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

Ohio Permit No. UIC 05-82-01-PTO-V

OHIO E.P.A.
MAY - 2 2014

Applicant:	CONSOL Mining Company LLC Raccoon Mine Number 3
Address:	State Route 124 Wilkesville, Ohio
Telephone:	(740) 669-7720
Facility Name:	Raccoon Mine Number 3
Facility Location:	Located at Fraction 30, Wilkesville Township, Vinton County, Wilkesville, Ohio
Description:	Class V Underground Injection Well to inject leachate from the Raccoon Mine Number 3 reclaimed coarse refuse pile into the underground workings of Raccoon Mine Number 3.
Issuance Date:	May 2, 2014
Effective Date:	May 2, 2014
Expiration Date:	May 2, 2019

The above named applicant is hereby ISSUED a 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 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 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: 5-2-2014

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 the operation of a Class V underground injection well 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 or formation fluids into underground sources of drinking water (USDWs) if the presence of that material may cause a violation of any primary drinking water regulation under OAC Chapter 3745-81 or may otherwise adversely affect the health of persons. 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, exclusively 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 pursuant to OAC Rule 3745-34-22; 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. Any permit noncompliance constitutes a violation of ORC Chapter 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 Chapter 6111. Any person who knowingly or recklessly violates permit conditions may be subject to criminal prosecution.

3. Continuation of Expiring Permits. 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.

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, or to determine compliance with this permit. The permittee shall furnish to the Director, upon request, copies of all records required to be kept by the permittee.

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

9. Records.

   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

   b. The permittee shall retain copies of records of all data used to complete the permit application forms and any supplemental information submitted under OAC Rule 3745-34-16 and retain records of all monitoring information, including all calibration and maintenance records and all reports required by this permit for the permitted life the well(s) in accordance with OAC Rule

3745-34-26(J)(2)(a). This period may be extended by request of the Director at any time.

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

d. The permittee shall deliver the records to the Director after the retention periods specified by paragraphs (b) and (c) above unless the permittee obtains written approval from the Director to discard the records.

e. Records of monitoring information shall include the following as applicable pursuant to OAC Rule 3745-34-26(J)(3):

   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 detailed description of sampling methodology;

   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. 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. Within thirty (30) days of the effective date of this permit, the permittee shall designate the duly authorized representative for all submissions required under this permit, in written form to the Director, in compliance with OAC Rule 3745-34-17(B)(1)-(3).

11. 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. Such notice shall be given at least ten (10) days prior to the commencement of construction or implementation of any planned change. The permitee shall include as part of such written notice to the Director justification of any planned physical alternations 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 unpermitted 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 under paragraph (E)(11)(d) above at the time monitoring reports are submitted. The reports shall contain the information listed in permit condition 11(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. If the authorization under Part I (E)(10) of this permit is no longer valid, a new authorization satisfying the requirements of OAC Rule 3745-34-17(B) and (C)

shall be submitted in written form prior to or together with any reports, information or applications requiring the signature and certification of the authorized signatory.

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) and OAC Rule 3745-34-11(O). 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 routine monitoring or any other information indicates that primary drinking water standards as defined in Chapter 3745-81 of the OAC, are or may be exceeded in any USDW as a result of injection activities.

   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: discontinuance of injection operations.

2. The plan for corrective action shall be submitted to the Director within thirty (30) days of the date the permittee discovers evidence, or is notified by the Director, that an exceedance of one or more primary drinking water standards as defined in Chapter 3745-81 of the OAC is resulting or may be resulting in a USDW from the injection well operation. The corrective action plan shall be subject to review and approval by Ohio EPA prior to implementation.

PART II
SPECIAL PERMIT CONDITIONS

A. WELL OPERATION

All well operations shall be conducted in accordance with the specifications submitted with the application for this permit. 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. The results of data collected shall be evaluated to ensure that the analytical results of the waste water demonstrate reduction and/or stabilization in concentration for those parameters that have established primary drinking water standards. If at any time the monitoring results indicate that the concentrations of parameters is increasing with respect to primary drinking water standards such that the operation of the well is 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(D) and Part I (I) of these permits.

