Permanent Program Finding

Results of Review
Permanent Program Significant Revision Application No. 6 to Permit No. 382
Sugar Camp Energy, LLC
Sugar Camp Mine No. 1

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The Illinois Department of Natural Resources, Office of Mines and Minerals, Land Reclamation Division (Department), the Regulatory Authority in Illinois under the Surface Mining Control and Reclamation Act of 1977 (Federal Act), 30 U.S.C. Section 1201 et seq., has reviewed Significant Revision Application No. 6 to Permit No. 382 in accordance with the Surface Coal Mining Land Conservation and Reclamation Act (State Act), 225 ILCS 720, and the Department’s regulations at 62 Ill. Adm. Code 1700-1850.

The applicant has submitted in writing the modifications required by the Department’s letter dated August 15, 2017 (Appendix A). These modifications have been reviewed and approved by the Department. Pursuant to 62 Ill. Adm. Code 1773.19, the Department is approving the application as modified. The Department’s decision is based upon a review of the record as a whole, and is supported and documented by the record. The findings and reasons for the Department’s decision are set forth below. The period for administrative review under 62 Ill. Adm. Code 1847.3 commences as of the date of this decision.

I. SUMMARY OF APPLICATION FOR SIGNIFICANT REVISION NO. 6 TO PERMIT NO. 382

Surface coal mining and reclamation operations Significant Revision Application No. 6 to Permit No. 382 proposes an underground shadow area revision. The new shadow area proposes and additional 37,971.9 acres to be mined with the extraction of coal in the Herrin No. 6 seam. The extraction will primarily be completed by longwall mining.

II. SUMMARY OF THE PUBLIC PARTICIPATION PROCESS

The Department finds that the public participation requirements of 62 Ill. Adm. Code 1773.13 and 1773.14 have been met.

The permit application was filed with the Department on June 14, 2016, and was deemed complete on March 28, 2017. The applicant placed a newspaper advertisement of the proposed operation in the Benton Evening News, a newspaper of general circulation in the area affected, published in Franklin County, once a week for four consecutive weeks, beginning on April 6, 2017. The applicant filed two copies of the permit application with the County Clerk of Hamilton and Franklin Counties, in accordance with 62 Ill. Adm. Code 1773.13(a)(2), on April 5, 2017. Copies of the application were sent to the following State Agencies: Illinois Department of Agriculture (IDOA), and Illinois Environmental Protection Agency (IEPA), and the United States Department of Agriculture, Natural Resources Conservation Service (NRCS), and the United States Fish and Wildlife Service (USFWS) on April 12, 2017, for review and comment. In addition, copies were circulated with the appropriate Offices within the Illinois Department of Natural Resources (Department). Written notification of the application was given to those governmental agencies and entities required to receive notice under 62 Ill. Adm. Code 1773.13(a)(3).

State Agency comments on this application have been received by the Department, with the source and date of comments as follows: IDOA (April 19, 2017) and IEPA (April 21, 2017).

Comments on this application were received from the USFWS dated August 4, 2017.
The Department received a request for an informal conference. The Department held an informal conference on June 21, 2017, in the Illinois Department of Natural Resources Office of Mines and Minerals Benton field office, in Benton Illinois.

All comments received in writing and at the informal have been considered by the Department in reviewing this application. The Department’s responses to these comments are set forth in Appendix B.

All comments received on this application have been furnished to the applicant, and have been filed for public inspection at the office of the Hamilton and Franklin County Clerks.

III. SUMMARY OF THE DEPARTMENT’S FINDINGS

The Department, upon completing its review of the information set forth in the application, the required modifications submitted, if any, and information otherwise available, and made available to the applicant, and after considering the comments of State Agencies, and all other comments received, makes the following findings:

A. Findings Required by 62 Ill. Adm. Code 1773.15

REVIEW OF VIOLATIONS
(Sections 1773.15(b) and (e))

Section 1773.15(b)(1): Based on a review of all reasonably available information concerning violation notices or ownership or control links involving the applicant, including information obtained pursuant to Sections 1773.22, 1773.23, 1778.13 and 1778.14, the Department has determined that the applicant or a person who owns or controls the applicant is currently in violation of the State Act, Federal Act or other law or regulation referred to in Section 1773.15(b)(1). Pursuant to this Section, the Department has determined that:

Section 1773.15(b)(1)(A): For the identified current violations, the applicant submitted proof that the current violations have been or are in the process of being corrected to the satisfaction of the agency that has jurisdiction over the violations. Or,

Section 1773.15(b)(1)(B): For the identified current violation, the applicant or a person who owns or controls the applicant has filed and is presently pursuing, in good faith, a direct administrative or judicial appeal to contest the validity of the current violation.

Documentation provided by the applicant to comply with Section 1773.15(b)(1)(B) is attached as Appendix E.

Section 1773.15(b)(2): This permit is being conditionally issued on the basis of pending the outcome of an appeal described in subsection (b)(1)(B), above. The conditional issuance is set forth in Part IV.

Section 1773.15(e): The Department requested updated compliance information in its modifications request letter dated August 15, 2017. Based on the compliance review required by Section 1773.15(b)(1), a review of the OSM Applicant Violator System for outstanding violations,
and in light of updated information submitted pursuant to Sections 1778.13(i) and 1778.14(e), the Department reconsidered its decision to approve the application and found that no change in its decision to issue the permit is necessary.

SECTION 1773.15(c)(1) FINDINGS

Section 1773.15(c)(1): The permit application as modified is accurate and complete and all requirements of the Federal and State Acts and the regulatory program have been met.

SECTION 1773.15(c)(2) – (c)(13) FINDINGS

Section 1773.15(c)(2): The applicant has demonstrated that reclamation as required by the Federal and State Acts and the regulatory program can be accomplished under the reclamation plan contained in the significant revision application, as modified.

Section 1773.15(c)(3)(A): Since this application is a shadow area revision for underground coal extraction, the requirements of Section 1764 are not applicable.

Section 1773.15(c)(3)(B): Since this application is a shadow area revision for underground coal extraction, the requirements of Section 1761 are not applicable.

Section 1773.15(c)(4): This section is applicable to surface mining operations only.

Section 1773.15(c)(5): The Department has assessed the probable cumulative impacts of all anticipated coal mining on the hydrologic balance in the cumulative impact area, in accordance with Part 1784 and finds that the operations proposed under the application have been designed to prevent material damage to the hydrologic balance outside the proposed permit area (see Appendix C).

Section 1773.15(c)(6): The applicant has not proposed the use of any existing structures in the permit application requiring compliance with Section 1700.1(d).

Section 1773.15(c)(7): No additional fees are required for shadow area extensions. The Department finds that the applicant has paid all reclamation fees from previous and existing operations as required by 30 CFR 870.

Section 1773.15(c)(8): The requirements of this section are not applicable to this application.

Section 1773.15(c)(9): The requirements of this section are not applicable to this application.

Section 1773.15(c)(10): Review of the application has shown that no issues were raised with respect to federally endangered or threatened species as part of this revision. This revision is limited to expansion of the longwall shadow area and no disturbances to any critical habitats, as determined under the Endangered Species Act of 1973 (16 USC 1531 et seq., see Appendix F), are being proposed. The Department hereby reaffirms its finding under Section 1773.15(c)(10) as stated in Department findings for Permit 382 and incorporates that finding by reference herein.
Section 1773.15(c)(11): The requirements of this section are not applicable as there are no proposed remining operations.

Section 1773.15(c)(12): The effect of the proposed permitting action on properties listed on or eligible for listing on the National Register of Historic Places has been taken into account by the Department.

Section 1773.15(c)(13): The requirements of this section are not applicable as there are no proposed remining operations.

B. Findings Required by 62 Ill. Adm. Code 1785 (Applicable Sections)

The requirements of this section are not applicable to this application.

C. Compliance with 62 Ill. Adm. Code 1773.19

Section 1773.19(a)(1): The Department has based its decision to approve, as modified, the application, based on public participation as provided by Sections 1773.13 and 1773.14, compliance with all applicable provisions of Section 1785, and the processing and complete review of the application.

Section 1773.19(a)(3): The Department is providing written notification of its final permit decision to the following persons and entities:

A. The applicant, each person who filed comments or objections to the permit application, and each party to the informal conference;

B. The Hamilton and Franklin County Boards; and,

C. The Office of Surface Mining.

All materials supporting these findings are a part of the public record and are hereby incorporated by reference.

IV. PERMIT CONDITIONS

A. The permittee shall conduct surface coal mining and reclamation operations only on those lands specifically designated as the permit area on the maps submitted with the application and authorized for the term of the permit and that are subject to the performance bond or other equivalent guarantee in effect pursuant to 62 Ill. Adm. Code 1800.

B. The permittee shall conduct all surface coal mining and reclamation operations as described in the approved application, except to the extent that the Department otherwise directs in the permit.

C. The permittee shall comply with the terms and conditions of the permit, all applicable performance standards of the Federal and State Acts, and the requirements of the regulatory program.
D. Without advance notice, delay, or a search warrant, upon presentation of appropriate credentials, the permittee shall allow the authorized representatives of the Department and Secretary of the United States Department of the Interior to:

1. Have the right of entry provided for in 62 Ill. Adm. Code 1840.12; and,

2. Be accompanied by private persons for the purpose of conducting an inspection in accordance with 62 Ill. Adm. Code 1840, when the inspection is in response to an alleged violation reported to the Department by the private person.

E. The permittee shall take all possible steps to minimize any adverse impacts to the environment or public health and safety resulting from noncompliance with any term or condition of this permit, including, but not limited to:

1. Accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance;

2. Immediate implementation of measures necessary to comply; and,

3. Warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance.

F. As applicable, the permittee shall comply with 62 Ill. Adm. Code 1700.11(d) for compliance, modification, or abandonment of existing structures.

G. The permittee shall pay all reclamation fees required by 30 CFR 870 for coal produced under this permit for sale, transfer, or use.

H. Within thirty (30) days after a cessation order is issued under 62 Ill. Adm. Code 1843.11, for operations conducted under the permit, except where a stay of the cessation order is granted and remains in effect the permittee shall either submit to the Department the following information, current to the date the cessation order was issued, or notify the Department in writing that there has been no change since the immediately preceding submittal of such information:

1. Any new information needed to correct or update the information previously submitted to the Department by the permittee under 62 Ill. Adm. Code 1778.13(c); or

2. If not previously submitted, the information required from a permit application by 62 Ill. Adm. Code 1778.13(c).

I. Species Protection:

1. Issuance of this permit under the Surface Coal Mining Land Conservation and Reclamation Act does not in any way authorize any take of any listed species in violation of the Illinois Endangered Species Protection Act, 520 ILCS 10/1 et seq.
or The Endangered Species Act of 1973, 87 Stat. 844.16., 16 U.S.C. Section 1531, et seq. If "take" as defined by these Acts is anticipated to result from permitted activities, the Department recommends the permittee apply for an incidental take permit from the Illinois Department of Natural Resources, Office of Resource Conservation for state listed species and the U.S. Fish and Wildlife Service for federally listed species.

2. Issuance of this permit under the Surface Coal Mining Land Conservation and Reclamation Act does not in any way authorize any take of a bald or golden eagle, including nests or eggs, in violation of the Bald Eagle Protection Act, as amended (16 U.S.C. 668 et seq.). If "take" as defined by the Bald Eagle Protection Act is anticipated to result from permitted activities, the permittee should apply for an incidental take permit from the U.S. Fish and Wildlife Service.

J. If the permit is conditionally issued under 62 Ill. Adm. Code Section 1773.15(b)(2) on the basis of (1) a presumption supported by certification under 62 Ill. Adm. Code Section 1778.14 that the violation is in the process of being corrected; (2) proof submitted under 62 Ill. Adm. Code Section 1773.15(b)(1)(A) that the violation is in the process of being corrected; or (3) pending the outcome of an appeal described in 62 Ill. Adm. Code Section 1773.15(b)(1)(B), issuance is conditioned as follows:

1. If subsequent to permit issuance applicant is issued a failure-to-abate cessation order, the permit shall be suspended and/or rescinded in accordance with the procedures for 62 Ill. Adm. Code Section 1773.20(c) Improvidently Issued Permits within 30 days of the issuance of the failure-to-abate cessation order.

2. If subsequent to permit issuance the Department is notified by the agency that has jurisdiction over the violation that the violation is no longer in the process of being corrected to the satisfaction of said agency, the permit shall be suspended and/or rescinded in accordance with the procedures for 62 Ill. Adm. Code Section 1773.20(c) Improvidently Issued Permits within 30 days of such notification.

3. If subsequent to permit issuance the circuit or district court reviewing the violation either denies a stay applied for in the appeal or affirms the violation, then the applicant shall submit the proof required under 62 Ill. Adm. Code Sections 1773.15(b)(1)(A) within 30 days after the court's decision or the permit shall be suspended and/or rescinded in accordance with the procedures for 62 Ill. Adm. Code Section 1773.20(c) Improvidently Issued Permits within 30 days of such failure to submit required proof.

K. Pursuant to 62 Ill. Adm. Code 1817.121(a)(3), the Department requires submittal of finalized agreements with each public road authority and utility authority that assures public safety during subsidence. General information such as surveillance of effects as they occur and precautions taken to assure public safety should be described. This information shall be submitted at minimum of 60 days prior to subsidence of any section of road, utility, railroad, or high pressure pipeline.
L. Attachment IV.3.B.4.d.ii of the Significant Revision provides methods of protection of four (4) churches (protected features) proposed to be affected by planned subsidence. These methods of protection demonstrate that subsidence will not cause material damage to, or reduce the reasonably foreseeable use of, such facilities. During underground mining operations that result in planned subsidence, services and activities at each church will be re-established at another location with the cooperation of church leaders. Pursuant to 62 Ill. Adm. Code 1817.121(d), the Department requires the submittal of finalized agreements executed with authorized representatives of each church prior to any underground operations that results in planned subsidence.

M. Given the magnitude and long term projection of the proposed shadow area expansion, the Department is limiting the longwall mining operations that result in planned subsidence to Viking Districts No. 2 & No. 3 and M-Class Districts No. 2 & No. 3. Future longwall mining operations resulting in planned subsidence shall be submitted to the Department as a revision updating the subsidence control plan in accordance with 62 Ill. Adm. Code 1774.13.

V. CONCLUSIONS

Based upon the information contained in the significant revision application, information otherwise available and made available to the significant revision applicant, the comments of State Agencies, the foregoing analysis of the probable impact of the proposed operations, all findings and information contained herein and conditions set forth in Part IV, the Department finds that there is a reasonable basis on which to issue a significant revision for the application, as modified.

Enter on behalf of the Illinois Department of Natural Resources, Office of Mines and Minerals, Land Reclamation Division as Regulatory Authority.

Illinois Department of Natural Resources
Office of Mines and Minerals

[Signature]

Thomas A. Benner, Director

Dated: November 28, 2017
August 15, 2017

Gary Miles  
Sugar Camp Energy, LLC  
11351 No. Thompsonville Rd  
Macedonia, IL 62860

Via Certified Mail  
7015 1730 0001 4289 7454

Re: Modification to Permit No. 382, Revision No. 6  
No. 1 Mine

The Department, after reviewing the information contained in the permit application and information otherwise available to the applicant, and after considering all comments received, has determined that modification of revision application No. 6 to permit No. 382 is necessary. The modifications to the application shall comply with the requirements of 62 Ill. Adm. Code 1777.11. The modifications required by the Department are enclosed here. If the applicant does not desire to modify the permit application as described below, it may, by filing a written statement with the Department, deem the permit application denied, and such denial shall constitute final action.

Pursuant to 62 Ill. Adm. Code 1773.15(a)(1)(B)(i), modifications required by the Department shall be received within one year from the date of this letter. Absent the modifications required by the Department, the application does not demonstrate compliance with the requirements of the Illinois Surface Coal Mining Land Conservation and Reclamation Act, Regulations and Regulatory Program and the Department will issue a written finding denying the application.

The period for administrative review (62 Ill. Adm. Code 1847.3) shall commence upon:

- receipt by the applicant of a written decision from the Department, approving the application as modified, or

- if the applicant's modifications are insufficient, or if the applicant fails to submit the required modifications in accordance with 62 Ill Adm. Code 1773.15(a)(1)(B)(i), receipt by the applicant of a written decision from the Department denying the permit application, or

- receipt by the Department of the applicant's denial statement.
The modifications required by the Department are as follows:

1. Pursuant to 62 Ill. Adm. Code 1783.25(b), 1784.16(a), and 1784.23(c), and as required by Part I.10.B of the application, the Department is requiring the applicant to modify the application by submitting engineering certifications where the modifications result in changes to maps, plans or cross sections submitted under the original application.

2. Pursuant to 62 Ill. Adm. Code 1777.11(c), and as required by Part I.1 of the application, the Department is requiring the submittal of a verification by a responsible official of the applicant for the information being submitted as a result of this modification letter.

