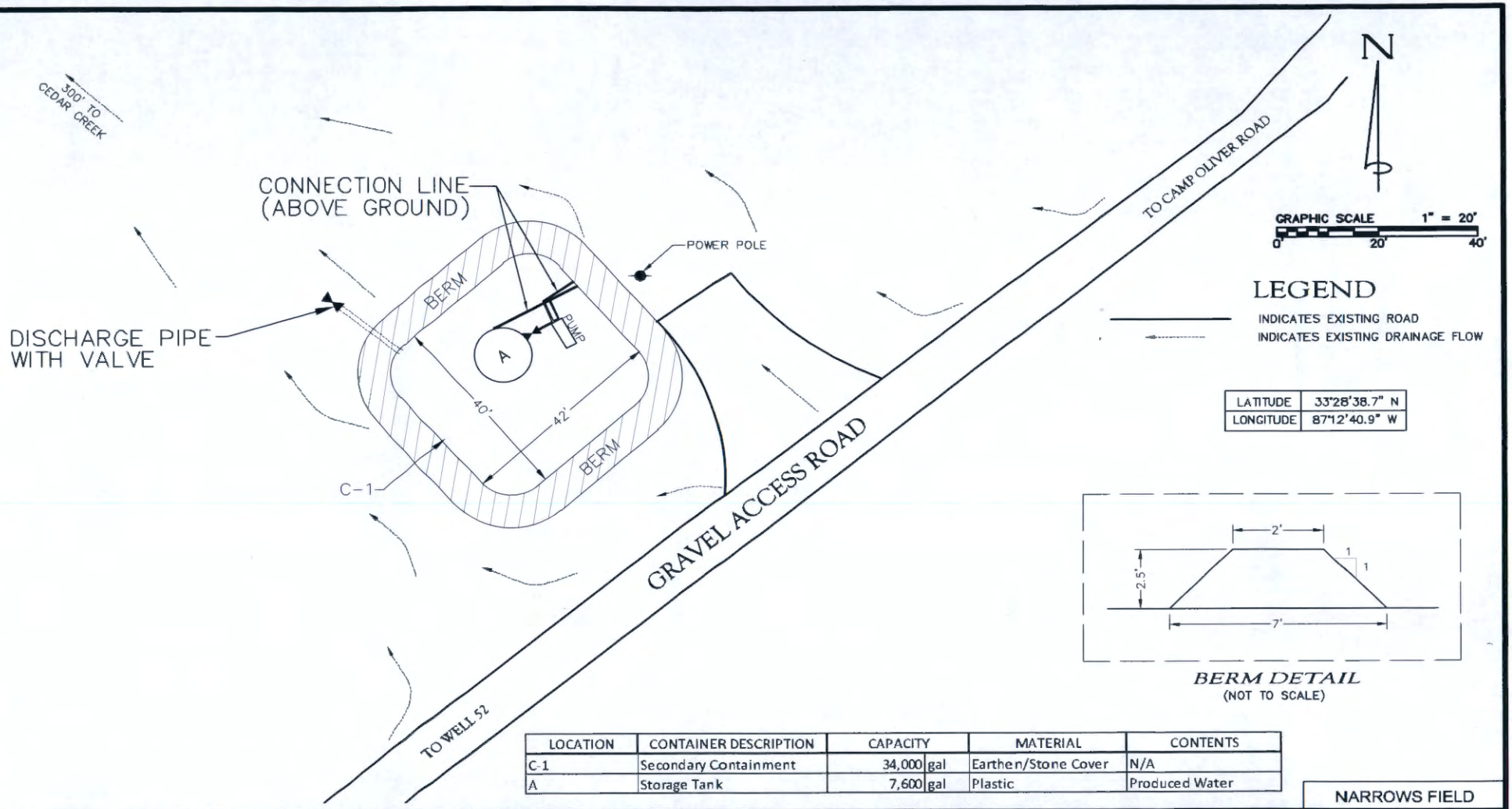

LOCATION	CONTAINER DESCRIPTION	CAPACITY		MATERIAL	CONTENTS
C-1	Secondary Containment	34,000	gal	Earthen/Stone Cover	N/A
A	Storage Tank	7,600	gal	Plastic	Produced Water

