OHIO E.P.A.
MAR 27 2014

OHIO ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF DRINKING AND GROUND WATERS
UNDERGROUND INJECTION CONTROL AREA PERMIT TO OPERATE
CLASS V INJECTION WELLS

Ohio Permit No. UIC 05-05-05-PTO-V

Applicant: Buckingham Coal Company, Inc.

Address: 21525 State Route 13
Glouster, Ohio

Telephone: (740) 347-4565

Facility Name: Buckingham Coal Company

Facility Location: Located at Section 10, Trimble Township, Athens County, Glouster, Ohio

Description: Two (2) Class V Underground Injection Wells to inject slurry consisting of water and fine coal reject from a portable barrel washer to the mined out portion of the Middle Kittanning coal seam.

Issuance Date: March 27, 2014

Effective Date: March 27, 2014

Expiration Date: March 27, 2019

The above named applicant is hereby ISSUED an Area Permit to Operate for the above described underground injection well pursuant to Sections 6111.043 and 6111.044 of the Ohio Revised Code and to Chapter 3745-34 of the Ohio Administrative Code. Issuance of this Area Permit to Operate does not constitute expressed or implied approval or agreement that, if constructed and/or modified in accordance with the specifications and/or information accompanying the permit applications, the above described activity will be in compliance with applicable State and Federal laws and rules and regulations. This Area Permit to Operate is issued subject to the attached conditions which are hereby incorporated and made a part hereof.

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

By: _____ Date: 3/27/14

Expiration Date: This permit shall expire at midnight on the expiration date indicated above, unless terminated or modified under Chapter 3745-34 of the Ohio Administrative Code.

Craig W. Butler, Director
OHIO ENVIRONMENTAL PROTECTION AGENCY

PART I
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is authorized to engage in operation of two Class V underground injection wells in accordance with Chapter 3745-34 of the Ohio Administrative Code (OAC), as described in the permit application and the conditions of this permit. Notwithstanding any other provisions of this permit, the permittee shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection, annulus or formation fluids into underground sources of drinking water (USDW). Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit during its term constitutes compliance for purposes of enforcement, with Sections 6111.043 and 6111.044 of the Ohio Revised Code (ORC). Such compliance does not constitute a defense to any action brought under ORC Sections 6109.31, 6109.32 or 6109.33 or any other common or statutory law other than ORC Sections 6111.043 and 6111.044. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law. Nothing in this permit shall be construed to relieve the permittee of any duties under applicable state and federal law or regulations.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination. The Director may, for cause or upon request from the permittee, modify, revoke and reissue, or terminate this permit in accordance with OAC Rules 3745-34-07, 3745-34-23, and 3745-34-24. Also, the permit is subject to minor modifications for cause as specified in OAC Rule 3745-34-25. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

2. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to OAC Rule 3745-34-22(A), 3745-34-23, 3745-34-25(D) or 3745-34-26(L)(3), as may become applicable.

C. 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 any other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with OAC Rule 3745-34-03 any information submitted to the Ohio EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping words "confidential business information" on each page containing such information. If no claim is made at the time of submission, the Ohio EPA may make the information available to the public without further notice. If a claim is asserted, documentation for the claim must be tendered and the validity of the claim will be assessed in accordance with the procedures in OAC Rule 3745-34-03. If the documentation for the claim of confidentiality is not received, the Ohio EPA may deny the claim without further inquiry. Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee;

2. Information which deals with the existence, absence or level of contaminants in receiving water.

E. DUTIES AND REQUIREMENTS (OAC RULE 3745-34-26)

1. Duty to Comply. The permittee shall comply with all applicable UIC regulations and conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit issued in accordance with OAC Rule 3745-34-19. Any permit noncompliance constitutes a violation of ORC Chapter 6109. or 6111. and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. Such noncompliance also may be grounds for enforcement action under other applicable state and federal law.

2. Penalties for Violations of Permit Conditions. Any person who violates a permit requirement is subject to injunctive relief, civil penalties, fines and/or other enforcement action under ORC Chapters 6111., 6109., or 3734. Any person who knowingly or recklessly violates permit conditions may be subject to criminal prosecution.