3. Pursuant to 62 Ill. Adm. Code 1773.22 the applicant is to provide information pertaining to violation history in relation to the ownership and control. Information submitted in the complete application indicates violations issued, relevant to the ownership and control of the applicant, that do not indicate the violation closed or terminated. Pursuant to sections 1773.15(b)(1)(A) and (B), the applicant shall submit proof that the current violation has been or is in the process of being corrected to the satisfaction of the agency that has jurisdiction over the violations or has filed and is presently pursuing, in good faith, a direct administrative or judicial appeal to contest the validity of the current violations.

The applicant shall provide additional information to the violations listed in the application that are not shown as terminated. The information shall be documents from the issuing agency indicating the above, or an update in status, verifying the termination of the violation.

4. In response to Part III.2.B.1 of the application, the applicant failed to provide the location of all water wells located within the shadow area and adjacent areas of the proposed permit area. In particular, water wells noted within Attachment III.2.B.1 do not appear to be located on the Hydrogeological Map (Map 3A and 3B). Pursuant to 62 Ill. Adm. Code 1784.14(b)(1), the applicant shall provide the location of all water wells located within the shadow area and adjacent areas of the proposed shadow area expansion area.

5. In response to Part III.2.B.1 of the application, the applicant provides the results from the door to door survey and mailed surveys of residents within the prosed mining expansion area and residents within one half mile of the proposed mining expansion area. The results indicate 353 wells and cisterns to be located within this area. However, on page 12 in Part III.2.D.1.a of the application, the applicant states that there are 246 domestic wells and 246 cisterns within and adjacent to the proposed shadow area expansion area. Pursuant to 62 Ill. Adm. Code 1784.14(b)(1), please clarify the number of water wells and cisterns located within and adjacent to the proposed shadow area expansion area.

6. In response to Part III.2.B.3 of the application, the applicant states “only 47 residents within the shadow and adjacent areas reported using a well or cistern source for household or drinking purposes”. However, in Attachment III.2.B.1, over 50 residents are reported as using a well or cistern as their primary water source. Pursuant to 62 Ill. Adm. Code
1784.14(b)(1)(B), please clarify the number of residents within the shadow area and adjacent areas that are utilizing a well or cistern as their primary water source.

7. In response to Part III.2.B.3 of the application, the applicant failed to provide the use of the private water wells documented by ISGS in Attachment II.12. Pursuant to 62 Ill. Adm. Code 1784.14(b)(1)(B), the applicant shall provide the use of the water wells noted in Attachment II.12.

8. In response to Part III.2.C.1 of the application, the applicant failed to document all ponds within the shadow area and adjacent areas of 20 acre-feet capacity or more. In particular, there appears to be two (2) ponds of 20 acre-feet capacity or more in Section 21 of Township 5S Range 4E. However, the applicant reports only one (1) pond of 20 acre-feet capacity or more in Section 21 of Township 5S Range 4E. Pursuant to 62 Ill. Adm. Code 1784.14(b)(2), the applicant shall clarify the number of ponds of 20 acre-feet capacity or more that are located within the shadow area and adjacent areas of the proposed shadow area expansion area.

9. The applicant provided ISGS oil and water well locations in Attachment II.12 of the application. In this Attachment, over 150 active and abandoned oil wells were noted within and adjacent to the proposed shadow area expansion area. However, no discussion was provided in Part III of the application detailing how these active and abandoned oil wells will be managed to assure protection of the ground water resources. Pursuant to 62 Ill. Adm. Code 1784.14(e)(1), the applicant shall include a discussion in Part III of the application detailing measures to manage subsidence of these oil wells to ensure no groundwater contamination occurs from the proposed operations.

10. The applicant provided the Cumulative Impact Area Map in Attachment III.2.C.1 of the application. However, it appears that features depicted in the legend are overlapping one another, making the map illegible. Pursuant to 62 Ill. Adm. Code 1778.11(a)(2), the applicant shall submit a clear and concise Cumulative Impact Area Map.

11. In response to Part I.2.A of the significant revision, the applicant references Attachment I.2.A. The referenced table does not include the name and address of the owner of the mineral property to be mined as required by 62 Ill. Adm. Code 1778.13(e). The applicant shall modify the response or table to provide the required information.

12. In response to Part IV.3.B.4.d.ii of the significant revision, the applicant describes a program to identify historic structures. However, this part of the application requires a narrative which assures compliance with the requirements of 62 Ill. Adm. Code 1817.121(d) as may be necessary to permit such proposed mining operations in relation to public buildings and facilities, schools, churches, and hospitals. The applicant shall modify the response accordingly.
13. In response to Part IV.3.B.7.c of the significant revision, the applicant provides a list of governmental bodies and utility companies in which agreements have been obtained or are being pursued. The Department requires the applicant identify the status of the agreement with each of the entities listed. Please note the Department will condition the permit to require agreements with the utility companies and road authorities prior to subsidence to ensure protection of public safety in accordance with 62 Ill. Adm. Code 1817.121.

14. In response to Part IV.3.B.7.c of the significant revision, the applicant indicates measures to mitigate subsidence related material damage to land will include drainage correction and recontouring to restore drainage patterns. These proposed drainage correction profiles are included on Map 7. The Department requires the submittal of documentation providing evidence that the applicant will have the right of entry to perform these proposed drainage correction activities pursuant to 62 Ill. Adm. Code 1778.15(f).

15. Based on the magnitude of the proposed shadow area expansion, the Department will conditionally approve the significant revision given all regulatory requirements are satisfied. The condition will limit the approved areas of longwall mining with planned subsidence to certain portions of the proposed shadow area. Given the long-term mining projections proposed, this conditional approval will allow the Department to seek additional information in the future to ensure compliance with the appropriate regulatory requirements. As such, the Department requires the General Location Map (Map 1) be modified to include the projected underground mining dates for each of the longwall panels and label the mining districts pursuant to 62 Ill. Adm. Code 1784.20(b)(2).

If you have any questions, please contact this office at (217) 782-4970, or our Southern office in Benton at (618) 439-9111.

Sincerely,

Scott K. Fowler, Supervisor
Office of Mines and Minerals

SKF:

cc: R. Smith
    Franklin County Clerk's Office
APPENDIX B
CONSIDERATION OF COMMENTS AND OBJECTIONS

62 Ill. Adm. Code 1773.13(b) allows submission of written comments on applications. The following are comments received from the State Agencies, County Board and other members of the public and the Department's response to those comments.

Illinois Department of Agriculture

Comment: The Illinois Department of Agriculture (IDOA) has reviewed the above referenced permit revision. The application is for an extension of their longwall operation. The revised permit covers +/- 59 square miles or +/- 39,972 acres. Planned subsidence to structures, water wells and drainageways will be repaired after subsidence has occurred. We have no comments at this time.

Response: Comment was forwarded to applicant.

Illinois Environmental Protection Agency

Comment: The mine related activities, as proposed, are not required to be permitted in accordance with 35 Ill. Adm. Code: Subtitle D of the Illinois Pollution Control Board Rules and Regulations.

This operation is presently covered under NPDES Permit No. IL0078565. Since no changes are now proposed from that previously permitted, a modified Permit will not be required.

Response: Comment was forwarded to the applicant.

U.S. Department of Interior, Fish and Wildlife Service

Comment 1: To facilitate compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, Federal agencies are required to obtain from the Fish and Wildlife Service (Service) information concerning any species, listed or proposed to be listed, that have ranges which include the project area. As the State of Illinois has been delegated the responsibility of issuing mining permits by the Office of Surface Mining, we are providing the following list of threatened and endangered species to assist in your evaluation of the proposed permit. The list for the proposed permit area includes the endangered Indiana bat (Myotis sodalis), endangered piping plover (Charadrius melodus), and threatened northern long-eared bat (Myotis
There is no designated critical habitat in the project area at this time.

Response: Comment noted and forwarded to applicant.

Comment 2: Information provided in the permit application indicates that there is no surface disturbance proposed in this revision and therefore no impacts to listed species are anticipated. Based on the information provided in the permit application, the Service concurs that the proposed permit actions are not likely to adversely affect any federally listed species. Although no surface disturbance is proposed in this revision, post-subsidence mitigation may be necessary to restore pre-existing drainage patterns which could result in impacts to forested riparian areas.

The Service recommends that any tree clearing be minimized or avoided if possible to reduce impacts to potential habitat for the Indiana bat and northern long-eared bat. If tree clearing is necessary, it should not occur during the April 1 thru October 14 time frame. Also, any forested areas impacted by post-subsidence mitigation should be restored.

Response: Tree clearing dates and post-subsidence mitigation of any potential impacts to forested riparian areas for longwall shadow area expansions are beyond the purview of the Department because the surface acres are not permitted under the regulations found at 62 Ill. Adm. Code 1700 – 1850. Concerns over potential impacts to forested riparian areas and tree clearing restrictions should be directed to the U.S. Army Corp of Engineers.

Comment has been forwarded to applicant.

Comment 3: Although no surface disturbance is proposed in this revision, post-subsidence mitigation may be necessary to restore pre-existing drainage patterns which could result in impacts to streams and wetlands. Activities in the project area that would alter these streams or wetlands may require a Section 404 permit from the US Army Corps of Engineers.

The Service recommends that impacts to streams and wetlands be avoided or impacts minimized to the greatest extent possible. If a permit is required than an appropriate mitigation plan should be developed and coordinated with the Service.

Response: Impacts to wetlands and streams and any necessary post-subsidence mitigation that may require a permit are beyond the purview of the Department because the surface acres are not permitted under the regulations found at 62 Ill. Adm. Code
APPENDIX B

CONSIDERATION OF COMMENTS AND OBJECTIONS

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Response: Comment noted and forwarded to applicant.
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Response: Tree clearing dates and post-subsidence mitigation of any potential impacts to forested riparian areas for longwall shadow area expansions are beyond the purview of the Department because the surface acres are not permitted under the regulations found at 62 Ill. Adm. Code 1700 – 1850. Concerns over potential impacts to forested riparian areas and tree clearing restrictions should be directed to the U.S. Army Corp of Engineers.

Comment has been forwarded to applicant.

Comment 3: Although no surface disturbance is proposed in this revision, post-subsidence mitigation may be necessary to restore pre-existing drainage patterns which could result in impacts to streams and wetlands. Activities in the project area that would alter these streams or wetlands may require a Section 404 permit from the US Army Corps of Engineers.

The Service recommends that impacts to streams and wetlands be avoided or impacts minimized to the greatest extent possible. If a permit is required than an appropriate mitigation plan should be developed and coordinated with the Service.

Response: Impacts to wetlands and streams and any necessary post-subsidence mitigation that may require a permit are beyond the purview of the Department because the surface acres are not permitted under the regulations found at 62 Ill. Adm. Code 1700 – 1850. Concerns over potential impacts to streams and wetlands should be directed to the U.S. Army Corp of Engineers.

Comment has been forwarded to applicant.

Comment 4: Although the bald eagle has been removed from the threatened and endangered species list, it continues to be protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act (BGEPA). The Service developed the App B - 2
National Bald Eagle Management Guidelines to provide landowners, land managers, and others with information and recommendations regarding how to minimize potential project impacts to bald eagles, particularly where such impacts may constitute “disturbance,” which is prohibited by the BGEPA. A copy of the guidelines is available at:


The Service is unaware of any bald eagle nests in the permit area; however, if a bald eagle nest is found in the permit area or vicinity of the permit area then our office should be contacted and the guidelines implemented.

Response: Comment noted and forwarded to applicant.

Public Comments

An informal conference regarding the application was held on June 21, 2017, in the Illinois Department of Natural Resources Field office in Benton, Illinois.

The written and informal conference comments were similar in nature. The issue addressed was concern about a public water supply line.

Comment 1: An objection to undermining the Rend Lake Conservancy District (District) water line was expressed. That objection focused on a 10-inch asbestos cement water main that serves about 5,000 people in the McLeansboro area. The commenter indicated the line is a critical transmission main and the District wants to make sure that they can continue to supply water to everyone.

Response: As part of the subsidence control plan, the Department will require the operator to ensure accessibility to a water supply during the planned subsidence operation. Therefore, the Department has conditioned the permit to require the operator to seek a cooperative agreement with all potentially impacted utilities within the areas of planned subsidence. Please see condition K.
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Sugar Camp Energy, LLC, Sugar Camp No. 1 Mine
Significant Revision No. 6 to Permit No. 382
And Permit No. 382 and No. 434 and Revision Nos. 1, 2, and 5 to Permit No. 382
Assessment and Findings of Probable Cumulative Hydrologic Impacts

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and
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Assessment and Findings of Probable Cumulative Hydrologic Impacts

Sugar Camp Energy, LLC (hereinafter referred to as “permittee” or “applicant” as applicable) was required to submit a determination of probable hydrologic consequences of the proposed mining and reclamation operations, both on and off the permit area, pursuant to 62 Ill. Adm. Code 1784.14(e) for underground mines.

Pursuant to 62 Ill. Adm. Code 1773.15(c) (5), the Department must make an assessment of the probable cumulative impacts of all anticipated coal mining on the hydrologic balance in the cumulative impact area, in accordance with 62 Ill. Adm. Code 1784.14(f), and find in writing that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area.

The following assessment and findings are intended to fulfill the above requirements.

I. GENERAL INFORMATION

A. Historical Coal Mines (ISGS)

There are no previous coal mining operations located upstream/upgradient of the existing Sugar Camp No. 1 Mine, nor of the proposed permit area. The nearest historic mining operation was located approximately five miles to the southwest of the Sugar Camp No. 1 Mine.

B. Active Coal Mines – Sugar Camp Mine (2008-current)

1. Permit No. 382 (issued 2008)

The original Sugar Camp No. 1 Mine permit (Permit No. 382) was issued for an underground coal mining operation consisting of approximately 12,103 acres, which included 1,264 acres for use as surface support facilities. The surface support facilities include a coal preparation plant, reclaim tunnels, parking lots, access roads, drainage control structures, office buildings, changing rooms, assembly rooms, warehousing facilities, storage facilities, elevator facilities, ventilation facilities, refuse disposal areas, overland conveyors, screens, crusher, power distribution facilities, power lines, water lines, rail loop and loadout facilities, stockpile areas and other associated facilities. The permittee is extracting the Herrin No. 6 Coal Seam at a depth ranging from 730 to 1,040 vertical feet from the surface, utilizing both room and pillar, and longwall mining methods within the 10,839 acres of shadow area. The areas utilizing room and pillar mining are designed to prevent subsidence while the longwall mining areas will have planned subsidence.

To date, the Department has issued seventy-eight (78) Incidental Boundary Revisions (IBR’s) and fifty (50) Insignificant Permit Revisions (IPR’s) for this facility pursuant to 62 Ill. Adm. Code
1774.13. These changes have resulted in the increase of the Permit No. 382 area by approximately 667-acres. These approved changes were for a variety of items, mostly consisting of various boreholes (power, air vents, or water) as well as the addition of a refuse conveyor belt system and the addition of a water pipeline to be utilized to remove water from the mine workings. Of the seventy-eight IBR’s, twenty-four were IBR’s for shadow area. Approximately 458-acres of shadow area has been added via these IBR’s.

The waterlines and vent shafts, extending to the east and northeast of the Permit No. 382 area, cross the upper reaches of unnamed tributaries, none of which show a significant impact by the completed activities. The surface disturbances associated with the additional acreage were short-lived and accommodated the existing drainage via the installation of properly-sized culverts so as to not impede the existing flow in the tributaries.

2. **Permit No. 382, Significant Revision No. 1 (issued 2012)**

Significant Revision No. 1 to Permit No. 382 modified the previously approved refuse disposal area (RDA) from an incised cell to an impounding structure. No other changes to the RDA have been proposed or approved.

3. **Permit No. 382, Significant Revision No. 1 (issued 2011)**

Significant Revision No. 2 to Permit No. 382 added 817 acres of shadow area for additional longwall mining area. No other changes to the existing permit were proposed or approved.

4. **Permit No. 382, Significant Revision No. 3 (withdrawn)**

Significant Revision No. 3 to Permit No. 382 proposed to add 880.3 acres of shadow area to the existing and approved shadow area for the Sugar Camp No. 1 Mine. This application was withdrawn by the applicant via written request dated November 6, 2014.

5. **Permit No. 382, Significant Revision No. 4 (pending)**

Proposed Significant Revision No. 4 to Permit No. 382 is for a new refuse disposal area, located in the eastern portion of the existing permit area. Currently, the area is permitted as “Undisturbed” under the original Permit No. 382. At this time, the application has not been reviewed by the Department to determine if it is Administratively Complete.

6. **Permit No. 434 (issued 2015)**

This permit was issued by the Department in 2015 for a new refuse disposal area. This additional permit area was approved to add approximately 1,159 acres to be used almost exclusively for disposal of both coarse and fine coal refuse. Permit No. 434 is located directly north of the existing Permit No. 382 area, including acreage added for construction of a refuse conveyor belt system.