NARROWS FIELD

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1/24/18	GENERAL REVISIONS	D D H

THE NARROWS COALBED METHANE PROJECT

HOLDING TANK

SECTION 18, TOWNSHIP 18 SOUTH, RANGE 6 WEST
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

FILE NAME: URBAN-NARROWS-SCHEM		SHEET No. 11 of 11	
DATE OF FIELD SURVEY: 7-18-2017	JOB No. 17-3109	CHECKED BY: QHS	DWG. No. 520-17
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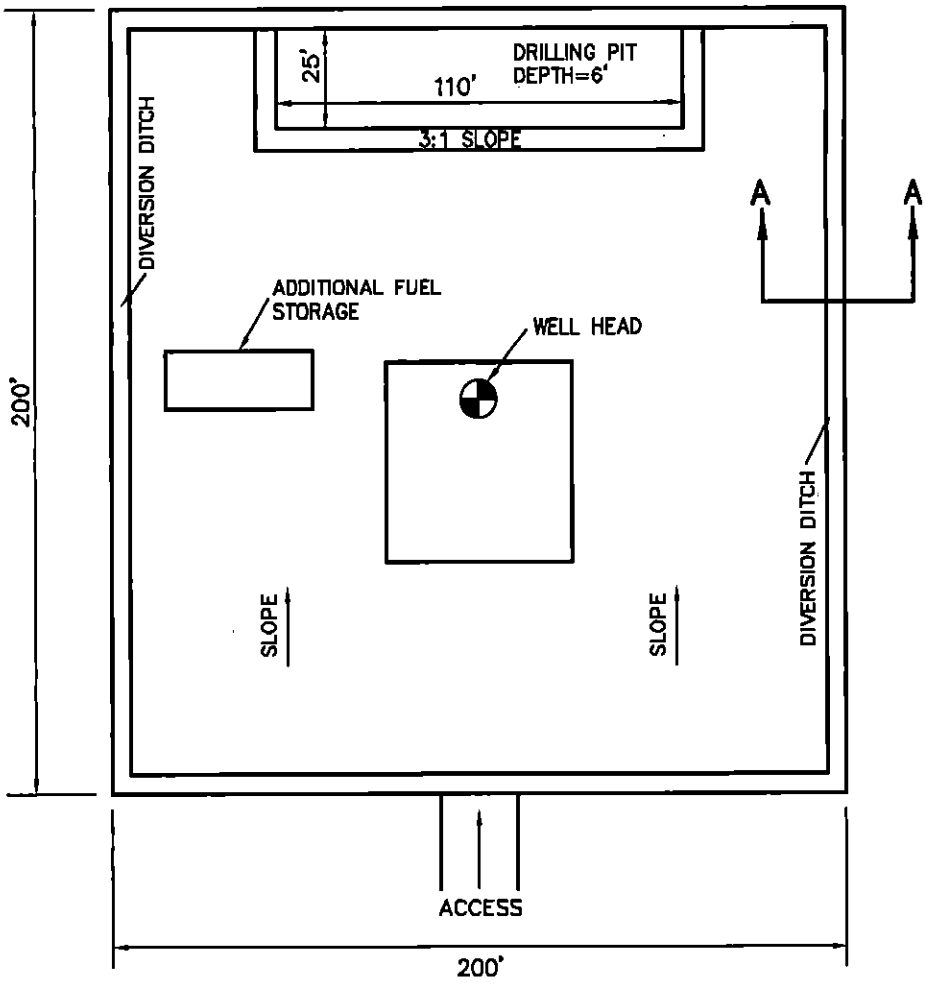
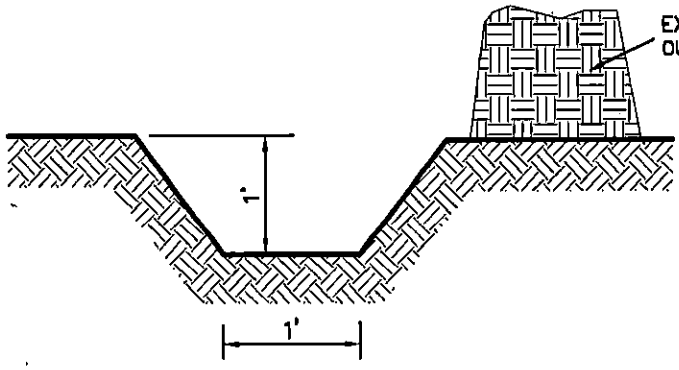
APPENDIX C
Typical Well Site Plans