3. Continuation of Expiring Permits.

   a. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a complete application for a new permit at least 180 days before this permit expires.

   b. Permit Extensions. The conditions of an expired permit may continue in force in accordance with Section 119.06 of the Revised Code until the effective date of a new permit, if:

1. The permittee has submitted a timely application which is a complete application for a new permit; and

2. The Director, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit; and

3. The new permit has not been denied, and if a denial has been appealed, the denial has not been upheld.

c. Effect. Permits continued under Section 119.06 of the Revised Code remain fully effective and enforceable.

d. Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the Director may choose to do any or all of the following:

1. Initiate enforcement action based upon the permit which has been continued;

2. Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator is required to cease the activities authorized by the continued permit or be subject to enforcement action for operation without a permit;

3. Issue a new permit under Section 6111.044 of the Revised Code with appropriate conditions; or

4. Take other actions as set forth in Chapter 3745-34 of the OAC.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense, for a permittee in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

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

quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information. The permittee shall furnish to the Director, within a time specified, any information which the Director may request in order to determine whether cause exists for renewing, modifying, revoking and reissuing, or terminating this permit. To determine compliance with this permit, or to issue a new permit, the permittee shall furnish to the Director, upon request, copies of all records required to be kept by this permit.

8. Inspection and Entry. 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 permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;

   b. Have access at reasonable times to and copy any records that are 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 ORC Chapter 6111. and OAC Chapter 3745-34, any substances or parameters at any location.

9. Records.

   a. The permittee shall retain copies of records of all monitoring information, including all calibration and maintenance records and copies of all reports required by this permit for a period of at least five (5) years from the date of the sample, measurement or report or for the duration of the permitted life the well, whichever is longer.

   b. The permittee shall maintain copies of records of all data required to complete the permit application form for this permit and any supplemental information submitted under OAC Rule 3745-34-16 for a period of at least five (5) years from the date the application was signed. These periods may be extended by request of the Director during that period of time.

   c. The permittee shall retain copies of records concerning the nature and composition of all injected fluids until three (3) years after the completion of

plugging and abandonment which has been carried out in accordance with OAC Rule 3745-34-11(O).

d. The permittee shall continue to retain such copies of records after the retention period specified by paragraphs (a) to (c) above, unless he delivers the records to the Director or obtains written approval from the Director to discard the records.

e. Records of monitoring information shall include:

i. The date, exact place, and time of sampling or measurements;

ii. The name(s) of the individual(s) who performed the sampling or measurements;

iii. A precise description of both sampling methodology and the handling and custody of samples;

iv. The date(s) analyses or measurements were performed;

v. The name(s) of the individual(s) who performed the analyses or measurements and the laboratory that performed the analyses or measurements;

vi. The analytical techniques or methods used; and

vii. All results of such analyses.

10. Monitoring. Samples of injected fluids and measurements taken for the purpose of injectate monitoring shall be taken at the point of injection. All samples and measurements conducted to fulfill any requirement of this permit shall be representative of the monitored activity.

11. Signatory Requirements. All reports or other information, required to be submitted by this permit or requested by the Director, shall be signed and certified in accordance with OAC Rule 3745-34-17.

12. Reporting Requirements.

a. Planned Changes. The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility. Within ten (10) days of the verbal notification, or of the commencement of construction, the permittee shall give written notice to the Director with justification of any planned physical alterations to the permitted well.

b. Anticipated Noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than thirty (30) days following each schedule date.

d. Twenty-four (24) Hour Reporting.

1. The permittee shall report to the Director any noncompliance which may endanger health or the environment. Appropriate information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported orally within 24 hours:

i. Any monitoring or other information which indicates that any contaminant may cause an endangerment to an underground source of drinking water.

ii. Any noncompliance with a permit condition, or malfunction of the injection system, which may cause fluid migration into or between underground sources of drinking water.