The Permit No. 434 area is located in parts of Sections 4 and 5 of Township 6 South, Range 4 East, and Sections 29, 28, and 33 of Township 5 South, Range 4 East of Franklin County, Illinois.
site is surrounded by a mixture of privately owned rural properties and/or agricultural lands. Some forested areas exist in the vicinity as well.

7. **Permit No. 382, Significant Revision No. 5 (issued 2016)**

Significant Revision No. 5 to Permit No. 382 added 755 acres of shadow area for both room and pillar development mining and longwall mining operations. No other changes to the existing permits are proposed.

8. **Permit No. 382, Significant Revision No. 6 (proposed)**

Proposed Significant Revision No. 6 to Permit No. 382 is for approximately 37,971.9 acres of shadow area for both room and pillar development mining and longwall mining operations. No other changes to the existing permits are proposed.

II. **PROBABLE CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA) OF SUGAR CAMP ENERGY, LLC, SUGAR CAMP MINE**

A. **Cumulative Impact Area (CIA) Evaluation**

For purposes of a Cumulative Hydrologic Impact Assessment (CHIA), the Cumulative Impact Area (CIA) is defined as follows:

The area, including the permit area, within which impacts resulting from the proposed operation may interact with the impacts of all anticipated mining on surface and groundwater systems. Anticipated mining shall include, at a minimum, the entire projected lives through bond release of:

the proposed operation;

all existing operations;

any operation for which a permit application has been submitted to the Department.

This is based upon baseline geologic and hydrologic information. See 62 Ill. Adm. Code Sections 1701.Appendix A and 1784.14.

1. **Office of Surface Mining Guidance**

The Federal Office of Surface Mining Mid-Continent Region (OSM-MCR) developed a document in June 2007 entitled *Hydrologic Considerations for Permitting and Liability Release, a Technical Reference for the Mid-Continent Region*. In determining whether a CHIA is required, OSM-MCR states that “the operative word in the CHIA concept is *cumulative* which seemingly necessitates the potential interaction of two or more anticipated mining operations.” (p. 17) Further OSM states, “While it may be possible that for a single hydrologically isolated mine the probable hydrologic consequences determination made by the operator would be adopted by the regulatory authority
as the CHIA, nevertheless such a conclusion must be reached by the regulatory authority on a case-
by-case basis.” (p. 17)

2. **CIA Determination for Sugar Camp Energy, LLC, Sugar Camp Mine**

Previously, the Department determined a CIA was necessary for the recently approved Permit No. 434 area, combined with the original Permit No. 382 areas. For the previous assessment, the Department looked within the four HUC 12’s (the Sugar Camp Creek, Carlton Branch-Middle Fork Big Muddy River, Akin Creek and Sullivan Branch-Middle Fork Big Muddy River HUC’s) that include the existing and proposed Sugar Camp permit areas.

The Department has determined that the likelihood of the proposed Permit Application No. 435 (Sugar Camp Energy’s Logan Mine) proceeding is high. Therefore, a CIA is necessary. The Department’s required assessment of the Probable Hydrologic Consequences (PHC) follows pursuant to 62 Ill. Adm. Code Sections 1784.14(b)(3) and 1784.14(e).

B. **Assessment of the Probable Hydrologic Consequences (PHC) for the Permit Area and the Shadow Area**

1. **Permit Area and the Shadow Area**

For purposes of this CHIA, the Department will discuss the additional proposed shadow area only. Previously, the Department conducted the required hydrologic assessment on the original Permit No. 382 permit area, shadow area, and their respective adjacent areas and more recently, on the Permit No. 434 area. Please see the previously issued CHIA’s for detailed discussions of the hydrologic assessments.

Per 62 Ill. Adm. Code Section 1701.Appendix A, the following terms are defined:

The “permit area” is defined as:

[T]he area of land and water within the boundaries of the permit which are designated on the permit application maps, as approved by the Department. This area shall include all areas which are or will be affected by the surface coal mining and reclamation operations during the term of the permit indicated on the approved map which the operator submitted with the operator’s application and which is required to be bonded under 62 Ill. Adm. Code 1800 and where the operator proposes to conduct surface coal mining and reclamation operations under the permit, including all disturbed areas; provided, that areas adequately bonded under another valid permit may be excluded from a permit area. The permit area excludes the area defined in this Part as the shadow area.

The “shadow area” is defined as:

[A]ny area beyond the limits of the permit area in which underground mine workings are located. This area includes all resources above and below the coal that are protected by the State Act that may be adversely impacted by underground mining operations including impacts of subsidence.

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The “adjacent area” is defined as:

The area located outside the permit area, or shadow area, where a resource or resources, determined according to the context in which adjacent area is used, are or reasonably could be expected to be adversely impacted by proposed mining operations.

As approved by the Department for Permit No. 382, the existing shadow area is described as:

The approximately 12,598 acre tract of land located in parts of Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, and 16 of Township 6 South, Range 4 East and parts of Sections 19, 20, 29, 30, 31 and 32 of Township 5 South, Range 5 East in Franklin County, Illinois and parts of Sections 5, 6, 7, 8, 17 and 18 of Township 6 South, Range 5 East, parts of Sections 25, 26, 27, 28, 33, 34, 35 and 36 of Township 5 South, Range 4 East in Hamilton County, Illinois.

As described in Section 1.B.8 above, the proposed shadow area for Significant Revision No. 6 to Permit No. 382 consists of approximately 37,971.9 acres. The additional acres are located within Sections 7, 8, 17, 18, 19, and 20 of Township 5 South, Range 5 East and parts of Sections 18, 19, 30, and 31 of Township 6 South, Range 5 East in Hamilton County, Illinois and parts of Sections 11, 12, 13, 14, 23, 24, 25, 26, 35, and 36 of Township 5 South, Range 3 East and parts of Sections 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33 of Township 5 South, Range 4 East and parts of Sections 1, 2, 11, 12, 13, 14, 23, 24, 25, and 36 of Township 6 South, Range 3 East and parts of Sections 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36 of Township 6 South, Range 4 East in Hamilton County, Illinois.

As required by 62 Ill. Adm. Code 1784.14(b)(1), the permittee had to provide information on all groundwater wells found within one-half (1/2) mile from the perimeter of the shadow area that could be impacted by subsidence caused by underground coal extraction. Pursuant to 62 Ill. Adm. Code Sections 1784.20 and 1817.121, the permittee is required to execute a subsidence control plan approved by the Department which provides for mitigation of damages caused by subsidence. Therefore, for the purposes of this CHIA, the Department has determined that the adjacent area for the Permit No. 382 shadow area is the area one-half mile away from the perimeter of the shadow area. This area extending one-half mile area away from the shadow area perimeter is delineated on Map No. 1 and, for the reasons set forth, identifies those areas where the surface water and groundwater resources could be reasonably expected to be adversely impacted by the proposed mining operations.

a. Regional Hydrologic Area

The existing permit and shadow areas are located in the glaciated upland area of northeastern Franklin County and western Hamilton County. These areas are situated within the reaches of two streams, Akin Creek and the Middle Fork Big Muddy River. Unnamed tributaries and associated branches pass through the permit area and shadow area. The Permit No. 434 area is located between Sugar Camp Creek and the Middle Fork Big Muddy River. Both of these areas eventually drain to the Big Muddy River, itself. The nearest USGS gaging station located on the Big Muddy River is near Benton, Illinois. There are no USGS gaging stations located on the Middle Fork Big Muddy River, nor on Sugar Camp or Akin Creeks. The USGS gaging station on the Big Muddy
River near Benton, Illinois (05596000) has a drainage area of 502 square miles (321,280 acres). This gaging station is approximately 8 miles southwest of the surface facilities permit area; therefore its use is inappropriate, given the large drainage area.

b. Permit Area Surface Waters Assessment Area

The permit area surface waters assessment area was previously defined as the approximately 96.43 square mile (61,712-acre) area which encompasses the portions of the watersheds of Sugar Camp Creek, Akin Creek and the Middle Fork Big Muddy River (See Map No. 1). The permit area assessment for surface waters includes the entire existing permit areas. The watershed of Middle Fork Big Muddy River, just below the confluence of the three streams, has been estimated to also be approximately 96.43 square miles (61,712 acres).

The Permit No. 382 area is approximately 1,360 acres, the Permit No. 434 area is approximately 1,160 acres and the proposed Permit Application No. 435 (Logan Mine) is approximately 2,295 acres. The combined surface facilities permit areas is approximately 4,815 acres; this is 7.8% of the watershed size. Considering only the existing Permit No. 382 and Permit No. 434 areas, these surface facilities areas represent approximately 4% of the watershed size.

The potential mining-related impacts to surface water in the area encompass approximately 4 to 8% of the watershed. Based on this, the impacts should be negligible due to the volume of water contributing to the Middle Fork Big Muddy River at the confluence with both Akin Creek and Sugar Camp Creek. The applicant established a stream sampling point downstream of the confluence of the three streams. The Middle Fork Big Muddy River eventually discharges to the Big Muddy River approximately twenty miles downstream (to the southwest). The watershed of the Big Muddy River at USGS gaging station 05597000, near Plumfield, IL is approximately 792 square miles (506,880 acres). The mining-operations influence of the Big Muddy River would be less than 0.5%.

c. Permit Area Groundwater Assessment Area

The permit area groundwater assessment area has been defined as the same area as the surface water assessment area. The groundwater assessment area for the permit area has been selected based upon the Department’s assessment of the possible hydrologic impacts which may occur as a result of mining operations proposed for Permit No. 382. The subsurface hydrologic components considered in this assessment include all significant water-bearing units in and within the vicinity of the surface facilities permit area (See Map No. 1).

d. Shadow Area Surface Waters Assessment Area

The shadow area surface waters assessment area is approximately 62,050 acres, while the approved and proposed shadow area is approximately 50,569 acres in size. As described above, this assessment is limited to the area one-half mile away from the perimeter of the shadow area. The Department limited the assessment area to the one-half mile radius around the shadow area as lands beyond the one-half mile area historically are unaffected by longwall mining operations.

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e. **Shadow Area Groundwater Assessment Area**

The shadow area groundwater assessment area is approximately 62,050 acres, while the approved and proposed shadow area is approximately 50,569 acres in size. As described above, this assessment is limited to the area one-half mile away from the perimeter of the shadow area. The Department limited the assessment area to the one-half mile radius around the shadow area as lands beyond the one-half mile area historically are unaffected by longwall mining operations.


a. **Baseline Geologic Information**

As previously indicated by the permittee, the application for Permit No. 434 provides that the regional bedrock geology of the area consists of Pennsylvanian system formations. Sixty percent of the Pennsylvanian system strata are classified as sandstones, while most of the remainder of the strata is siltstones and shales. A small percentage of the remaining strata (approximately one percent) of the Pennsylvanian system are classified as coal and/or limestone units. Known geologic faults and fractures exist regionally, but none appear to exist within the existing or proposed permit areas. The closest structural feature is the Rural Hill Anticline, located approximately four miles east of the existing permit area.

Unconsolidated deposits within the surface facilities permit area are Pleistocene in age, and are approximately 20 feet thick and consist mainly of clays, but some gravels and discontinuous sands also are present. Per the applicant, the discontinuous sand deposits do not generally perform reliably as a significant aquifer within either permit area.

Site-specific geology, interpreted from the boring and corehole logs, submitted with the original permit application indicates the depth to the Herrin No. 6 Coal Seam ranges from 730 vertical feet to 1,040 vertical feet with seam floor elevations ranging from 458 feet below mean sea level (MSL) to 293 feet below MSL. The regional dip of the Herrin No. 6 Coal Seam is less than one percent to the northeast. The Herrin No. 6 Coal is overlain by alternating shale and limestone layers. The roof material of the Herrin No. 6 Coal has been described as a thin black shale. The target coal seam is approximately five and a half feet thick in the area.

b. **Geologic Information Findings**

Per the Illinois State Geologic Survey (ISGS), the bedrock in southern Illinois consists of layered beds of shale, sandstone, limestone, dolomite and coal. The original laboratory analyses of the consolidated overburden (Corehole #6403-01) indicated an ample presence of alkaline materials which will more than adequately be able to neutralize any acid or toxic-forming potential of the overburden materials. The units identified as potentially acid- or toxic-forming consist of the black shale and the medium gray claystone immediately above the Herrin No. 6 Coal. The floor of the No. 6 Coal is described as a typical underclay and is quite alkaline. The approved mining operations consist of underground mining and potential sources of acid-forming materials (mainly the coal refuse materials) will be disposed of on the surface, with the exception of the shaft and slope development materials, which will be properly handled by the permittee. The permittee stockpiled any potentially acid-forming material encountered during development of the
shaft/slope, properly covered the stockpile and adequately identified the materials. During reclamation, this material will be used as backfill in the shaft/slope area. The permittee has stated that the overall net neutralization potential of the shaft/slope development materials is +40 tons per 1000 tons. The permittee utilized the industry standard for acid-forming material as anything exhibiting a net acid production potential of greater than -5 tons per 1000 tons.

For Permit No. 434, the applicant provided the acid-base accounting data on the refuse being produced at the Sugar Camp Mine. The paste pH of the coarse refuse ranged was 8.22; the paste pH of the solid portion of the fine coal refuse material was 8.06. The overall net neutralization potential for the fine coal refuse is -7.35 tons per 1000 tons; while the net neutralization potential for the coarse refuse averages -55.13 tons per 1000 tons. The analysis of the coal refuse (both the coarse and fine factions) indicates that the refuse materials are potentially acidic. Proper handling of this refuse material will minimize any negative impacts to the hydrologic balance. Proper handling includes keeping the coarse refuse surface fresh to prevent oxidation and once the coarse refuse ring is completed, adequately covering the coarse refuse with alkaline materials and supplementing the refuse with neutralizing materials, such as lime.


a. **Baseline Information**

i. **Surface Water Quantity Baseline Information**

During active operations for the Sugar Camp Mine, surface runoff from the Permit No. 382 affected areas will report to one of seven sediment ponds constructed for the operation and surface runoff from the Permit No. 434 area will report to one of four sediment ponds constructed for this area. At the end of mining, four of the eight original sediment ponds in Permit No. 382 will remain as water; increasing the acres of water resources by approximately 36 acres. All of the proposed sediment ponds for Permit No. 434 will be removed and the land uses restored. No developed water resources existed within the original Permit No. 382 area or within the surface facilities permit area for Permit No. 434. However, several small ponds are present within the existing and proposed Permit No. 382 shadow area.

Another issue which must be addressed is the potential for stream alterations and flooding within the shadow area, which may result from the longwall mining subsidence. Pursuant to the terms of Permit No. 382 and Revision No. 2 to Permit No. 382, the permittee recognizes the potential for short-term stream alterations as well as the potential for flooding as a result of subsidence in the upper reaches of the Middle Fork Big Muddy River and Akin Creek. Stream flows may be interrupted, causing water to pool in the existing stream channels or over bank flooding into low lying areas. Each of these streams is classified as perennial streams. Pursuant to the terms in Permit No. 382 and Revision No. 2 to Permit No. 382, the permittee proposes to excavate, or dredge, stream channels to drain the subsided, flooded stream area back into its stream channel. Dredging of the chain pillars is also proposed. If this dredging is necessary, it will allow for continued uninterrupted stream flow. The mining-related effects are expected to be only temporary in nature and stream flows are required to be restored to pre-mining conditions.
Please see the Department’s previous CHIA’s for additional details regarding surface water quantity.

ii. **Surface Water Quality Baseline Information**

Within the existing and proposed Permit No. 382 shadow area, several ponds with potentially 20-acre feet volume exist. Many of these ponds appear to be man-made and are presumably used for farm (livestock) or aesthetic purposes. During active longwall mining, a subsidence mitigation plan will be developed for these ponds and other ponds of potentially 20-acre feet volume. The subsidence mitigation plan will be developed to assure the planned subsidence will not cause material damage or reduce the use of any of the ponds within or adjacent to the proposed shadow area expansion area. The applicant has committed to reaching an agreement to reconstruct pond structures to the original configuration after subsidence has occurred with landowners who have experienced damage to their ponds due to the planned subsidence of this proposed shadow area expansion.

Please see the Department’s previous CHIA’s for additional details regarding surface water quality.

iii. **Groundwater Quantity Baseline Information**

The groundwater potential of the permit area and shadow area has been described by Pryor (1956). The chances for development of a reliable groundwater supply from the unconsolidated materials are described as poor. Logs previously supplied by the permittee indicate that, throughout much of the permit area, the unconsolidated material ranges from approximately 10 to 30 feet thick. The unconsolidated material is composed of mainly clays, silty clays and discontinuous sand deposits. Many of the surficial sand deposits are narrow and discontinuous. Some reliable sources of groundwater have been developed into the bedrock, below the unconsolidated materials. Pryor states that the Pennsylvanian bedrock is generally not a water-yielding strata, except for small supplies which may be available from the sandstone.