TYPICAL DIVERSION DITCH
SECTION "A–A"

NOTE: LAYOUT OF PAD WILL VARY FROM ONE LOCATION TO ANOTHER. SOME PADS MAY REQUIRE 150' x 250'

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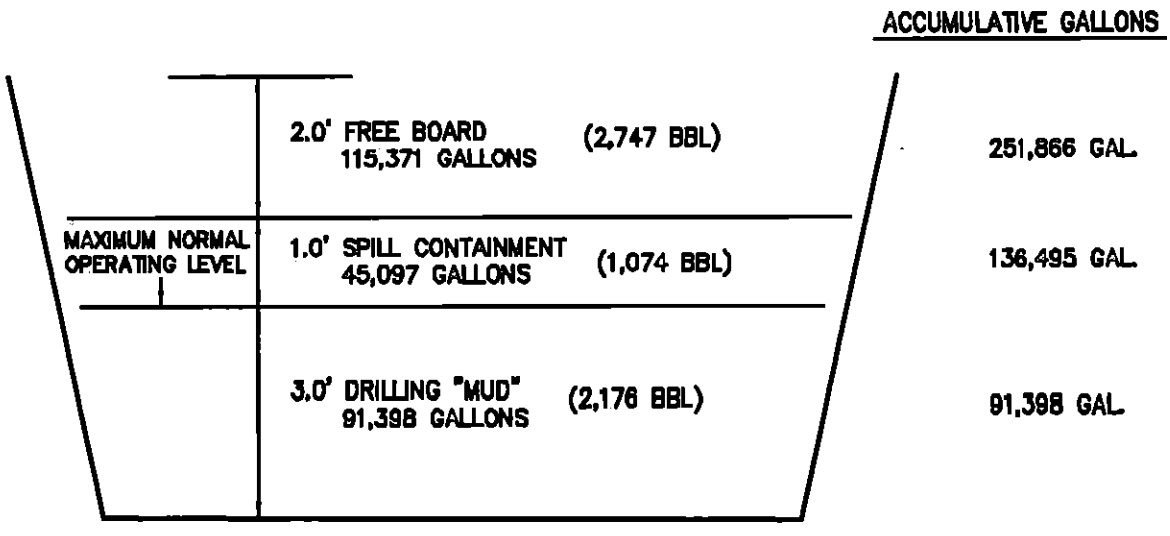
URBAN OIL & GAS GROUP, LLC
WELL PAD LAYOUT
DRILLING/COMPLETION PHASE
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

TYPICAL WELL SITE

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

SCALE: NOT TO SCALE
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: D D H
JOB No. 17-3109
FILE NAME: URBAN-NARROWS-SPCC17-TNS
SHEET No. 1 of 4
CHECKED BY: QHS
DWG. No. 521-17