2. A written submission also shall be provided within five (5) business days of the time the permittee becomes aware of the circumstances of such noncompliance. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, the anticipated time it is expected to continue; and if the noncompliance has or has not been corrected, and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance.

e. Other Noncompliance. The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall be submitted within the timeframes and contain the information listed in permit condition 12(d)(2) above.

f. Other Information. When the permittee becomes aware of failure to submit any relevant facts in the permit application or that incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such facts and corrected information within ten (10) days.

g. Within thirty (30) days of receipt of this permit, the person designated as responsible for submission of reports pursuant to OAC Rule 3745-34-17 shall certify to the Director that he or she has read and is personally familiar with all terms and conditions of this permit. The Director shall be notified immediately, in writing, if the designee or position is changed.

h. Monthly Operating Reports shall be submitted as required in Part II of this permit.

F. PLUGGING AND ABANDONMENT

1. Plan for Plugging and Abandonment. At least thirty (30) days before any well installed pursuant to this permit is taken out of service, the permittee shall submit to the Ohio Environmental Protection Agency a plan for the plugging and abandonment of such well per OAC Rule 3745-34-11(O). The required plan shall specify procedures and contain such other provisions as are necessary to ensure that no movement of fluids into an underground source of drinking water is allowed. After review and acceptance of this plan by the Ohio Environmental Protection Agency, that plan shall automatically become a condition of this permit.

2. Abandonment Report. Within thirty (30) days after abandoning the well(s), the permittee shall submit a report to the Director certifying in accordance with OAC Rule 3745-34-17 that the well was closed in compliance with OAC Rule 3745-34-07(A). At a minimum, the report shall include: Surface and subsurface diagrams locating the position at which the plugs are situated (if applicable); and, a description of all casing, subsurface structures and piping left in the well(s) or subsurface.

G. FINANCIAL RESPONSIBILITY

1. Financial Responsibility. The permittee is required to maintain financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner consistent with Chapters 3745-9 and 3745-34 of the OAC. The permittee is required to show evidence of current financial responsibility to the Director in the form of a surety bond submitted within 45 days of the effective date of this permit, and once every twelve (12) months thereafter.

H. CORRECTIVE ACTION

1. The permittee shall develop a corrective action plan in the event that: a) routine monitoring or any other information indicates that primary drinking water maximum contaminant or action levels, as defined in Chapter 3745-81 of the OAC, are or may be exceeded in any USDW within zones immediately adjacent to the injection zone; or b) any water quality parameter in any USDW in the permitted area fails to meet standards of OAC Chapter 3745-81, as a consequence of injection well

operation, in a manner not permitted for underground injection as defined in Part II(A) of this permit.

Such plan shall include a determination of the nature, rate, and extent of the degradation. The Director may also require the plan to include appropriate remedial actions including, but not limited to: selective mine sealing, additional chemical treatment, or discontinuances of injection operations.

2. The plan for corrective action shall be submitted to the Director within thirty (30) days of the date that indications of a violation of Chapter 3745-81 are noted, by the permittee through written Agency notice, and shall be approved by the Ohio EPA prior to implementation.

PART II
SPECIAL PERMIT CONDITIONS

A. WELL OPERATION

Activities conducted under this permit include, but are not limited to, the following:

1. Injectate Quality. The permittee shall monitor injectate quality in accordance with the schedule and parameter list established in Part II(B) of this permit. If at any time it is determined that the wells are not in compliance with OAC Rule 3745-34-07(A), the Director shall take, or require the permittee to take, corrective action in accordance with OAC Rule 3745-34-07(C) and condition Part I(H) of this permit.

2. Injection Pressure Limitation. Injection pressure at each of the well heads shall be limited to atmospheric pressure (gravity flow) at all times.

3. Injection Wells. The permittee shall, at all times, operate the injection wells in such a way that will not result in the migration of injected fluids or mine water into any underground sources of drinking water above, below or adjacent to the injection zone. Only those substances listed on the cover page of these permits and as described in the Permit to Operate application shall be injected. Disposal of any other fluids, including hazardous wastes (as defined in Chapter 3745-51 of the OAC), into this well is strictly prohibited.

4. Injection Rate. Injection of fluids shall not exceed a total of 500 gallons per minute for each well.

B. MONITORING

The permittee shall sample and analyze the injectate and mine water (injection zone) as required by this permit conforming to the standards and procedures stated in the Sampling and Analysis Plan (SAP) dated December 27, 2012, submitted as part of the permit application.