Potential water bearing bedrock strata, as identified in the literature, include the Mt. Simon Sandstone, the Trivoli Sandstone and the Anvil Sandstone. The Mt. Simon Sandstone is approximately 420 feet below the Herrin No. 6 coal, while the Trivoli is approximately 260 vertical feet above. The Anvil Rock Sandstone is approximately 50 feet above the Herrin coal seam. The Trivoli Sandstone is a fairly widespread unit over southern Illinois. The ISGS describes the Mt. Simon as a massive sandstone unit, which can range in thickness from 500 (in southern Illinois) to 2600 feet (in northern Illinois); the Mt. Simon is highly saline in Southern Illinois and is not used as a potable aquifer. The Trivoli Sandstone appears to be approximately 20 to 80 feet thick in the vicinity of the Sugar Camp Mine. Even though it is a widespread unit, rapid lateral facies changes occur which limits the Trivoli’s utility as a reliable aquifer (Willman, 1975) and is quite saline.

Beyond these units, no other confirmed sources of groundwater are known; however, other minor aquifers may exist. The applicant provided information that 115 wells or cisterns are used for household or drinking purposes within the proposed shadow area and adjacent area. However, the
applicant states that most residents within the vicinity of both the original and proposed permit areas obtain their water supply from rural and/or municipal water systems.

As a result of the long-wall mining operation, the permittee has reportedly experienced water diminishment in water wells within and beyond the approved shadow area. Per the permittee, a few well owners have experienced diminished recharge rates and lower static water levels in their wells. To date, the Department has not been contacted by any resident regarding a water well issue, including the loss of water. The wells that have been impacted range in depth from 225 to 358 feet deep and are within the Pennsylvanian sandstone units, likely in an unidentified sandstone present above the No. 6 Coal. No changes in water quality have been noted. Because of the diminishment, the permittee has provided the well owners with public water supply connections. In addition, the permittee has a plan in place to continually monitor the water levels in these wells and once the wells have recovered, Sugar Camp will conduct a pump rate/drawdown test and collect a sample for quality analysis to assure the landowner the water has recovered to the pre-mining quality and quantity.

The majority of the private domestic wells in use within the approved shadow area average 200 feet in total depth and are within the bedrock; only a few shallow wells or cisterns are reported in the area. None of the shallow wells appear to be used as a primary water source. One private well reportedly in use as a primary water supply reports a depth of 500 feet. Near this location, boring BI-43-78, shows the Herrin No. 6 Coal at a depth of 817 feet. Given an average extraction height of 7 ½ feet and using the applicants estimate that subsidence impacts could reach 40 times the mine height, the potential zone of impact would be 300 feet. If this estimate is correct, even the deepest private water supply well should not see a permanent decrease in water quantity or a change in water quality. Again, as noted earlier in this discussion, the permittee/applicant has identified a dozen residents who have experienced a quantity impact. Those wells were identified as being 225 to 358 feet deep. The permittee/applicant expects the diminished quantity to be only temporary and fully expects the wells to recover to their original capacities.

Subsidence related impacts to the few shallow wells in the area may include water loss or a lowering of the water table. Booth and Spande (1991) found that water levels in shallow aquifers often recover to near pre-mining levels shortly after subsidence occurs. There are six (6) shallow wells located within the proposed shadow area that are reportedly used for household or drinking purposes. These six (6) wells may potentially experience diminished water supplies due to subsidence, but water quantity is expected to recover to pre-mining levels through time. The majority of wells located within the proposed shadow area are reportedly used for secondary uses (i.e. gardening, lawn watering, stock watering, etc.). Additionally, most residents within the shadow area and adjacent areas are connected to public water supplies and do not rely on a well or cistern for drinking purposes. Nonetheless, wells or cisterns that may be affected by this proposed shadow area expansion are expected to recover after subsidence has occurred.

The permittee has not proposed any consumptive uses of groundwater therefore no adverse impacts to groundwater quantity are anticipated as a result of operations in the permit area. However, the activities in the permit area are not the only ones that should be considered. Planned subsidence of portions of the shadow assessment area may have some impacts on the groundwater system which must be addressed. Subsidence can lead to increased hydraulic conductivities in the subsided area due to fracturing of overlying rock units (Owili-Eger, 1983). Booth and Spande

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(1991) determined that aquifer characteristics of an originally poor aquifer actually improve after mining. A study conducted in the early 1990’s by the Illinois Mine Subsidence Research Program (IMSRP) concluded that local aquifers were enhanced via increased yields and increased hydraulic conductivities as a result of subsidence. IMSRP research indicated that higher pumping rates could be sustained with lower overall drawdown of the aquifer.

Pursuant to 62 Ill Adm. Code 1817.41(j), the operator for the Sugar Camp Mine will be required to protect drinking domestic and residential water supplies by documenting pre-mining quality and quantity of water supplies and to provide adequate replacement for supplies impacted by underground mining activities conducted after January 19, 1996. The Department finds that planned subsidence operations have the potential of impacting the quality or quantity of a water supply. Therefore, all wells for which the operator has no specific agreement with individual landowners concerning post subsidence resolution of water supply issues, shall be monitored to acquire adequate seasonal data sufficiently in advance of any potential impacts.

Please see the Department’s previous CHIAs for additional details regarding groundwater quantity.

iv. Groundwater Quality Baseline Information

In 2014, the applicant installed a reverse osmosis treatment plant to deal with the high chloride water that was infiltrating the mine workings. The high chloride water is presumably located directly above the No. 6 coal seam and as the longwall operation is progressing and fracturing of the roof rock is occurring, this water is draining into the mine workings. This high chloride water is pumped from the underground workings to two surface clarifying/settling ponds before being pumped to the reverse osmosis (RO) treatment plant. The RO plant, located near the preparation plant, treats the high chloride water into two waste streams – 75% of the treated water (approximately two million gallons per day) is pumped directly to Pond 001, where it is then utilized by the preparation plant; the second waste stream is a liquid concentrate, consisting of approximately 675,000 gallons per day. Approximately 50% of this second waste stream is disposed of in the two on-site deep injection wells, while the remaining 50% is sent to the existing RDA. The RO treatment plant, combined with the deep injection wells, was the best available treatment option for the permittee and this treatment option has been approved by both the Illinois EPA and the Department.

Please see the Department’s previous CHIAs for additional details regarding groundwater quality.

v. Existing Coal Processing Waste Disposal Baseline Information

Significant Revision No. 6 to Permit No. 382 proposes to add approximately 37,971.9 acres of shadow area to the existing 12,598 acres.

Two refuse disposal areas (RDAs) have been approved by the Department for this facility; the original 226-acre RDA within Permit No. 382 and the 502-acre RDA within Permit No. 434.

Please see the Department’s previous CHIAs for additional details regarding coal processing waste disposal.

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b. Findings

i. Surface Water Quantity Findings

Permit Area
Please see the Department’s previous CHIAs regarding the surface water quantity findings for the Permit Areas.

Shadow Area
Within the Permit No. 382-approved and proposed shadow area, several ponds of potentially 20-acre feet volume exist. Many of these ponds appear to be man-made and are presumably for farm (livestock) or aesthetic purposes. During active longwall mining, the quantity of water in these ponds may be affected, but no changes in water quality are anticipated or expected. Any subsidence-related impacts to these ponds will be taken care of by the applicant. These ponds are considered structures and therefore, pond damage will either be repaired or the pond owner will be compensated for the impact.

Another issue which must be addressed is the potential for stream alterations and flooding within the shadow area, which may result from the longwall mining subsidence. In Attachment IV.3.B.6 of the application for Permit No. 382, the permittee committed to a streamflow restoration plan for both the Middle Fork Big Muddy River and Akin Creek. Sugar Camp Energy recognized the potential for short-term stream alterations as well as the potential for flooding as a result of subsidence. Stream flows may be interrupted, causing water to pool in the existing stream channels or over bank flooding into low lying areas. The permittee will excavate, or dredge, stream channels to drain the subsided, flooded stream area back into its stream channel. The permittee has committed to obtain the proper and necessary rights and permits (including those from other Agencies) prior to causing subsidence that would require corrective action work on the streams. Typically, Illinois streams do not experience water loss due to subsidence; therefore, the Department believes the potential for water loss is negligible. Because the mining-related impacts to the local streams will only be temporary, the Department does not consider this to be material damage to the hydrologic balance.

ii. Surface Water Quality Findings

Permit Area
Please see the Department’s previous CHIAs regarding the surface water quality findings for the Permit Areas.

Shadow Area
The quality of the streams within the Permit No. 382 existing and proposed shadow area should not experience any change in water quality as a result of the proposed operations.
Groundwater Quantity Findings

Permit Area
Please see the Department’s previous CHIAs regarding the groundwater quantity findings for the Permit Areas.

Shadow Area
It is not anticipated that groundwater quantity within the shadow area will be significantly, permanently impacted by the operations proposed in Significant Revision No. 6 to Permit No. 382.

The applicant is not proposing any consumptive uses of groundwater and planned subsidence mining should have a minimal impact on the shallow groundwater quantity within the existing and proposed shadow area. Therefore, since no consumptive uses of groundwater are proposed there should be no long-term adverse impacts to groundwater quantity. However, underground longwall mining operations can affect the amount of groundwater available, on a short-term basis, to wells by lowering the static water level in the vicinity of the wells as groundwater fills the resultant subsidence fractures.

It should be noted that evidence exists that hydraulic conductivity values in sandstone increase by one order of magnitude due to subsidence (DeMaris, 1996). Additionally, the IMSRP investigation of subsidence of the Mt. Carmel Sandstone aquifer indicated that subsidence changed the aquifer from a poor one into a “potentially more productive aquifer.” This indicates that the availability of groundwater once subsidence occurs could be increased over current levels, thereby increasing the amount of groundwater available to domestic users.

There are three-hundred and ninety-five (395) wells or cisterns reported to be located in the approved and proposed shadow area and adjacent areas of Permit No. 382. Of the 395 wells and cisterns, two-hundred (200) are reported to be currently used. Of the 200 currently used wells or cisterns, one-hundred and fifteen (115) wells or cisterns report utilizing groundwater for household or drinking purposes. These residential wells and cisterns report total depths ranging from 10 to 500 feet, with multiple resident’s well depths unreported.

Originally, fourteen (14) residents within one-half mile of the existing permit area or within the existing shadow area of Permit No. 382, reported using groundwater wells as their primary source of drinking water. The depths of these residential wells range from 12 feet to 500 feet, with most wells appearing to be approximately 200 feet deep and within the unconsolidated materials.

Given the depth of the proposed mining (730 to 1,040 feet deep), the projected subsidence impact area and the presence of at least 200 feet of overburden between the mined coal and the domestic wells, the groundwater quantity of the shallow domestic wells (approximately 25 feet deep) should not have a significant long-term impact, if any at all, but there is potential for short-term impacts to the available quantity of water in the deeper bedrock wells.

With regard to quantity, underground longwall mining operations can affect the amount of groundwater available, on a short-term basis, to wells by lowering the static water level in the vicinity of the wells as groundwater fills the resultant subsidence fractures. In addition, the availability of groundwater can be affected by subsidence that can cause changes in permeability.
and porosity due to fracturing of the materials above the mined seam. Room and pillar development mining, which will be used as support for the longwall panels, is not expected to have any impacts on groundwater quantity.

With that, the applicant notes that to date, domestic wells have been impacted by the longwall mining operation. These wells range in depth from 225 to 358 feet deep and all have experienced a "diminished" well yield. Each of these wells are believed to have been completed in the Pennsylvanian sandstones. The applicant notes that, "the wells are usable and are not totally dewatered. However, the wells are unable to sustain a water supply adequate for household usage."

As a result of the impacted domestic wells, Sugar Camp Energy has connected all of the residents to a public water supply source. Water elevations at each of the private wells are being monitored by the permittee on a quarterly basis.

However, neither the Department nor the permittee expect long-term or permanent diminishment of groundwater levels to occur; both the Department and the permittee expect the groundwater levels to rebound to at or near pre-mining levels once longwall mining has ceased.

Groundwater quantity below the lowest coal seam to be mined should not be affected by the proposed mining operations. The stratum immediately below the Herrin No. 6 Coal is a typical underlay which exhibits low permeability characteristics. The low permeability of the underlay should restrict the downward movement of water from the mine voids into the underlying strata. In addition to the above, there is no indication that any resident currently obtains drinking water from a source below the coal seam.

iv. Groundwater Quality Findings

**Permit Area**

Please see the Department’s previous CHIAs regarding the groundwater quality findings for the Permit Areas.

**Shadow Area**

Groundwater quality in the existing and proposed Permit No. 382 shadow area should not be adversely impacted by the planned subsidence mining method for Permit No. 382. A lack of widespread sources and the availability of public water sources, justify the approved program of groundwater monitoring. The permittee, made a commitment to replace any private water supplies that may be impacted; and has done so for the residents that have reported diminished water in their private wells. To date, no resident has reported a change in water quality and no change is expected.

With regard to quality, a slightly higher level of mineralization may temporarily affect post-mining groundwater quality within the shadow area and its adjacent area. These increases should be well within water quality standards and should have negligible effects on the overall groundwater quality.
c. Findings Related to Existing Coal Processing Waste Disposal

Please see the Department’s previous CHIAs regarding the coal processing waste disposal findings for the Permit Areas.

III. CONCLUSION

The surface water and groundwater monitoring programs are designed to provide sufficient lead time for notification of any potential impacts, as well as to provide ample time for the investigation and mitigation of any impacts prior to reaching off-site. Both the groundwater and surface water monitoring programs are dynamic and as such, the Department reserves the right to add monitoring parameters or monitoring locations should the need arise. The permittee required to monitor the surface and groundwater throughout the life of the mine, up to and including the time of final bond release.

The Department’s hydrogeologic assessment on the proposed shadow area addition is now complete. As noted in the discussions throughout this document, the Department has concluded that the additional shadow area will not have a negative impact on either the surface water or groundwater regimes in the permit area for Permit No. 382 or Permit No. 434 or the existing shadow area of Permit No. 382.

Neither the surface water nor groundwater within the permit area for Permit No. 382, Permit No. 434 or the shadow area of Permit No. 382 will be materially damaged unless the quantity and/or quality of water is degraded, on a long-term or permanent basis, beyond applicable standards or a long-term or permanent loss of use is reported. Material damage occurs when the impact is immitigable. Although the permittee has reported diminished water levels in twelve private wells, none of the wells have been completely dewatered and no changes in the water quality have been reported. Neither the applicant nor the Department anticipates that the diminished water levels in these wells will be permanent.

As noted above, the Department determined that a Cumulative Impact Area (CIA) is applicable to the Sugar Camp Mine facility, due to the anticipated additional mining operation (Permit Application No. 435, Sugar Camp Energy’s Logan Mine). The Office of Surface Mining Mid-Continent Region’s (OSM – MCR) June 2007 document allows the regulatory authority the latitude to determine whether a CIA and CHIA are necessary. In this particular site, the Department determined the mining operation necessitated a CIA. Therefore, the Department conducted an assessment of the probable impacts on the mining operations within the permit, shadow and their respective adjacent areas.

Therefore, the cumulative hydrologic impact assessment finds that the proposed operations have been designed to prevent material damage to the hydrologic balance beyond the Permit No. 382 and Permit No. 434 areas, as well as the proposed and existing shadow areas of Permit No. 382.
IV. REFERENCES AND ATTACHMENTS

REFERENCES


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APPENDIX D

SUGAR CAMP ENERGY, LLC., SUGAR CAMP MINE NO. 1
REVISION NO. 6 TO PERMIT 382
ASSESSMENT AND FINDINGS OF SUBSIDENCE IMPACTS

Sugar Camp Energy, LLC (Sugar Camp) has proposed to add additional planned subsidence areas to Permit No. 382. The Department finds that the subsidence control plan as modified is capable of meeting the performance standards of the Department’s Permanent Program Rules. The Department will monitor Sugar Camp’s performance in meeting the mitigation requirements of 62 Ill. Adm. Code 1817.121.

Sugar Camp has committed to securing all necessary rights, including the right to subside, through execution of an affidavit required by 62 Ill. Adm. Code 1778.15(f).

Regardless of subsidence rights, surface ownership or the existence of any private contractual agreements, Sugar Camp must correct material damage resulting from subsidence caused to surface lands, to the extent technologically and economically feasible, by restoring the land to a condition capable of maintaining the value and reasonably foreseeable uses which it was capable of supporting before subsidence. Sugar Camp’s subsidence control plan, as modified, contains a description of measures to be taken in order to comply with 62 Ill. Adm. Code 1817.121(c)(1).

Occupied dwellings, structures and facilities exist within the projected area of planned subsidence. In accordance with the procedures of 62 Ill. Adm. Codes 1784.20(b)(8)(A) and 1817.121(a), damage minimization efforts must be taken on all structures and facilities within the project area of planned subsidence unless a written waiver is obtained or the cost of minimization exceeds the cost of repairs. Sugar Camp has committed to providing the appropriate documentation of waivers, cost analysis or minimization plans for each structure at minimum 120 days in advance of anticipated impacts. The Department finds that Sugar Camp’s damage minimization plan meets the intent of this regulatory requirement.