BOTTOM DIMENSION = 110' x 25' WITH 3:1 SLOPE

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URBAN OIL & GAS GROUP, LLC

RETENTION STRUCTURE DESIGN DATA

DRILLING/COMPLETION PHASE

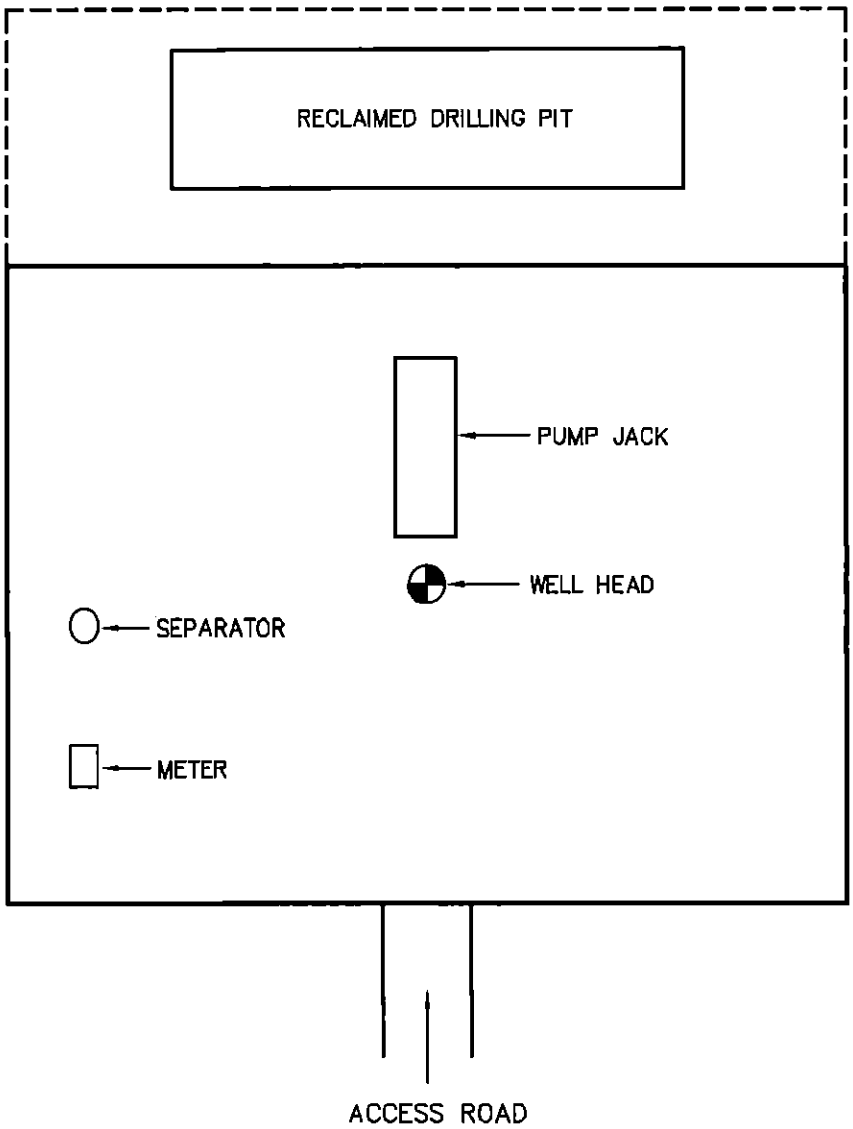
JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

TYPICAL WELL SITE

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

SCALE: NOT TO SCALE
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: D D H
JOB No. 17-3109
FILE NAME: URBAN-NARROWS-SPCC17-TWS
SHEET No. 2 of 4
CHECKED BY: QHS
DWG. No. 521-17