1. Injected Fluids. To be monitored:

   a. The permittee shall measure the daily volume injected and determine the daily average injection rate. This data shall be submitted with the monthly chemical analytical data from the injectate sampling as required below;

   b. The permittee shall sample and analyze the injection fluid on a monthly basis for the following constituents and parameters: Total solids, total dissolved solids, total iron, total manganese, total acidity, conductivity, pH, and sulfate. The

results of analyses shall be reported to Ohio EPA no later than 15 days after the first of the month following the sampling; and

c. The permittee shall sample and analyze the injection fluid on a quarterly basis (every three months) for the following constituents: aluminum, arsenic, barium, bicarbonate, calcium, carbonate, chloride, dissolved oxygen, fluoride, lead, magnesium, nitrate, potassium, selenium, sodium, strontium, total dissolved solids, and zinc. The results of analyses shall be reported to Ohio EPA no later than 15 days after the first of the month following the sampling.

2. Injection Zone. To be monitored:

a. The injection zone shall be monitored through sampling of existing monitoring wells: MW-1, MW-2, MW-3 and MW-4.

b. Sampling of the injection zone water shall be conducted according to the same parameter lists and monthly and quarterly schedules as listed in Part II(B)(1)(a) through (c) of these permits. This monitoring shall be conducted to provide direct evidence that the injection operation complies with OAC Rule 3745-34-07(A) which prohibits the movement of fluid containing any contaminant into a USDW.

C. REPORTING

The permittee shall submit monitoring reports in accordance with the **ATTACHMENT** of this permit to the Ohio EPA, Division of Drinking and Ground Waters, Underground Injection Control Unit by the 15th day of the month following each month that monitoring results are required in accordance with schedules described in Part II(B) of this permit at the following address:

Ohio EPA
Division of Drinking and Ground Waters
Underground Injection Control Section
Lazarus Government Center
50 West Town Street
P.O. Box 1049
Columbus, Ohio 43216-1049

Reports shall contain information regarding types of tests and methods used to generate monitoring data, as specified in Part I(E)(10) of this permit.

ATTACHMENT

SUBMISSION OF ANALYTICAL DATA

The following information shall be submitted to and received by Ohio EPA in a form specified by the director:

(A) All results generated and information recorded in accordance with the sampling and analysis plan specified in the PTO.

(B) Laboratory data sheets. The laboratory data sheets shall include at a minimum the following:

(1) Name of the facility.

(2) Field sample identification number for each ground water sample.

(3) Laboratory sample identification number for each ground water sample.

(4) Sampling date.

(5) Date the laboratory received the sample.

(6) Analytical method identification numbers for all parameters.

(7) Sample extraction date, if applicable.

(8) Sample analysis date.

(9) Analytical results for all parameters including method detection limits (MDLs), practical quantitation limits (PQLs) and any laboratory estimated values.

(10) Laboratory data qualifiers, if applicable.

(11) Sample dilution factor, if applicable.

(12) Laboratory quality control information. This information shall include at a minimum the following:

(a) Case narrative describing each problem that was encountered between sample receipt and the completion of sample analysis.

(b) Field and laboratory sample identification numbers.

(c) Holding times specified in the sampling and analysis plan for each parameter, or a statement by the laboratory that all holding time requirements were met.

(d) Whether meniscus bubbles were present in any volatile organic sample containers when received by the laboratory.

(e) Surrogate and spike recoveries with control limits.

(f) Data results from the analysis of blank samples including trip blanks, method blanks, and, if required, instrument blanks with control limits.

(g) Data from the analysis of matrix spike/matrix spike duplicates (MS/MSD) and matrix spike blanks with control limits.

(h) Relative per cent difference calculations based on MS/MSD results.

(i) Laboratory control sample results if the metals spike recovery results are determined to be out of control.

(D) Data summary tables. The data summary tables shall include mine water elevation data and the analytical data collected from the sampling event applicable to the data submission and may include previously submitted data from past sampling events.