Sugar Camp must correct material damage resulting from subsidence caused to any uncontrolled structures or facilities by repairing the damage or compensating the owner of such structures or facilities in the full amount of the diminution in value resulting from subsidence. Sugar Camp’s subsidence control plan, as modified, contains a description of measures to be taken in order to comply with 62 Ill. Adm. Code 1817.121(c)(2).

Public roads and utilities exist over the planned subsidence mining areas. Based on potential public safety issues and the lack of any detailed plan to minimize damage to ensure the protection of the public, Sugar Camp has committed to obtaining agreements from the authority with jurisdiction over the public roads and utilities prior to any subsidence impacts occurring. The Department has conditioned the permit to obtain these agreements to assure precautions are in place to protect the public during and after subsidence impacts. (Please see Section IV, Condition K)
Pursuant to 62 Ill. Adm. Code 1817.41(j), Sugar Camp must promptly replace any drinking, domestic, or residential water supply that is contaminated or interrupted. Sugar Camp has provided a plan for conducting surveys of drinking, domestic, and residential water supplies required under 62 Ill. Adm. Code 1817.121(a)(2) wherever necessary. Therefore, all wells for which no specific agreement exists concerning post subsidence resolution of water supply issues shall be monitored to acquire adequate seasonal data sufficiently in advance of any potential impacts.

62 Ill. Adm. Code 1817.121(d) prohibits mining activities under or adjacent to certain features unless the subsidence control plan demonstrates that subsidence will not cause material damage to, or reduce the reasonable foreseeable uses of, such features or facilities. The Applicant is proposing underground mining activities that result in planned subsidence beneath four (4) churches. Based on the definition of “material damage” provided in 62 Ill. Adm. Code 1701.Appendix A, the proposed underground mining activities are not likely to cause any functional impairment or any significant change in the condition, appearance, or utility of each church from its pre-subsidence condition. The Applicant’s subsidence control plan includes providing additional structural support; raising each structure off the foundations to minimize damage; leveling and repairing cracks in the foundations, exterior and interior walls, driveways and access roads; repairing utility connections; and providing alternate locations for each church’s services and activities prior to the churches being undermined and until mitigation of damages is complete. The Department has conditioned the permit to obtain executed agreements with authorized representatives of each church prior to any underground operations that result in planned subsidence. (Please see Section IV, Condition L) The Department finds that Sugar Camp’s subsidence control plan and methods of protection meet the intent of the regulatory requirements.

The Department will review the performance of Sugar Camp’s subsidence control plan in the field concerning prompt and effective mitigation. The Department will monitor Sugar Camp’s performance in meeting land mitigation requirements, replacement of protected water supplies, and structure mitigation requirements. The original Permit No. 382 was conditioned to ensure this result. Quarterly reports detailing the mitigation accomplished and outlining future mitigation planning to assure compliance with 62 Ill. Adm. Code 1817.121 remains in effect.

The Department finds that Sugar Camp’s subsidence control plan, as modified, is in accordance with 62 Ill. Adm. Code 1784.20.
SUBSIDENCE BIBLIOGRAPHY:


APPENDIX E

DOCUMENTATION PROVIDED BY APPLICANT TO COMPLY WITH
62 Ill. Adm. Code 1773.15(b)(1)(A)

