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.

<table>
<thead>
<tr>
<th>PURPOSE OF THIS APPLICATION</th>
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<tbody>
<tr>
<td>☐ Initial Permit Application for New Operations</td>
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<tr>
<td>☐ Reissuance &amp; Modification of Existing Permit</td>
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I. GENERAL INFORMATION

| NPDES Permit Number (Not applicable if initial permit application): | County(s) in which Operations are Located: |
|---------------------------------------------------------------------|
| AL                                                                  |

<table>
<thead>
<tr>
<th>Company/Permittee Name</th>
<th>Operations Name</th>
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<tbody>
<tr>
<td>Mailing Address of Company/Permittee:</td>
<td>Physical Address of Operation (as near as possible to main entrance):</td>
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<tr>
<td>City: State: Zip:</td>
<td>City: State: Zip:</td>
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<thead>
<tr>
<th>Permittee Phone Number</th>
<th>Permittee Fax Number:</th>
<th>Latitude and Longitude of Main Entrance:</th>
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<tr>
<th>Responsible Official (as described on Page 8 of this application):</th>
<th>Responsible Official Title:</th>
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<tbody>
<tr>
<td>Mailing Address of Responsible Official:</td>
<td>Physical Address of Responsible Official:</td>
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<tr>
<td>City: State: Zip:</td>
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<tr>
<th>Phone Number of Responsible Official:</th>
<th>Fax Number of Responsible Official:</th>
<th>Email Address of Responsible Official:</th>
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<tr>
<th>Operations Contact:</th>
<th>Operations Contact Title:</th>
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<tr>
<td>Physical Address of Operations Contact:</td>
<td>Phone Number of Operations Contact:</td>
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<td>City: State: Zip:</td>
<td>Fax Number of Operations Contact:</td>
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<tr>
<th>Email Address of Operations Contact:</th>
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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:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Physical Address of Residence (P.O. Box is Not Acceptable)</th>
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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:

<table>
<thead>
<tr>
<th>Name of Corporation, Partnership, Association, or Single Proprietorship</th>
<th>Name of Individual from Part II.A.</th>
<th>Title/Position in Corporation, Partnership, Association, or Single Proprietorship</th>
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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: __________________________________________________________

D. Land owner(s): ___________________________________________________________________________________

E. Mining Sub-contractor(s)/Operator(s), if known: ______________________________________________________________

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:

____________________________________________________________________________________________________________________

____________________________________________________________________________________________________________________

____________________________________________________________________________________________________________________

____________________________________________________________________________________________________________________

ADEM Form 549 m3 5/14  Page 2 of 8
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 these operations whether presently effective, expired, suspended, revoked or terminated:

________________________________________________________________________________________________

________________________________________________________________________________________________

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:

________________________________________________________________________________________________

VI. PROPOSED SCHEDULE

Anticipated Activity Commencement Date: _____________________ Anticipated Activity Completion Date: ____________________

VII. ACTIVITY DESCRIPTION & INFORMATION

A. Proposed Total Area of the Permitted Site: __________ acres Proposed Total Disturbed Area of the Permitted Site: ________ acres

B. Township(s), Range(s), Section(s): ____________________________________________________________________________________

C. Detailed Directions to Site: __________________________________________________________________________________________

___________________________________________________________________________________________________________________

D. Is/will this operation:

☐ (1) an existing operation which currently results in discharges to State waters? Yes No

☐ (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):

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

B. Primary SIC Code ________ Description

Secondary SIC Code(s) ________ Description

C. Narrative Description of the Activity: __________________________________________________________

______________________________________________________________________________________________________________________
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:

<table>
<thead>
<tr>
<th>Volume</th>
<th>Contents</th>
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<th>Volume</th>
<th>Contents</th>
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<td>_______ gallons</td>
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<td>_______ gallons</td>
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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.

<table>
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<tr>
<th>Action</th>
<th>Outfall E/P</th>
<th>Receiving Water</th>
<th>Latitude</th>
<th>Longitude</th>
<th>ADEM WUC</th>
<th>303(d) Segment (Y / N)</th>
<th>TMDL Segment* (Y / N)</th>
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*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

☐ 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:

__________________________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________________________

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? ______________________________________
________________________________________________________________________________________________________________
________________________________________________________________________________________________________________
________________________________________________________________________________________________________________

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

________________________________________________________________________________________________________________
________________________________________________________________________________________________________________
________________________________________________________________________________________________________________

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

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

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

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

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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.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Viable</th>
<th>Non-Viable</th>
<th>Reason/Rationale For Indicating Non-Viable</th>
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<tbody>
<tr>
<td>1) Treatment/Discharge Proposed In This Application</td>
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<tr>
<td>2) Land Application</td>
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<td>3) Pretreatment/Discharge to POTW By SID Permit</td>
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<td>4) Relocation of Discharge</td>
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<td>5) Reuse/Recycle – Pollution Prevention</td>
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<td>6) Other Process/Treatment Alternatives</td>
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<td>7) Underground Injection By UIC Permit</td>
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<td>8) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM</td>
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<tr>
<td>9) Other Project Specific Alternative(s) Identified By the Applicant Or The ADEM</td>
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COMMENTS: __________________________________________________________________________________________________________
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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.

| 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 ** = _______i (1+i)^10 – 1_ | _________(2) |
| 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).
In the case of a municipal, state, federal, or other public entity, by either a principal executive officer, or ranking elected official.

In the case of a sole partnership, by the proprietor, or a general partner; production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility; with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, 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."