NOTE:
AREA OUTSIDE OF IMMEDIATE PAD AREA WILL BE VEGETATED WITH GRASS, TREES OR OTHER VEGETATION TO CONTROL SOIL EROSION

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URBAN OIL & GAS GROUP, LLC

COMPLETED WELL SITE

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

TYPICAL WELL SITE

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

SCALE: NOT TO SCALE
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: D D H
JOB No. 17-3109
FILE NAME: URBAN-NARROWS-SPCC17-TWS
SHEET No. 3 of 4
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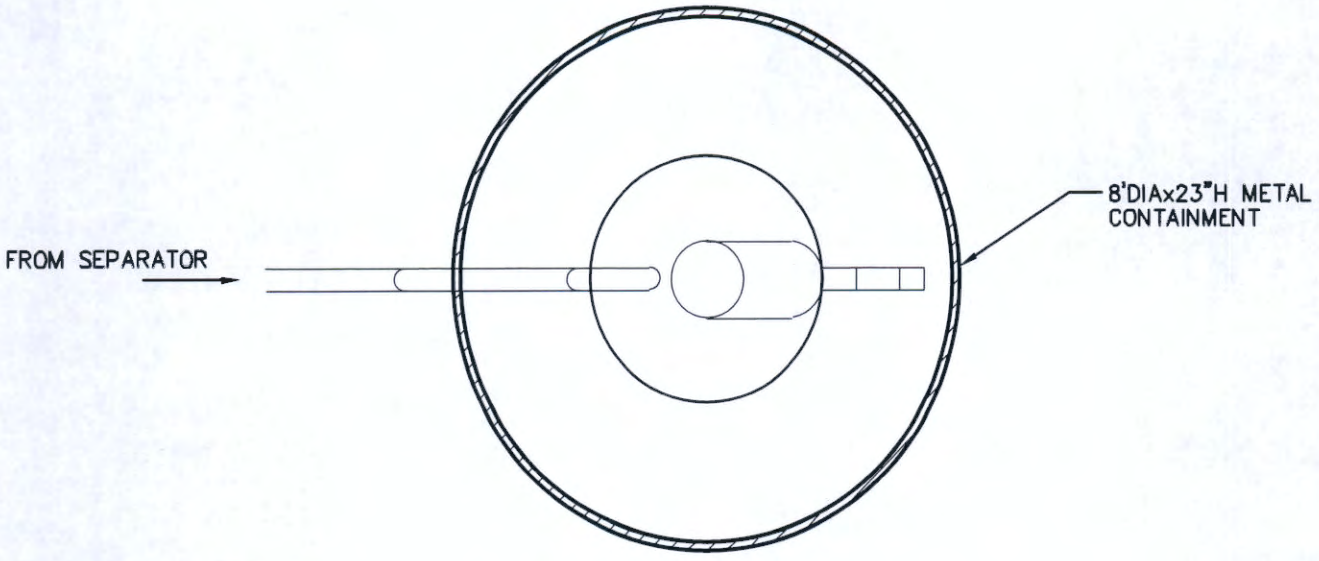
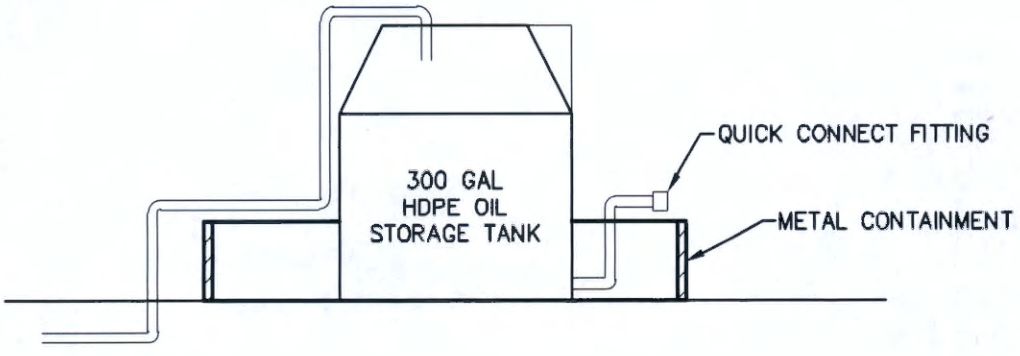
DWG. No. 521-17



CONTAINMENT VOLUME: 700 GAL.