App E
<table>
<thead>
<tr>
<th>Issuing Agency</th>
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<th>State Violation No. or MSHA Violation No.</th>
<th>Issue Date</th>
<th>Name of Company or Person to Whom Violation Issued</th>
<th>Description of the Violation</th>
<th>Date, Location and Type of Administrative or Judicial Proceeding</th>
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<td>DOGM</td>
<td>ACT007941</td>
<td>NOV-17-155</td>
<td>3/10/2015</td>
<td>UEL</td>
<td>Permittee failed to follow the required monitoring plans during the mining of lignite paddles #18, #20, and #21. Incompleteness of records.</td>
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<td>IDNR</td>
<td>257</td>
<td>NOV-58-01-16</td>
<td>2/18/2016</td>
<td>TACC</td>
<td>Simply unacceptable disturbed area within and outside of the reclaimed area.</td>
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<td>IDNR</td>
<td>45</td>
<td>NOV-58-01-16</td>
<td>3/21/2016</td>
<td>Combination CC</td>
<td>Items from the 2013 reclamation schedule were not completed on time. NOV 57-3-16 issued for not meeting the March 1, 2016 deadline.</td>
<td>Abated</td>
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<tr>
<td>DOGM</td>
<td>ACT015932</td>
<td>NOV-58-01-16</td>
<td>4/19/2016</td>
<td>UEL</td>
<td>CAAP Permit requirements were not met and a complete application for a CAAP permit must be submitted.</td>
<td>Abated</td>
<td>Abated with substantial and approval by USDOE.</td>
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<td>IDNR</td>
<td>IL0030023</td>
<td>NOV-58-02-16</td>
<td>7/7/2016</td>
<td>Combination CC</td>
<td>Failure to file NOV 57-3-16 with extension into ground. CO 01-16 actions are required by August 8, 2016.</td>
<td>Abated</td>
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<td>7/7/2016</td>
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<td>IDNR</td>
<td>15, 253, 352</td>
<td>NOV-58-02-16</td>
<td>10/4/2016</td>
<td>TACC</td>
<td>Failure to submit the renewal application on a timely manner. The renewal system that IDNR uses in initial permit holder is not permit renewal.</td>
<td>Abated</td>
<td></td>
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<td>NOV-58-04-15</td>
<td>2/14/2017</td>
<td>TACC</td>
<td>Failure to include flow from Discharge Ratio 002L from the quarterly report for October, November, and December.</td>
<td>Abated</td>
<td>Discharge monitoring report for the basin must be submitted by November 2016.</td>
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<td>IDNR</td>
<td>399</td>
<td>NOV-58-04-15</td>
<td>5/3/2017</td>
<td>Hinchman</td>
<td>Failure to report flow from Discharge Ratio 002L (NSPDES Permit 002L) in the month of November 2016 in the quarterly discharge monitoring report. (The Department documented flow during the Nov. 10, 2016 inspection.)</td>
<td>Abated</td>
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<td>56</td>
<td>72-1-17</td>
<td>3/27/2017</td>
<td>Mac昆is</td>
<td>Failure to report flow from Smith Reserve (NPDES Outfall 007) for the month of November 2016 in the quarterly discharge monitoring reports. (The Department documented flow during the Nov. 7, 2016 inspection.)</td>
<td>Abated</td>
<td>Final grade, settling, and mixing must occur by June 1, 2017.</td>
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<td>IDNR</td>
<td>202</td>
<td>67-1-17</td>
<td>5/8/2017</td>
<td>Consolidation CC</td>
<td>Failure to complete field grading, seeding, and mixing required on former点头007</td>
<td>Abated</td>
<td>Reduce all coal refuse from diversion ditch, remove material upstream of NPDES Outfall 007, and provide a plan to the department detailing the construction procedures, surface mining and recovering surface.</td>
<td></td>
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<td>IDNR</td>
<td>401</td>
<td>58-2-17</td>
<td>5/8/2017</td>
<td>TACC</td>
<td>Coal waste was deposited in an uncontrolled manner impacting an adjacent open-pit mine and receiving stream.</td>
<td>Abated</td>
<td>Reduce to the department detailing the construction procedures, surface mining and recovering surface.</td>
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<td>IDNR</td>
<td>401</td>
<td>58-3-17</td>
<td>6/4/2017</td>
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<td>Permit renewal application for IDNR permit 401 was not submitted 180 days before expiration.</td>
<td>Abated</td>
<td>End of July 2017.</td>
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<td>KIMREE</td>
<td>875-0050</td>
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<td>3/30/2015</td>
<td>MCLEAN</td>
<td>An unsupervised load of waste was used to load, in violation of regulations.</td>
<td>Abated</td>
<td>Obtain permit renewal for affected area.</td>
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<td>KIMREE</td>
<td>889-0004</td>
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<td>3/17/2015</td>
<td>KRI</td>
<td>Data for CPV-8 and CPV-9 sites were not submitted to surface and groundwater monitoring report. NNC 13-0042 issued for failure to report.</td>
<td>Abated</td>
<td>Abated.</td>
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<td>KIMREE</td>
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<td>3/17/2015</td>
<td>KRI</td>
<td>Sediment basin #2 discharging water at pH 2.0, NNC 13-0093 issued for failure to maintain pH limits.</td>
<td>Abated</td>
<td>Abated.</td>
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<td>KIMREE</td>
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<td>4/21/2015</td>
<td>KRI</td>
<td>1st Quarter 2015 Gold Pile Certification received late (was due 4/14, received 4/16), NNC #13-0084 as KIMREE &quot;non-compliant&quot;, but effectively abated.</td>
<td>Abated</td>
<td>Report was submitted, but one day late. KIMREE files missing deadlines as &quot;non-compliant&quot; but the report has been received, and is effectively abated.</td>
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<td>KIMREE</td>
<td>889-5809</td>
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<td>5/4/2015</td>
<td>KRI</td>
<td>Sediment basin KY-309 was discharging at pH of 6.47 into receiving wetlands and there is therefore no up- or downstream measurements.</td>
<td>Abated</td>
<td>Discharge stopped, violation abated.</td>
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<td>KY0005554</td>
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<td>Various water quality exceedances and uncontrolled monitoring requirements noted.</td>
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<td>Agency &quot;non-compliant&quot; is effectively abated with ongoing monitoring.</td>
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<td>7/15/2015</td>
<td>KRI</td>
<td>Failure to pass all surface drainage through sediment control structures with water rejecting the permitted area with flow greater than 8&quot;/sec.</td>
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<td>KDMRE</td>
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<td>8/17/2015</td>
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<td>Permit has not been issued to sell products. NHCC 413-6006 issued. Notice the permit to include the undersized fetch.</td>
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<td>Abated</td>
<td>Extended with provisions to add zones to permit boundary. Permitting process is lengthy, extension granted. Abated on 8/22/2016</td>
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<td>8/24/2015</td>
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<td>11/12/2015</td>
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<td>Water discharging from sediment basin 5B1 with a pH of 4.49.</td>
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<td>11/12/2015</td>
<td>KRI</td>
<td>Drainage bypassing approved sediment control structure. Water leaving the southern edge of the permitted area with iron concentration greater than 10 mg/L.</td>
<td></td>
<td>Abated</td>
<td></td>
</tr>
<tr>
<td>KDMRE</td>
<td>889-5009</td>
<td></td>
<td>11/16/2015</td>
<td>KRI</td>
<td>Well 8003-1725 reported dry for three (3) consecutive quarters. Within 10 days, well must be rehabilitated or meet submitted plans to reseal the well.</td>
<td></td>
<td>Abated</td>
<td></td>
</tr>
<tr>
<td>KDMRE</td>
<td>889-5011</td>
<td></td>
<td>11/16/2015</td>
<td>KRI</td>
<td>Well 8003-1725 reported dry for three (3) consecutive quarters. Within 10 days, well must be rehabilitated or meet submitted plans to reseal the well.</td>
<td></td>
<td>Abated</td>
<td></td>
</tr>
<tr>
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<td>State Violation No. or NRI A Violation No.</td>
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<tr>
<td>KD MRE</td>
<td>S89-58304</td>
<td></td>
<td>3/24/2016</td>
<td>KRI</td>
<td>Substandard water flow permit from the southern end of the dam.</td>
<td>Abated</td>
<td></td>
<td>Direct work completed on the southern end of the dam and the spillway is no longer flowing. Abatement of NNC 13-1434 proposed.</td>
</tr>
<tr>
<td>KD MRE</td>
<td>S89-0147</td>
<td></td>
<td>3/28/2016</td>
<td>KRI</td>
<td>Water discharging from sediment basin #2 with a pH of 6.1 and diversion channels D101 and D03 have been modified and are no longer in compliance.</td>
<td>Abated</td>
<td></td>
<td>Remedial work has been completed per KD MRE inspection report 1/17. NNC 13-1435 abandoned.</td>
</tr>
<tr>
<td>KD MRE</td>
<td>S88-56611</td>
<td></td>
<td>10/26/2016</td>
<td>KRI</td>
<td>Permits have failed to maintain sediment structure SB-5. The primary spillway has been bypassed.</td>
<td>Abated</td>
<td></td>
<td>Principle spillway portion of dam was washed out and we have until 11/20/16 to repair it. Mile test contractor to site and test.</td>
</tr>
<tr>
<td>KD MRE</td>
<td>S89-9654</td>
<td></td>
<td>11/9/2016</td>
<td>KRI</td>
<td>Permit has failed to operate CFD-1 according to the plan approved by permit. Permitter overflowed south end of CFD-1 with slurry and placed a berm across the spillway which stopped the discharge.</td>
<td>Abated</td>
<td></td>
<td>Permittee must cease the pumping of slurry into the south end of CFD-1. Permittee must either remove the discharge or obtain a permit amendment to approve alterations made.</td>
</tr>
<tr>
<td>KD MRE</td>
<td>S89-9699</td>
<td></td>
<td>11/21/2016</td>
<td>KRI</td>
<td>Permit has failed to submit surface and groundwater 3rd quarter reports, GW-4 reports, and AM-03 monitoring reports totaling the required deadline.</td>
<td>Abated</td>
<td></td>
<td>Monitoring reports were submitted. See Violation other.</td>
</tr>
<tr>
<td>KD MRE</td>
<td>S89-9654</td>
<td></td>
<td>11/23/2016</td>
<td>KRI</td>
<td>Permit has been modified within 7 days given to do so.</td>
<td>Abated</td>
<td></td>
<td>Permittee must modify and maintain around areas SB-72, the non-toxic material pile near CFD-1, the outfalls of CFD-1, and areas on CFD-1 where erosion was reported. Permittee must then proceed in the steering of the area.</td>
</tr>
<tr>
<td>KD MRE</td>
<td>S89-5839</td>
<td></td>
<td>2/2/2017</td>
<td>KRI</td>
<td>Permit has allowed the accumulation of mud and sand that in turn is in the path of the flow on I-81 and the associated road dam.</td>
<td>Abated</td>
<td></td>
<td>Permittee has 30 days to remove and dispose of all material from the permit that has accumulated. KRI is continuing work. The agency extended till April 6, 2017.</td>
</tr>
<tr>
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<tr>
<td>ODNR</td>
<td>D-0360</td>
<td>NOV #29963</td>
<td>9/26/2015</td>
<td>TOVCC</td>
<td>Water flowing from coal stockpile down to area below SR 154 bridge. Required remedial action: clean up material, install culvert, remove/shift force/build dyke.</td>
<td>Abated</td>
<td>Abated with compliance of remedial actions.</td>
<td></td>
</tr>
<tr>
<td>ODNR</td>
<td>2382</td>
<td>29435</td>
<td>4/5/2016</td>
<td>OAPI</td>
<td>Water discharging through the enhancement beneath the principal spillway pipe of section 065.</td>
<td>Abated</td>
<td>Abated with repairs.</td>
<td></td>
</tr>
<tr>
<td>ODNR</td>
<td>D-0360</td>
<td>29971</td>
<td>12/19/2016</td>
<td>TOVCC</td>
<td>pH of pond was 3.0 when it should be between 6.5-9.0.</td>
<td>Abated</td>
<td>Fish must be treated to a pH of 6.5-9.0 prior to discharge by 12/27/16. Water from pond must not be discharged until effluent limits are met.</td>
<td></td>
</tr>
<tr>
<td>ODNR</td>
<td>D-0475</td>
<td>C01-14303</td>
<td>6/14/2017</td>
<td>AEC</td>
<td>Easterbrook was discharged beyond the permit limits and sediments was found in accessed backwater lakes Run stream on the Wharton and Bettencourt property.</td>
<td>Abated</td>
<td>Cease all mining activities beyond permit limits, including drilling activities causing off the discharges. Take all measures necessary to stop discharge of sediments into the streams.</td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>30441312/16</td>
<td>N/A</td>
<td>2/2/2015</td>
<td>Canonsbury CC</td>
<td>Compliance Order: DMBs self-report</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>30441312/PA0917390</td>
<td>C.O. 150923A</td>
<td>5/11/2016</td>
<td>Consolidation CC</td>
<td>Outlet #2 discharging with Aluminum concentrations of 0.389 mg/L exceeding the 1 mg/L limit. Compliance Order (C.O.) expired 15/10/2016. Amend or fix information on 5/7/12.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>30441312/PA0917390</td>
<td>NOV 06/30/15</td>
<td>4/30/2015</td>
<td>Consolidation CC</td>
<td>Monthly average and water; maximum aluminum concentration at outlet 065 was exceeded on first quarter DMBs. NOV issued and lifted.</td>
<td>Abated</td>
<td>Lifted immediately after issued.</td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>30441312/PA0917390</td>
<td>NOV 12/13/15</td>
<td>8/27/2015</td>
<td>Consolidation CC</td>
<td>EIMs showed a no flow at Outlet No 2 in April and in 005 in June. conflicting with enterprise sampling data (sometimes finds 1316 flowing when we 6 no flow).</td>
<td>Abated</td>
<td>NOV issued and lifted.</td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>30441312/PA0917390</td>
<td>NOV 10/25/15</td>
<td>10/27/2015</td>
<td>Consolidation CC</td>
<td>Effluent characterization for special condition requirements of Part 8 of the NPDES permit, required 2 years after NPDES issuance, was not submitted.</td>
<td>Abated</td>
<td>Required effluent characterization has been provided to PADEP.</td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>30441312/PA0917390</td>
<td>NOV 4/29/16</td>
<td>4/29/2016</td>
<td>The Monongah Coal Co.</td>
<td>Effluent characterization for special condition requirements of Part 8 of the NPDES permit, required 2 years after NPDES issuance, was not submitted.</td>
<td>Abated</td>
<td>Data had been previously submitted to the department. NOV abated (issuance probably technically have been withdrawn).</td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>8379802/PA0214248</td>
<td>NOV 4/29/16</td>
<td>4/29/2016</td>
<td>The Washington Coal Co.</td>
<td>Effluent characterization for special condition requirements of Part 8 of the NPDES permit, required 2 years after NPDES issuance, was not submitted.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
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<tr>
<td>PADEP</td>
<td>05743706</td>
<td>NOV 5/5/16</td>
<td>5/5/2016</td>
<td>Canterbury CC</td>
<td>Operator has not begun dredging the sediment basins in noted in previous inspection report. NOV issued to require dredging by 1/12</td>
<td></td>
<td>Abated</td>
<td>Abated with the submission of the certification.</td>
</tr>
<tr>
<td>PADEP</td>
<td>03841302</td>
<td>NOV 6/24/16</td>
<td>6/28/2016</td>
<td>Canterbury CC</td>
<td>Sample collected on 6/24/16 showed a manganese concentration of 1.80 mg/L over the limit of 1.5 mg/L. NOV issued for exceeding manganese limit at Colony 6/01 on sample collected 6/13. Immediately filed as complaint sample was 6/01-6/25.</td>
<td></td>
<td>Abated</td>
<td>Abated with manganese concentration returning to compliant levels.</td>
</tr>
<tr>
<td>PADEP</td>
<td>36441312 / PA00013700</td>
<td>NOV 6/24/16</td>
<td>8/24/2016</td>
<td>The Monongalia County Coal Co.</td>
<td>Effluent limits on water NOVi were not reported when the HMOR's MERs were submitted for the quarter 2016.</td>
<td></td>
<td>Abated</td>
<td>Complainant sample collected 6/24 shows manganese limits were being met. NOV lifted.</td>
</tr>
<tr>
<td>PADEP</td>
<td>02841302</td>
<td>CO 12/26/16</td>
<td>12/20/2016</td>
<td>Canterbury CC</td>
<td>NOV issued for exceeding manganese limits at Colony 6/01 on sample collected 12/20/16.</td>
<td></td>
<td>Abated</td>
<td>Abated with manganese concentration returning to compliant levels.</td>
</tr>
<tr>
<td>PADEP</td>
<td>03841302</td>
<td>CO 16/18/17</td>
<td>1/9/2017</td>
<td>Canterbury CC</td>
<td>Manganese concentration on 6/01 was recorded as 3.635 mg/L when the effluent limit is 2.5 mg/L.</td>
<td></td>
<td>Abated</td>
<td>Operator must provide proper documentation ensuring discharges are meeting effluent standards.</td>
</tr>
<tr>
<td>PADEP</td>
<td>36441312 / PA00013700</td>
<td>CO 01/11/17</td>
<td>3/3/2017</td>
<td>The Monongalia County Coal Co.</td>
<td>CO issued for reporting no flow when the instructor found a flow.</td>
<td></td>
<td>Abated</td>
<td>Abated with the submission of the certification.</td>
</tr>
<tr>
<td>PADEP</td>
<td>36441312 / PA00013700</td>
<td>CO 01/11/17</td>
<td>3/3/2017</td>
<td>The Monongalia County Coal Co.</td>
<td>Water exceeded effluent limits at Colony 6/02 with an aluminum concentration of 2.4 mg/L and an aluminum concentration of 2.06 mg/L when the limit is 1.1 mg/L. Water exceeded effluent limit at Colony 6/02 with an aluminum concentration of 5.9 mg/L and 1.96 mg/L when the limit is set at 1.1 mg/L.</td>
<td></td>
<td>Abated</td>
<td>Operator must provide proper documentation ensuring discharges are meeting effluent standards.</td>
</tr>
<tr>
<td>PADEP</td>
<td>03841302</td>
<td>CO 17/10/17</td>
<td>6/8/2017</td>
<td>Canterbury CC</td>
<td>Overfill 6/01 was discharging water with an aluminum concentration of 5.44 mg/L which exceeds the limit of 1.1 mg/L. Sample collected on 6/17/17.</td>
<td></td>
<td>Abated</td>
<td>Abated with the submission of the certification.</td>
</tr>
<tr>
<td>PADEP</td>
<td>03841302</td>
<td>CO 17/10/28</td>
<td>6/20/2017</td>
<td>Canterbury CC</td>
<td>Overfill 6/01 discharging with an aluminum concentration of 1.52 mg/L which exceeds the limit of 0.3 mg/L. Sample collected on 6/20/17.</td>
<td></td>
<td>Abated</td>
<td>Abated with the submission of the certification.</td>
</tr>
<tr>
<td>PADEP</td>
<td>36441312 / PA00013700</td>
<td>CO 17/10/29</td>
<td>6/26/2017</td>
<td>The Monongalia County Coal Co.</td>
<td>Overfill 6/02 discharging water with an aluminum concentration of 1.58 mg/L when the effluent limit is 1.3 mg/L.</td>
<td></td>
<td>Abated</td>
<td>Abated with the submission of the certification.</td>
</tr>
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<tr>
<td>PADEP</td>
<td>3041301 / PA1037681</td>
<td>CO1171829</td>
<td>6/26/2017</td>
<td>The Monongahela County Coal Co.</td>
<td>Outfall 023 received the downstream concentration of 1.3 mg/L, with a concentration of 3,758 mg/L</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>69735765</td>
<td>CO1171830</td>
<td>7/13/2017</td>
<td>MCMR</td>
<td>Father to have approved reclamation plan.</td>
<td>Satisfactory Progress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PADEP</td>
<td>09954601</td>
<td>CO171022</td>
<td>8/8/2017</td>
<td>MPPH</td>
<td>Discharged water from an area disturbed by mining did not meet effluent limits with a flow concentration of 42.842 mg/L, when the flow is 7.8 mg/L, and a Manganese concentration of 11.149 mg/L, which exceeds the limit of 2.0 mg/L.</td>
<td>Abated</td>
<td>Operator must provide proper treatment to assure discharge is meeting effluent standards.</td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>18057883</td>
<td>UH07883(51)</td>
<td>1/12/2015</td>
<td>Consolidation CC</td>
<td>Black water coal fines discharging into Crooked Creek, destroying water, disturbing hydrological balance.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>10088684</td>
<td>U008684(36)</td>
<td>10/12/2015</td>
<td>Consolidation CC</td>
<td>Outfall 002 pH 8.7 (limit is 9.0)</td>
<td>Withdrawn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>P205514</td>
<td>P205514(11)</td>
<td>12/6/2015</td>
<td>AMEH</td>
<td>Prospect permit; Hole F01 caused degradation of groundwater quality from a nearby landowner well.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>U007783</td>
<td>HCCO #951</td>
<td>2/10/2015</td>
<td>Consolidation CC</td>
<td>Contractor spill at 1-D borehole construction site. HCCO #55 exceeds for excessive contribution of suspended solids into tributary. Abatement to NOV #55.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>U007783</td>
<td>NOV #55</td>
<td>2/10/2015</td>
<td>Consolidation CC</td>
<td>Contractor spill at 1-D borehole construction site. HCCO #55 exceeds for excessive contribution of suspended solids into tributary. Modified to NOV #55.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>U007783</td>
<td>NOV #54</td>
<td>2/10/2015</td>
<td>Consolidation CC</td>
<td>Contractor spill at 1-D borehole construction site. NOV #52 issued for failure to install proper temporary E&amp;D controls.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>U007783</td>
<td>NOV #67</td>
<td>2/10/2015</td>
<td>Consolidation CC</td>
<td>R0 break found off permit; allowing choking to enter an untimed tributary of Campbell River. NOV #4 issued for noncompliance to hydrological balance.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WYDEP</td>
<td>U0041109</td>
<td>NOV #67</td>
<td>3/2/2015</td>
<td>Consolidation CC</td>
<td>Discharge to Campbell River was stopped. Pipeline break was temporarily repaired. A more permanent repair will occur when weather permits.</td>
<td>Abated</td>
<td></td>
<td></td>
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<tr>
<td>WVDEP</td>
<td>0102392</td>
<td>NOV 828</td>
<td>3/4/2015</td>
<td>(Aborted)</td>
<td>Outlet 090 discharging in pH of 3.85 below the minimum limits, and iron at 68.8 above maximum limits. NOV 928 issued for failure to maintain effluent limits.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>0103030</td>
<td>NOV 812</td>
<td>3/4/2015</td>
<td>(Aborted)</td>
<td>Outlet 020 discharging iron at 3.5 mg/L, NOV 812 issued for exceeding effluent limit.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U100435</td>
<td>NOV 985</td>
<td>3/16/2015</td>
<td>(Aborted)</td>
<td>Pipe burst released water &amp; material into Robinson Run. NOV 488 issued for failure to minimize disturbance to hydrologic balance.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U100485</td>
<td>NOV 580</td>
<td>3/15/2015</td>
<td>(Aborted)</td>
<td>Outlet 033 discharging muddy water into and discharging Sandy Run and the South Fork of Fish Creek. NOV 910 issued.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U100703</td>
<td>NOV 543</td>
<td>4/8/2015</td>
<td>(Aborted)</td>
<td>Power in pump was interrupted, sump overflowed, increased mine water left permit area and entered ditches leading to UNT of Dent's Run. NOV 933 issued.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U100404</td>
<td>NOV 537</td>
<td>4/22/2015</td>
<td>(Aborted)</td>
<td>Failure to stabilize refuse beaches in that a large &quot;massive spill&quot; (actually a steep slope) developed above the new farm ditch. NOV 437 issued.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U100454</td>
<td>NOV 538</td>
<td>4/22/2015</td>
<td>(Aborted)</td>
<td>Failure to spread and compact refuse material to ensure not exceeding two feet (top of odors) and spread (compressed due to rains tide). NOV 358 issued.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U100484</td>
<td>NOV 839</td>
<td>4/22/2015</td>
<td>(Aborted)</td>
<td>Unapproved materials (some combustible debris, some acceptable) were disposed of in refuse pile. Needs removed. NOV 938 issued.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U102591</td>
<td>NOV 852</td>
<td>6/11/2015</td>
<td>(Withdrawn)</td>
<td>Pump failed and drainage system discharged black water from outlet 015 into Ohio River. NOV 852 issued.</td>
<td>Withdrawn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U102591</td>
<td>NOV 853</td>
<td>6/11/2015</td>
<td>(Aborted)</td>
<td>Pump failure allowed black water discharge from outlet 015 into Ohio River. NOV 853 issued for conditions not allowable in waters of the state.</td>
<td>Aborted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issuing Agency</td>
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</tr>
<tr>
<td>WVDEP</td>
<td>U103313</td>
<td>NOV 872</td>
<td>7/22/2015</td>
<td>Consolidation CC</td>
<td>Outlet 005 discharging with TSS at 228.0 (above 70 maximum) and total aluminum at 2.20 mg/L (above 0.75 maximum) due to water line rupture disrupting treatment.</td>
<td>Abated</td>
<td>The line has been replaced and the flow is expected to be inspected during period of clearing to ensure non-compliance discharge.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U102689</td>
<td>NOV 96</td>
<td>8/12/2015</td>
<td>Consolidation CC</td>
<td>Outlet 001 discharge exceeding maximum aluminum concentration.</td>
<td>Abated</td>
<td>Laboratory report of subsequent sample shows compliance is being met. Violation abated.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U200797</td>
<td>NOV 91</td>
<td>8/24/2015</td>
<td>Consolidation CC</td>
<td>Air Blunt exceeded maximum decile level of 133 (at 134.4 dfe).</td>
<td>Abated</td>
<td>Abated with pre-construction prevention plan submitted with subsequent plan shown in written written Works (Controller responsibilities).</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>O201464</td>
<td>NOV 95</td>
<td>9/4/2015</td>
<td>Consolidation CC</td>
<td>Filtration beds were removed by a storm drain, allowing sediment laden water during washdown procedure to drain into Biggs Run and disperse the stream.</td>
<td>Abated</td>
<td>Sediment control beds installed around discharge points. Violation abated.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>O102591</td>
<td>NOV 94</td>
<td>12/1/2015</td>
<td>Consolidation CC</td>
<td>Outlet 001 and 023 discharges exceeding their respective aluminum concentration limits. NOV 554 issued.</td>
<td>Abated</td>
<td>Abated with pre-construction prevention plan submitted with subsequent plan shown in written written Works (Controller responsibilities).</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>O100483</td>
<td>NOV 90</td>
<td>12/7/2015</td>
<td>Consolidation CC</td>
<td>Water line break caused warm water to enter the storm drain of Waterford Creek. NOV issued for causing conditions not allowable in state sources.</td>
<td>Abated</td>
<td>Abated with pre-construction prevention plan submitted with subsequent plan shown in written written Works (Controller responsibilities).</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U102692</td>
<td>NOV 97</td>
<td>12/3/2015</td>
<td>Consolidation CC</td>
<td>Outlet 005 discharge had an ammonia nitrogen level of 30.25 mg/L, exceeding the limit of 5.0 mg/L. NOV 87 issued.</td>
<td>Abated</td>
<td>Abated with pre-construction prevention plan submitted with subsequent plan shown in written written Works (Controller responsibilities).</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U103313</td>
<td>NOV 93</td>
<td>12/17/2015</td>
<td>Consolidation CC</td>
<td>Outlet 004 discharging with aluminum concentration of 1.27 mg/L exceeding the limit of 0.75 mg/L. NOV 575 issued.</td>
<td>Abated</td>
<td>Abated with pre-construction prevention plan submitted with subsequent plan shown in written written Works (Controller responsibilities).</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>O200796</td>
<td>NOV 41</td>
<td>12/21/2015</td>
<td>Consolidation CC</td>
<td>Commit to pump coal fines into a temporary ditch resulting in unacceptable discharge to US waters. NOV 91 issued. Committee to remediate onsite.</td>
<td>Abated</td>
<td>Abated with pre-construction prevention plan submitted with subsequent plan shown in written written Works (Controller responsibilities).</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>O102392</td>
<td>NOV 929</td>
<td>12/30/2015</td>
<td>Consolidation CC</td>
<td>Discharge at Outlet 492-005D was 12.2 mg/L, exceeding the limit of 10 mg/L. NOV 575 issued.</td>
<td>Abated</td>
<td>A new pump was installed and discharge from 005 ceased NOV 544 issued.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U103313</td>
<td>NOV 974</td>
<td>1/26/2016</td>
<td>Consolidation CC</td>
<td>Pump failed causing Outlet 085 to discharge water with iron concentration greater than 5.00 mg/L. NOV 575 issued.</td>
<td>Abated</td>
<td>A new pump was installed and discharge from 005 ceased NOV 544 issued.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U103463</td>
<td>NOU-601</td>
<td>3/23/2016</td>
<td>The Harrison County Coal Co.</td>
<td>Freshwater contaminated with diesel components flowed into ENT of Bartholomew creek from present Cross discharge immediately.</td>
<td>Abated</td>
<td>Discharge was ceased. New valve was installed on the end of the pipe preventing the occurrence of accidental discharges in the future.</td>
<td></td>
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<tr>
<td>WVDEP</td>
<td>AIR PERMIT</td>
<td>AIR QUALITY 4/7/16</td>
<td>4/7/2016</td>
<td>The Ohio County Coal Co.</td>
<td>Failure to inspect facility for violation prior to demolition. Failure to notify the WVDEP Division of Air Quality at least ten days prior to demolition.</td>
<td>Abated</td>
<td>Letter has been sent to DEQ, Assisting response/abatement. DAQ response email for further actions needed.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>WV00027701</td>
<td>NOV #1</td>
<td>5/3/2016</td>
<td>The Ohio County Coal Co.</td>
<td>Outlet 001 was sampled and lab analysis returned a chloride concentration of 607 mg/L, although the field testing kit showed much less.</td>
<td>Withdrawn</td>
<td>Re-use of sample showed a level of 55.9 mg/L, well under permitted limit. It is likely there was a decimal placement error in the original laboratory analysis. Agency withdrawn.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>UN01383</td>
<td>NOV #75</td>
<td>7/12/2016</td>
<td>The Marshall County Coal Co.</td>
<td>Failure to obtain approval to subdivide tract 3-16-2 prior to mining in excess of 60% extraction within 25 acres of the deposit.</td>
<td>Abated</td>
<td>Abated with submission of legal right to subdivide tract 3-16-2 and obtained approval from WVDEP.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>UN01483</td>
<td>NOV #1</td>
<td>7/18/2016</td>
<td>The Harrison County Coal Co.</td>
<td>AMD line break caused release of water to be an UNF of Quicks Fork. Damage monitoring on ground and creek, some vegetation killed. NOV #1 issued.</td>
<td>Abated</td>
<td>Permits have replaced the pipeless break, have regraded, rebuilt, and relitched the pond due to pipeless break. NOV #1 terminated.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>UN01383 / WV00027701</td>
<td>NOV #2</td>
<td>7/22/2016</td>
<td>The Harrison County Coal Co.</td>
<td>NOV #2 issued for conditions not allowed in state permits if maps from the impoundment were discharging black water into Cunningham Run.</td>
<td>Abated</td>
<td>Abated to diversion and sump were installed to collect water and pump water back to the throat coll. Sump cell is being pumped down to eliminate the source of black water.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>DH04491</td>
<td>DCO-05 / NOV #6</td>
<td>7/26/2016</td>
<td>The Marcellus County Coal Co.</td>
<td>DCO-05 issued for discharge from Outlet 002 resulting in fish kill in Sugar Run and Paw Paw Creek.</td>
<td>Abated</td>
<td>Permits pumped down in elimination of source of discharge. DCO-05 was converted to NOV #6, and NOV #6 was terminated.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>WV00027701</td>
<td>NOV #3</td>
<td>8/1/2016</td>
<td>The Ohio County Coal Co.</td>
<td>Behind a 12&quot; improvement (Outlet 009) in discharging orange water, field tested to be greater than 10 mg/L. NOV #2 issued.</td>
<td>Abated</td>
<td>Installed a control system to control discharging from outlet 009. NOV #3 was terminated.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>UN01483</td>
<td>NOV #40</td>
<td>8/11/2016</td>
<td>The Monongalia County Coal Company</td>
<td>Failed to maintain sediment capture in ponds one and two.</td>
<td>Abated</td>
<td>Panda encasement was removed and bentonite brick was removed completely.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>DH04491</td>
<td>NOV #20</td>
<td>8/22/2016</td>
<td>The Marcellus County Coal Co.</td>
<td>NOV #20 issued for high conductivity and chlorides coming from 1st treatment pond at St. Leo.</td>
<td>Abated</td>
<td>Fixed sump collection system at St. Leo. Conductivity &amp; Chloride tests documented to the WVDEP Division of Water Quality. NOV #20 issued on 10/15/16.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>WV00027701</td>
<td>NOV #1</td>
<td>10/24/2016</td>
<td>The Ohio County Coal Co.</td>
<td>NOV 1 issued: Sediment found in Boggy Run stream and on stream bottom.</td>
<td>Abated</td>
<td>Abated</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>WV00027701</td>
<td>NOV #1</td>
<td>11/1/2016</td>
<td>The Ohio County Coal Co.</td>
<td>Outlet 001 was not in compliance for QM 03.</td>
<td>Abated</td>
<td>NOV Abated 12/13/16</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>UN01383 / WV00027701</td>
<td>NOV #40</td>
<td>1/20/2017</td>
<td>Marshall County Coal Company</td>
<td>DCO modified to NOV, Black residue found in ditch and debris in east creek.</td>
<td>Extended</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 1.5.3**