   The data required to be collected under these permits shall be used by Ohio EPA to determine whether the Director shall require additional or modified conditions as part of continued authorization for the project under this permit. Such additional or modified conditions shall be incorporated into conditions of this permit either through minor modification in accordance with OAC Rule 3745-34-25 or modification, or revocation and reissuance, in accordance with OAC Rule 3745-34-23. All monitoring data information collected under this permit shall be considered cause for modification or revocation and reissuance under OAC Rule 3745-34-23(A)(2).

   Monitoring specified in Part II (B) of these permits shall continue throughout the term of the permit, unless such permit conditions are modified in accordance with Chapter 3745-34 of the OAC.

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

3. Injection Well. The permittee shall, at all times, operate the injection well 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. At all times the permittee shall maintain compliance with OAC Rule 3745-34-07. 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 50 gallons per minute.

5. The permittee shall provide written notification to the Director at least ninety (90) days prior to discontinuing operation of the Meigs Mine Number 31 Wastewater Treatment Plant. If the permittee ceases to operate this wastewater treatment facility, the permittee agrees that the Meigs Mine Number 31 complex has been abandoned.

   With the prior notification of abandonment the permittee shall provide a written summary of potential impacts of continued injection on all USDW(s), based upon anticipated hydrogeologic changes due to the absence of pumping at the Meigs Mine Number 31 wastewater treatment plant.

   The Director retains the right to terminate, revoke, reissue or modify the permits for cause as a result of a significant change in the hydrogeologic environment caused by operation of the UIC well system.

B. MONITORING

Within sixty (60) days of the effective date of this permit, the permittee shall submit a detailed sampling and analysis plan that conforms to the standards and contains the information listed in **ATTACHMENT 1** of this permit for sampling and analyzing the injectate and mine water (injection zone) as required by this permit.

1. Injected Fluids. To be monitored:

   a. The permittee shall record the maximum injection rate in gallons per minute for each working day and determine the daily average injection rate and total monthly volume injected. The 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, cadmium, lead, total acidity, total alkalinity, 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: calcium, arsenic, barium, chromium, selenium, silver, chloride, sodium and magnesium. 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:

   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.

C. REPORTING

The permittee shall submit monitoring reports in accordance with the **ATTACHMENT 2** 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 Unit
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)(9) of this permit.

ATTACHMENT 1

INJECTATE AND MINE WATER SAMPLING AND ANALYSIS PROCEDURES

The injectate and mine water sampling and analysis plan shall include copies of all blank forms necessary and a detailed description of the equipment, procedures, and techniques to be used to do the following:

(A) Are designed to ensure monitoring results that provide an accurate representation of injectate and mine water chemistry.

(B) The owner or operator shall include a description of the sample withdrawal technique including location of sampling, sampling device used, sample containers used, and sample handling and preservation for each sample obtained.

(C) Perform field analysis for temperature, pH, and specific conductance for each sample, including the following:

(1) Procedures and blank forms for recording field measurements that include the specific location, time, and site-specific conditions associated with the field data acquisition.

(2) Procedures used for the calibration of field devices and blank forms for the documentation of calibration procedures.

(D) Decontaminate all non-dedicated and non-disposable monitoring, purging, and sampling equipment prior to use

(E) Establish the chain of custody for the samples. The chain of custody form must be included with the sampling and analysis plan and shall note:

(1) Name of the facility and facility identification number as assigned by Ohio EPA, if applicable

(2) Field sample identification number for each sample.

(3) Date and time each sample was collected.

(4) The printed name and signature of each person having custody of the sample prior to its analysis with the exception of a person employed by a commercial carrier contracted to transport the ground water samples to the laboratory.

(5) The date and time that each person receives custody of the ground water sample, including the date and time the sample is relinquished to the laboratory.

(6) Chemical preservatives added to the sample.

(7) Whether ice is present or the internal temperature of each cooler when received by the laboratory.

(8) All special instructions regarding sample handling, preservation, analysis, or other information that needs to be documented to ensure that the associated sample analytical results will be representative.

(F) Obtain field quality control samples.

(G) Obtain all of the information required to be recorded on the sampling form. A copy of the blank sampling form shall also be included.

ATTACHMENT 2

SUBMISSION OF ANALYTICAL DATA

The following information shall be submitted to Ohio EPA as required by this permit:

(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.

(C) 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.