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URBAN OIL & GAS GROUP, LLC

WELLSITE SLOPE OIL TANK DETAIL

JEFFERSON & TUSCALOOSA COUNTIES ALABAMA

TYPICAL WELL SITE

REVISION

DATE	DESCRIPTION	BY
1/24/18	GENERAL REVISIONS	D D H

SCALE: NOT TO SCALE
DATE OF FIELD SURVEY: N/A
FB. N/A PG. N/A
DRAWN BY: D D H
JOB No. 17-3109
FILE NAME: URBAN-NARROWS-SPCC17-TWS
SHEET No. 4 of 4
CHECKED BY: QHS
DWG. No. 521-17

APPENDIX D
Secondary Containment Inspection Checklist

Secondary Containment Inspection Checklist

Urban Oil & Gas Group, LLC

Jefferson & Tuscaloosa Counties

FACILITY SITE: _____

YEAR: _____

Inspection of all secondary containment structures should be perfomed on a quarterly basis in accordance with this plan and 40 CFR 112.7(a)(3)(iii)

Facility Supervisor								
Date of Inspection	1st Qtr:		2nd Qtr:		3rd Qtr:		4th Qtr:	
	Check For	*Done*	*Comments/Location*	*Done*	*Comments/Location*	*Done*	*Comments/Location*	*Done*	*Comments/Location*
Containment Area Discription:	Presence of leaked or spilled liquid								
	Discoloration of structure or soil berm								
	Status of Drainage Valve								
	Cracks in concrete continment								
	Settling or weakness in soil berm								
	Corrosion of containment structure								
	Debris or used containers								
	Status of area beneath tanks								
	Stormwater level and capacity								
COMMENTS / ACTION									

Attach additional sheets as required to record issues and actions taken.

APPENDIX E
Secondary Containment Drainage Report

Secondary Containment Drainage Report

Urban Oil & Gas Group, LLC

Jefferson & Tuscaloosa Counties

FACILITY SITE: _____

YEAR: _____

When stormwater is released from a secondary containment area, it must not have a sheen. If a sheen is present, the water must be cleaned by use of absorbent pads, absorbent booms or other approved methods. Once the sheen is removed, the water may be either pumped or drained. If the water cannot be adequately cleaned then the owner should be contacted to provide guidance for addtional cleanup measures.

The following record report should be filled out everytime a discharge from a secondary containment area occurs.

Date	Facility Supervisor	Sheen Present		Describe absorbant material if used	Water Removal		Gallons of Water Removed (estimate)
		Yes	No		Start Time	End Time	

APPENDIX F
Tank & Piping
Inspection Checklist

Tank & Piping Inspection Checklist

Urban Oil & Gas Group, LLC

Jefferson & Tuscaloosa Counties

FACILITY SITE: _____

YEAR: _____

Inspection of all tanks and pipes should be perfomed on a quarterly basis to identify the potential for leaks and perform proactive maintanence.

Facility Supervisor								
Date of Inspection	1st Qtr:		2nd Qtr:		3rd Qtr:		4th Qtr:	
	Check For	*Done*	*Comments/Location*	*Done*	*Comments/Location*	*Done*	*Comments/Location*	*Done*	*Comments/Location*
TANK Observations	Puddles of Leaks								
	Drip Marks								
	Tank Discoloration								
	Corrosion								
	Cracks								
	Tank Supports								
PIPING Observations	Drips or Droplets of Liquid								
	Seepage at Valves or Seals								
	Bending of Between Supports								
	Abrasions / Rubbing at Supports								
	Corrosion								
	Discoloration								
COMMENTS / ACTION									

Attach additional sheets as required to record issues and actions taken.

APPENDIX G
Annual Inspection Record

Annual Inspection Record

Urban Oil & Gas Group, LLC

Jefferson & Tuscaloosa Counties

AREA: _____

SUPERINTENDENT: _____

FACILITY SITE: _____

DATE OF INSPECTION: _____

I. **STORAGE TANKS**

General Condition; _____

_____

_____

_____

_____

Foundation and Supports: _____

_____

Shut Down Switches: _____

_____

II. **FIREWALLS**

Adequacy of size: _____

_____

General Condition: _____

_____

_____

Drains: _____

_____

_____

III. **LEASE OPERATOR INTERVIEW** to discuss condition of valves, pipelines, flange joints, valve glands and bodies, drip pan, pipeline supports, stuffing boxes, and bleeder and gauge valves:

_____

_____

_____

_____

_____

_____

Annual Inspection Record

Urban Oil & Gas Group, LLC

Jefferson & Tuscaloosa Counties

IV. FLOWLINES

WELL NO.	DATE INSTALLED	CORROSION PROTECTION	TEST DATE	DATE LAST WALKED	PROPOSED DATE FOR NEXT REPLACEMENT

GENERAL COMMENTS: **Identify concerns and prioritize work schedule. Include dates work is scheduled, if applicable.**

APPENDIX H
Spill Incident Report Form

URBAN OIL & GAS GROUP, LLC

Spill Incident Report Form

Location & Date

Spill Location _____ **Area** _____ **Date of Incident** _____ **Time** _____

County Name _____ **State** _____ **Lat/ Long** _____

Receiving Water (if applicable) _____ **Adjacent Property** _____

Representative at Location _____ **Phone** _____

Directions to Location _____

Incident

Description of Incident _____

Type & Amount of	Spill	Liters	Gallons
Circle Type of material spilled and complete volumes. Specify type of Chemical, etc.	Oil		
	Diesel Fuel		
	Anti-Freeze		
	Chemical		
	Other		

Area Impacted (Describe and Complete Table) _____

	In Water	On Land	Contained (Y/N)
Length (ft)			
Width (ft)			
Depth (ft)			
Appearance			

Weather & Stream: **Temperature** (F) _____ **Forecast** _____ **Stream Conditions**

Conditions **Current Conditions** _____ **Conditions** _____ _____

Response Action

Clean-up / Response Actions _____

Action to Prevent Recurrence _____

Signatures and Comments

Comments (Use back for additional comments) _____

Supervisor's Signature _____ **Date** _____ **Phone No.** _____

Reports to Regulatory Agencies

Agency	Case No.	Reported By	Reported to	Date & Time

APPENDIX I
Discharge Prevention Briefing Log

Discharge Prevention Briefing Log

Urban Oil & Gas Group, LLC

Jefferson & Tuscaloosa Counties

Date: _____

Attendees:

_____ _____ _____

_____ _____ _____

_____ _____ _____

Subject/Issue Identified	Required Action	Implementation Details

APPENDIX J
Response Equipment Inspection Log

Response Equipment Inspection Log

Urban Oil & Gas Group, LLC

Jefferson & Tuscaloosa Counties

Check for the following:

1. Inventory (item and quantity)
2. Storage location
3. Accessibility (time to access and respond)
4. Operational status/condition
5. Actual use/testing (last test date and frequency of testing)
6. Shelf life (present age, expected replacement date)

Facility Supervisor	Date	Comments

McGiffert
and Associates, LLC
Since 1949
CIVIL ENGINEERS

Site Design
Utility Design
Transportation
Environmental
Surveying
Construction
Contract
Administration

June 3, 2020

Ms. Catherine McNeill
Chief of Mining and Natural Resource Section
Water Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36130

Re: Urban Oil & Gas Group, LLC
The Narrows Facility
NPDES Permit No. AL0066621
REISSUANCE APPLICATION PACKAGE
Jefferson and Tuscaloosa Counties, AL

Dear Ms. McNeill:

On behalf of Urban Oil & Gas Group, LLC, please find the following enclosed for your use and review in the reissuance of the above referenced NPDES Permit No. AL0066621:

1. ADEM Application Form 549 M3 5/14
2. ADEM Modified 2C Forms
3. POLLUTION ABATEMENT PLAN
4. SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN
5. BEST MANAGEMENT PRACTICES PLAN FOR NON-POINT SOURCE DISCHARGE CONTROL
6. A check for the ADEM fee of $7,875.00 (Reissuance $6,860.00 + Toxicity $1,015.00)

If there is additional information which I can provide, please advise.

Yours truly,

McGIFFERT AND ASSOCIATES, LLC

Q. Hansel Stewart
DDH/tj

Enclosures

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