List of Violations by Applicant the Past 3 Years
<table>
<thead>
<tr>
<th>Issuing Agency</th>
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<th>Abatement Actions</th>
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</thead>
<tbody>
<tr>
<td>WVDEP</td>
<td>U0102912 / WV0001832</td>
<td>NOV 832</td>
<td>1/24/2017</td>
<td>Marshall County Coal Company</td>
<td>Failed to maintain effluent limitations from outfall #005, blackwater discharge</td>
<td>Abated</td>
<td>The pipe will be removed and an open channel spillway will be constructed.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0013832 / WV002882</td>
<td>NOV 876</td>
<td>1/30/2017</td>
<td>Marshall County Coal Company</td>
<td>Failed to maintain proper drainage of pond 4 (associated with outfall #010)</td>
<td>Abated</td>
<td>Reduced suspended solids to be within effluent limits.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0012832</td>
<td>NOV 856</td>
<td>2/23/2017</td>
<td>Consolidation Co</td>
<td>Failed to minimize discharge to providing hydrologic balance at mine site and maintain effluent area. Failure to implement was contributing to grey black solid material in Harvey Run.</td>
<td>Abated</td>
<td>Steep discharging water non-compliant water out of intake hoop.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U010292</td>
<td>NOV 842</td>
<td>3/2/2017</td>
<td>Marshall County Coal Company</td>
<td>Failed to maintain effluent limit at Conservative Run outlet #010.</td>
<td>Abated</td>
<td>Remove black water and render from Conservative Run.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U010292</td>
<td>NOV 833</td>
<td>3/12/2017</td>
<td>Marshall County Coal Company</td>
<td>Failed to maintain hydrologic balance at Conservative Run with black water discharging into Conservative Run from outfall #035.</td>
<td>Abated</td>
<td>Ditch must be cleaned out and slope must be restored.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0102912</td>
<td>NOV 856</td>
<td>4/10/2017</td>
<td>The Ohio County Co</td>
<td>Did not meet effluent limits at outfall #011. TSS was 15 mg/L, the limit is 20 mg/L.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U010292</td>
<td>NOV 857</td>
<td>4/18/2017</td>
<td>The Ohio County Co</td>
<td>Did not meet effluent limits at outfall #011. Total Alkalinity was 8.9 mg/L, the limit is 7.5 mg/L.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0013832</td>
<td>NOV 877</td>
<td>5/22/2017</td>
<td>Marshall County Coal Company</td>
<td>A large slip formed below the shaft pad. Material from the slip partially blocked the right hand sediment ditch at 10 feet and completely blocked the ditch for another 10 feet.</td>
<td>Abated</td>
<td>Submit and obtain approval for the classifications of the drainage and control structures for this period.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0013832</td>
<td>NOV 876</td>
<td>5/22/2017</td>
<td>Marshall County Coal Company</td>
<td>NOV issued for not installing proper sediment control.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0013832</td>
<td>NOV 879</td>
<td>5/22/2017</td>
<td>Marshall County Coal Company</td>
<td>NOV issued for not satisfactorily having survey of the property.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0013832</td>
<td>NOV 885</td>
<td>5/23/2017</td>
<td>Marshall County Coal Company</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U020211</td>
<td>NOV 881</td>
<td>6/22/2017</td>
<td>Marshall County Coal Company</td>
<td>Permission issued to receive the article 3 surface water monitoring point DGR. This point was not monitored for Ashland and ibadness was reported by site 33 of the SMO reports.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U020211</td>
<td>NOV 82</td>
<td>6/22/2017</td>
<td>Marshall County Coal Company</td>
<td>Permission issued to receive the article 3 surface water monitoring point DGR. This point was not monitored for Ashland and ibadness was reported by site 33 of the SMO reports.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0104836</td>
<td>NOV 841</td>
<td>6/23/2017</td>
<td>The Monongah County Coal Company</td>
<td>Unapproved material on cover refuse pile.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0104836</td>
<td>NOV 842</td>
<td>7/11/2017</td>
<td>The Harrison County Coal Co.</td>
<td>TSS score of discharge from settling pond #001 did not meet the effluent limit.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U0104836</td>
<td>NOV 893</td>
<td>7/11/2017</td>
<td>The Harrison County Coal Co.</td>
<td>Discharge at point #001 did not meet effluent limits.</td>
<td>Abated</td>
<td>Sediment left in permitted area and exceed settled area. 1/4 of the water flow has been reduced.</td>
<td></td>
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<tr>
<td>WVDEP</td>
<td>U1003372 / WV0020854</td>
<td>NOV #16</td>
<td>8/03/2017</td>
<td>Marshall County Coal Company</td>
<td>Failed to maintain effluent limitations from coalfield #35, blackwater discharge</td>
<td>Abated</td>
<td>Keep the discharge from coalfield #35 and clean the spillages to prevent additional sediment outflowing; correct closure.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U1003382 / WV0020854</td>
<td>NOV #44</td>
<td>8/09/2017</td>
<td>Arkwright</td>
<td>Failure to maintain hydrologic balance at Little Indian Creek located north of mount #14</td>
<td>Abated</td>
<td>Pump work be repaired before operations can continue.</td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U1003392 / WV0020854</td>
<td>NOV #16</td>
<td>8/22/2017</td>
<td>Marshall County Coal Company</td>
<td>Failed to submit a certification for the quarterly inspection of the evaporation pond for the 2nd QTR of 2012</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U1003404 / WV0020854</td>
<td>NOV #42</td>
<td>8/30/2017</td>
<td>The Mingo County Coal Company</td>
<td>Coal slurry spilled into WV Fork of Dusked Creek from outlet #62</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WVDEP</td>
<td>U1003383 / WV0020854</td>
<td>NOV #49</td>
<td>8/30/2017</td>
<td>Marshall County Coal Company</td>
<td>Water with suspended solids overflowed the dike, entered the pond and eventually discharged into the Ohio River without passing through an approved sediment control system</td>
<td>Extended</td>
<td>Provide report detailing what parts of the system failed and repair all faulty parts.</td>
<td></td>
</tr>
<tr>
<td>Issuing Agency</td>
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</tr>
<tr>
<td>IONE</td>
<td>H 434</td>
<td>63-1417</td>
<td>5/5/2017</td>
<td>Sugar Camp Mining, LLC</td>
<td>Failure to submit ground water monitoring data from well NW-31 through NW-31R.</td>
<td>Abated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### MR-6 MINE INSPECTION REPORT

**PERMIT NUMBER**: 0102392  
**DATE**: 10/24/2017  
**TIME**: 12:00  
**REASON**: IN  
**TYPE**: P  
**MINE STATUS**: AM  
**PHOTOS**: No  
**BLASTING**: Last 20 Days? ins. Req'd? No

**PERMITTEE NAME**: THE MARSHALL COUNTY COAL COMPANY  
**OPERATOR NAME**: MR-19 DATE  
**NPDES #**: WV020834  
**NPDES EXPR DATE**: 06/07/2019  
**PERMIT EXPR DATE**: 02/28/2021  
**PERMIT ACRES**: 1,137.36  
**TOTAL DISTBD**: 900.00  
**RECLINN**: 75.00  
**ANCILLARY**: 0  
**UNRECLMN**: 825  
**DATES: PH I**:  
**LAST INSPECT**:  
**LAST INSPECTION DATE**: 09/13/2017  
**TYPE**: C  
**INC BONDED**:  
**BOND**:  
**INC BONDED ACRES**: 1,112.39  
**EMER RESP PLAN**: INS 05/01/2018  
**BLAST AD**:  
**BLAST AD**:  
**PERMIT REVIEW**: 0.25  
**INSPECT**: 2.00  
**TRAVEL**: 0.75  
**REPORT**: 0.50  

**INSPCTION COMMENTS**: NOV 31 follow-up inspection. The permittee continues to construct the East Hillside Connector Fill and is grouting the rock face around the plugged decant. The NOV is extended to complete work on the MSHA approved plan.

### ENFORCEMENT STANDARD

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<th>Treatment</th>
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### AUTH. COMPANY REPRESENTATIVE

**Joe Williams**

### DELIVERY METHOD / DATE TIME

**Hand 10/27/19 16:00 08**

### CERTIFIED MAIL NUMBER

**46226 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43959**

### WV DEP REP.

**Andrew M Coleman**

---

App E - 15
**ERIS**

**MR-16 VIOLATION FOLLOW-UP INSPECTION REPORT**

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**PERMIT NAME**: THE MARSHALL COUNTY COAL COMPANY

Violation is hereby: □ Terminated  □ Withdrawn  □ Remains in force as written □ Show Cause submitted  
☑ Extended to 01/22/2018 at 12:00  □ NOV modified to CO #  □ CO modified to NOV #

Action taken to abate:
The permittee continues to construct the East Hilibide Connector Fill and is grouting the rock face around the plugged decant.
The NOV is extended to complete work on the MSHA approved plan.

**INSPECTOR'S CIVIL PENALTY ASSESSMENT RECOMMENDATION** (check)

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<td>Consent Agreement in effect?  □ Yes ✔ No</td>
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Comments:

**AUTH. COMPANY REPRESENTATIVE**: Joe Williams

**DELIVERY METHOD / DATE TIME**: Hand 10/27/2017 15:00:00

**CERTIFIED MAIL NUMBER**

**ADDRESS**: 45226 NATIONAL ROAD, SAINT CLAIRESVILLE, OH 43950

**WV DEP REP.**: Andrew M Coleman

**Austin Caperton**

[Secretary, Department of Environmental Protection]  [WV DEP Representative]  [Date]

Names of individuals at informal Conference:

Results:  CO was:  □ Upheld  □ Modified □ Terminated  □ Withdrawn

Comments:

**SUPERVISOR**:  DATE:  TIME:  

**COMPANY REPRESENTATIVE**:  DATE:  

App E - 16
October 19, 2017

Andrew Coleman  
Environmental Inspector Supervisor  
WV Department of Environmental Protection  
Division of Mining and Reclamation  
47 School Street, 301  
Philippi, WV 26416

RE: The Marshall County Coal Company  
Conner Run Impoundment  
O102392 NOV 31

Mr. Coleman,

This letter is in response to the remedial measures stated in NOV 31 for The Marshall County Coal Company's Conner Run Impoundment, WVDEP Permit O102392. At this time, construction of the connector fill continues. The surface grouting of the rock face around the abandoned spillway is nearing completion. As the upstream construction continues, the slurry discharge will be relocated to the inside face of the dam. To date, no adverse effects of the Fish Creek seeps have been observed.

The Marshall County Coal Company requests an additional 90 day extension of the abatement date in order to continue with the MSHA approved plan and reduce the seepage to a minimal flow.

Regards,

Joe Williams  
Environmental Engineer  
Murray American Energy, Inc.

CC:  Jim Turner  
      Jan Nagel  
      Guy Shelledy  
      Cody Nett  
      Jim Mazzone  
      Daniel Schnefflick  
      Corey Barack  
      Fred Blumling  
      File
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| PERMITEE NAME       | THE MARSHALL COUNTY COAL COMPANY | MSHA # | 4601437 |
| OPERATOR NAME       | MR-48 DATE | MR-48 |         |
| NPDES #            | WV0102392 | NPDES EXPIRATION DATE | 08/07/2019 | PERMIT EXPIRATION DATE | 02/28/2021 |
| PERMIT ACRES       | 1,112.39 | TOTAL DISTRICT | 500.00 | RECLIMED | 75.00 | ANCILLARY | 0 | UNRECLIMED | 825 |
| DATES: PH I        |         | PH II | LAST AUG SEED | MR-48 |         |
| LAST INSPECTION DATE | 09/30/2017 | TYPE | P | BONDING | 9 | INCH BONDED ACRES | 1,112.39 | CUR IBR # | 23 | CUR REV # | 12 |
| EXPIRATION DATES: | INACTIVE | ESP REPORT PLAN | INS | 06/01/2016 | BLASTED |
| TIME USED (HRS) | PERMIT REVIEW | INSPECT | TRAVEL | REPORT | 0.25 | 1.50 | 1.50 | 0.50 |

**INSPECTION COMMENTS**

NOV 36 Follow-up. The permittee has provided a detailed report on the current conditions of the wetland area that Conner Run empties into. The report states that no impacts from the spoil were noted. Vegetation and wildlife were typical. This satisfies the abatement measures. The violation is terminated. The report is attached.

### ENFORCEMENT STANDARD

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### AUTHORITY COMPANY REPRESENTATIVE

Joe Williams

### DELIVERY METHOD / DATE TIME

Hand 9/8/2019 09:00 AM

### CERTIFIED MAIL NUMBER

### ADDRESS

46226 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950

### WV DEP REP.

Andrew M Coleman
PERMIT NUMBER: C102392

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PERMITTEE NAME: THE MARSHALL COUNTY COAL COMPANY

Violation is hereby: [ ] Terminated [ ] Withdrawn [ ] Remains in force as written [ ] Show Cause submitted
[ ] Extended to ________ at ________ [ ] NOV modified to CO # [ ] CO modified to NOV #

Action taken to abate:

The permittee has provided a detailed report on the current conditions of wetland area that Conner Run empties into. The report states that no impacts from the spill were noted. Vegetation and wildlife were typical. This satisfies the abatement measures. The violation is terminated.

INSPECTOR'S CIVIL PENALTY ASSESSMENT RECOMMENDATION (check)
Seriousness: [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8 [ ] 9 [ ] 10
Negligence: [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8
Good Faith: [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8
[ ] Consent Agreement in effect? [ ] Yes [ ] No
Comments:

AUTH. COMPANY REPRESENTATIVE: Joe Williams

DELIVERY METHOD / DATE TIME: Hand 9/5/2017 09:00:00

CERTIFIED MAIL NUMBER: __________

ADDRESS: 46226 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950

WV DEP REP: Andrew M Coleman

Austin Caperton
[Secretary, Department of Environmental Protection]

WV DEP Representative

[ ] Results: CO was [ ] Upheld [ ] Modified [ ] Terminated [ ] Withdrawn

Comments:

SUPERVISOR: __________ DATE: __________ TIME: __________

COMPANY REPRESENTATIVE: __________ DATE: __________
September 5, 2017

Mr. Joseph Williams
Murray American Energy, Inc.
6126 Energy Road
Moundsville, WV 26041

Dear Joseph:

Subject: Conner Run Wetland Assessment
         Marshall County Mine
         Marshall County, West Virginia
         CEC Project 173-569

Civil & Environmental Consultants, Inc. (CEC) is pleased to present this letter report to Murray American Energy, Inc. (MAEI) documenting the results of a wetland assessment of an approximate 15-acre site, located along Fish Creek, approximately a half of mile east of West Virginia State Route 2 in Marshall County, West Virginia. CEC is aware that this assessment is in response to the notice of violation that MAEI received from West Virginia Department of Environmental Protection (WVDEP), dated August 4, 2017. Opinions presented in this letter report were developed based upon site observations made on August 25, 2017.

1.0 METHODS

CEC conducted field observations of the wetlands along Fish Creek and Conner Run within the study boundary (Figure 1) by foot and kayak. The interior of the wetland was accessed by kayak from Fish Creek. The perimeter of the wetland was walked to identify potential influences and signs of stress on the wetland.

While traversing the wetland, CEC ecologist performed visual assessments to identify stressed vegetation, stressed wildlife, and coal deposits. Wetland substrate was sampled down to 12 inches to observe soil conditions. Ecologists also documented Cowardin classes, general vegetation, and wildlife observations.

Photographs of observations were taken and are presented in attachment 1. A site map showing the investigated area is provided (Figure 1).

2.0 OBSERVATIONS

The approximate 15-acre wetland assessed by CEC is located at the confluence of Conner Run and Fish Creek. Conner Run receives flow from a permitted pumped discharge through a National Pollutant Discharge Elimination System outfall from the neighboring Marshall County Mine coal refuse disposal area. Water depth in the wetland ranged from 0 to 2 feet. The wetland appears to be regularly inundated during high flows from Fish Creek. A high-tension power line runs north to south over the eastern edge of the wetland.
Several wetland habitats were observed. The predominant habitat observed was palustrine emergent. Other habitats observed include:

- palustrine forested;
- palustrine scrub/shrub;
- palustrine unconsolidated bottom;
- riverine unconsolidated shore;
- riverine aquatic bed; and
- riverine emergent wetland non-persistent.

Overall herbaceous and woody vegetation condition appeared to be typical for the time of year. No significantly stressed vegetation was observed throughout the wetland. Cattails, a summer annual plant, were observed throughout the wetland and were demonstrating typical degeneration for the time of year. Several dead standing trees and shrubs were observed throughout the wetland. The number of dead standing trees and shrubs appeared typical for the wetland and riverine habitats. A higher number of dead woody plants were observed beneath the crossing power lines; possibly indicating past herbicide application for right-of-way maintenance.

The wildlife that were observed within the wetland:

- waterfowl;
- soft-shelled turtles;
- mussels (juvenile pink heel splitter);
- corbicula;
- fish;
- green frogs;
- northern water snake;
- blue-heron;
- green-heron;
- white-tail deer; and
- muskrat.

No stressed or deceased wildlife was observed within or adjacent to the wetland.

Substrate in the interior of the wetland showed no evidence of coal deposition at the surface. Several areas within the wetland were investigated below the surface. Soil within the wetland was predominately a saturated muck made up of organic decomposition. Depth of muck extended greater than 6 feet in some locations. The aerobic conditions create a dark fine muck that may mask coal fines. Black fines were noted in the soil in small quantities throughout the wetland. These fines could have been coal deposits; but chemical testing was not performed to identify the makeup of the deposits.

3.0 SUMMARY AND CONCLUSIONS

It is CEC's opinion that coal fines were likely deposited into the approximate 15 acre wetland from the coal refuse disposal area. The deposition of coal fines was not apparent in the substrate and any deposition that may have occurred appears to have had no adverse effect on vegetation or wildlife throughout the wetland.
4.0 CLOSING

We appreciate the opportunity to be of service to Murray American Energy, Inc. on this project. If you have any questions or require additional information, please contact Ray Ewing at (412) 249-2363 or rewing@cecinc.com.

Very truly yours,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

for
Josh Reffner
Project Scientist

Ray Ewing
Project Manager, Ecological Services

Attachments: Figure 1 – Site Map
Attachment 1 – Site Photographs
| Photograph 1: Wetland Overview Northeast |
| Photograph 2: Wetland Overview North |
| Photograph 3: Wetland Overview South |
| Photograph 4: Wetland Overview Southwest |
| Photograph 5: Wetland Overview West |
| Photograph 6: Wetland Overview North |

**Civil & Environmental Consultants, Inc.**
Pittsburgh, PA 15205
Phone: (800) 305-2324
www.cecinc.com

**Murray American Energy, Inc.**
Conner Run Wetland Assessment 173-669

**Photographs Taken August 25, 2017**
### PERMITEE NAME
THE MARSHALL COUNTY COAL COMPANY

### OPERATOR NAME

### NPDES #
WV0020834

### PERMIT

### ACRE PERMIT EXPR DATE
PERMIT EXPR DATE 02/10/2018

### PERMIT ACRES
335.95

### TOTAL DISTBD
290.00

### RECLMD
10.00

### ANCIL-LARY
UNRECLMD

### DATES: PH I
LAST AUG SEED

### LAST INSPECTION DATE
09/09/2017

### PH II

### TYPE
P

### BOND
INC

### INCR BONDED ACRES
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### CUR IRS
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### REV# 43

### EXPIRATION DATES: INACT
05/01/2018

### EMERGENCY RESPONSE PLAN
BLAST AD

### TIME USED [HRS] → PERMIT REVIEW
0.25

### INSPECT
0.50

### TRAVEL
1.50

### REPORT
0.50

### INSPECTION COMMENTS

NOV 76 Follow-up inspection. The permittee has constructed the spillway and provided a certification for the construction. The final termination of this NOV was delayed due to issues with ESS, which the certification was submitted through.

### ENFORCEMENT STANDARD

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### WATER QUALITY TESTS

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<th>Structure ID</th>
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<th>Mn</th>
<th>Al</th>
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<th>Not Const.</th>
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### AUTHORITY, COMPANY REPRESENTATIVE
Joe Williams

### DELIVERY METHOD / DATE TIME
Hand 10:30 AM 16:00:00

### CERTIFIED MAIL NUMBER

### ADDRESS
45225 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950

### WV DEP REP.
Andrew M. Coleman

---

App E - 31
**PERMIT NUMBER:** U003383  
**DATE:** 01/30/2017  
**TIME:** 12:00  
**FORM #:** 6  
**FACILITY #:** 0400  
**ENF STD:** 76  
**ORIGINAL VIOL #:** 09/18/2017  
**TIME:** 10:00

**PERMITTEE NAME:** THE MARSHALL COUNTY COAL COMPANY

Violation is hereby:  
- [ ] Terminated  
- [ ] Withdrawn  
- [ ] Remains in force as written  
- [ ] Show Cause submitted  
- [ ] Extended to ______________________  
- [ ] NOV modified to CO # ______  
- [ ] CO modified to NOV # ______

**Action taken to abate:**

The permittee has constructed the spillway and provided a certification for the construction. The final termination of this NOV was delayed due to issues with ESS, which the certification was submitted through.

**INSPECTOR’S CIVIL PENALTY ASSESSMENT RECOMMENDATION** (check)

Seriousness:  
- [ ] 1  
- [ ] 2  
- [ ] 3  
- [ ] 4  
- [ ] 5  
- [ ] 6  
- [ ] 7  
- [ ] 8  
- [ ] 9  
- [ ] 10  
Negligence:  
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- [ ] 1  
- [ ] 2  
- [ ] 3  
- [ ] 4  
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- [ ] 8  
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- [ ] 10

Good Faith:  
- [ ] 0  
- [ ] 1  
- [ ] 2  
- [ ] 3  
- [ ] 4  
- [ ] 5  
- [ ] 6  
- [ ] 7  
- [ ] 8

Consent Agreement in effect?  
- [ ] Yes  
- [ ] No

Comments:

**AUTH. COMPANY REPRESENTATIVE:** Joe Williams

**DELIVERY METHOD / DATE TIME:** Hand 10/9/2017 02:00

**CERTIFIED MAIL NUMBER:**

**ADDRESS:** 46226 NATIONAL ROAD, SAINT CLAIRESVILLE, OH 43950

**WV DEP REP:** Andrew M Coleman

**Austin Caperton**  
[Secretary, Department of Environmental Protection]  

**WV DEP Representative**  
Date  
10/9/17

**Names of individuals at informal conference:**

**Results:** CO was:  
- [ ] Upheld  
- [ ] Modified  
- [ ] Terminated  
- [ ] Withdrawn

**Comments:**

**SUPERVISOR:**  
**DATE:**  
**TIME:**

**COMPANY REPRESENTATIVE:**  
**DATE:**
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**PERMITTEE NAME**: THE MARSHALL COUNTY COAL COMPANY  
**MSHA #:** 46-01437

**OPERATOR NAME**: MR-19 DATE

**NPDES #:** WV0229834  
**NPDES EXPR DATE**: 03/07/2019  
**PERMIT EXPR DATE**: 02/10/2018

**PERMIT ACRES**: 335.96  
**TOTAL DISTBD**: 290.00  
**RECLMD**: 10.00  
**ANCIL-LARY**: UNRECLMD 280

**DAYS: PH I**: PH II  
**LAST AUG SEED**: MR-8

**LAST INSPI DATE**: 09/28/2017  
**TYPE**: C  
**BOND**: INC  
**INC BONDED ACRES**: 332.92  
**CUR IB#:** 78  
**CUR REV#:** 43

**EXPR DATES: INACT EMER RESP PLAN**: INS 06/01/2016  
**BLAST AD**:

**TIME USED (HRS)***: PERMIT REVIEW 0.25  
**INSPECT**: 1.50  
**TRAVEL**: 1.50  
**REPORT**: 0.25

**INSPCTION COMMENTS**

NOV 60 Follow-up Inspection. The permittee has begun work on building a sump near the prep-plant. This sump will catch overflow from the thickeners. The water in the sump will then be pumped to one of the ponds on site. The prep-plant drainage now flows into the middle pond. The storm drain was scheduled to be grouted. The NOV is being extended to certify the new sump and grout the drain.

**ENFORCEMENT STANDARD**

<table>
<thead>
<tr>
<th>ENFORCEMENT STANDARD</th>
<th>EVALUATION</th>
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<tr>
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<td>0500 Design Certification</td>
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<td>0700 Surface Water</td>
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<td>1300 Backfill / Grading</td>
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<td>1500 Revegetation Requirements</td>
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<td>1700 Highwall Elimination</td>
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<td>1900 Postmining Land Use</td>
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<td>2100 Acid bearing /Toxic Material</td>
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<td>2300 Change of Operator</td>
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<td>2500 Diversions and Drainage Control</td>
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**WATER QUALITY TESTS**

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<th>Outfall</th>
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<th>Mn</th>
<th>Al</th>
<th>No Flow</th>
<th>Not Const</th>
<th>Treatment</th>
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</thead>
</table>

**AUTH. COMPANY REPRESENTATIVE**: Joe Williams

**DELIVERY METHOD / DATE TIME**: Hand 10/27/2017 16:00:00

**CERTIFIED MAIL NUMBER**

**ADDRESS**: 46225 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950

**WV DEP REP**: Andrew M Coleman

App E - 34
### PERMIT NUMBER

<table>
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<th>PERMIT NUMBER</th>
<th>U003283</th>
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<tbody>
<tr>
<td>DATE</td>
<td>09/30/2017</td>
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<td>TIME</td>
<td>16:00</td>
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<td>FORM #</td>
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<tr>
<td>FACILITY #</td>
<td>2500</td>
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<td>ENF STD</td>
<td>88</td>
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<tr>
<td>DATE</td>
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<tr>
<td>TIME</td>
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### PERMITTEE NAME

**THE MARSHALL COUNTY COAL COMPANY**

### VIOLATION FOLLOW-UP INSPECTION REPORT

Violation is hereby:  
- [ ] Terminated  
- [ ] Withdrawn  
- [ ] Remains in force as written  
- [ ] Show Cause submitted  
- [x] Extended to 11/14/2017 at 10:00  
- [ ] NOV modified to CO #  
- [ ] CO modified to NOV #

### Action taken to abate:

- The permittee has begun work on building a sump near the prop-plant. This sump will catch overflow from the thickeners. The water in the sump will then be pumped to one of the ponds on site. The prop-plant drainage now flows into the middle pond. The storm drain was scheduled to be enroxed. The NOV is being extended to certify the new sump and grade the drain.

### INSPECTOR'S CIVIL PENALTY ASSESSMENT RECOMMENDATION

**Seriousness:**  
- [ ] 1  
- [ ] 2  
- [x] 3  
- [ ] 4  
- [x] 5  
- [ ] 6  
- [ ] 7  
- [ ] 8  
- [ ] 9  
- [ ] 10

**Negligence:**  
- [ ] 0  
- [ ] 1  
- [ ] 2  
- [x] 3  
- [ ] 4  
- [ ] 5  
- [ ] 6  
- [ ] 7  
- [ ] 8

**Good Faith:**  
- [ ] 0  
- [ ] 1  
- [ ] 2  
- [ ] 3  
- [x] 4  
- [ ] 5  
- [ ] 6  
- [ ] 7  
- [ ] 8

Consent Agreement in effect?  
- [ ] Yes  
- [x] No

### AUTH. COMPANY REPRESENTATIVE

Joe Williams

### DELIVERY METHOD / DATE TIME

Hand 10/27/2017 16:00

### CERTIFIED MAIL NUMBER

---

### ADDRESS

45226 NATIONAL ROAD, SAINT CLAIVOLVE, OH 43060

### WV DEP REP.

Andrew M. Coleman

---

Austin Caperton  
[Secretary, Department of Environmental Protection]  
[Date]

---

### Names of individuals at informal conferences

- [ ] [ ]

### Results:

- [ ] CO was Upheld  
- [ ] CO was Modified  
- [ ] CO was Terminated  
- [ ] CO was Withdrawn

### Comments:

---

### SUPERVISOR

---

### COMPANY REPRESENTATIVE

---

---

App E - 35
PERMIT NUMBER | ORIGINAL INSPECTION DATE | TIME | ENF STD DATA | VIOLATION ACTIVITY DATE | TIME | VIOLATIONS | INSPE ID NUMBER
--- | --- | --- | --- | --- | --- | --- | ---
2006984 | 08/23/2017 | 19:00 | 6 | 3000 | 08/23/2017 | 20:00 | 42 | 1032

PERMITTEE NAME | THE MONONGALIA COUNTY COAL COMPANY
OPERATOR NAME | 
MSHA ID | 4901963 | NPDES # | WV0064602
OWNER/CONTROLLER | 

Whereas an inspection of the above operation by the undersigned Authorized Representative of the Director was completed on the 23rd day of August, 2017. The inspection revealed a violation of the provisions of Chapter 22, Article 3 of the Code of West Virginia. You are hereby notified that you are in violation of the provisions listed below.

WV CODE 22, Art. 3, Sect. 14(b)(5) Reg 38-2-

[ DOV ] Description of Violation:
You have failed to minimize disturbance to the hydrologic balance by preventing material damage outside the permit area, in that an excessive contribution of suspended solids into surface waters had occurred. Leaking coal slurry had spilled into the WV Fork of Dunkard Creek, contributing high suspended solids and black staining. An estimated 1.2 miles of stream, from the point of entry, down to the confluence with the PA fork of Dunkard, appeared to be impacted. Water was also flowing out at outlet 002. Lab samples were grabbed at outlet 002 and at upstream and downstream locations; results are pending.

[ REM ] Remedial Measures:
Company had repaired the damaged, leaking pipe segment, replaced it, and resumed pumping slurry through this line. Slurry discharge off of permit area had already ceased by the time of this inspection. Area around spill needs to be cleaned up.

MUST BE CORRECTED BY DATE | 09/24/2017 12:00 | NOV Issued
| CO Modified to NOV | Resulted in Off-Site Impact

AUTH. COMPANY REPRESENTATIVE | Dave Reeds
DELIVERY METHOD / DATE TIME | Hand 8/24/2017 11:30:00
CERTIFIED MAIL NUMBER | 
ADDRESS | 46226 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950
WV DEP REP | Joel A Brown

Contact | Joel A Brown at (304) 457-3219 upon completion. Failure to complete the above measures within the above time period may result in a Cessation Order or revocation of the permit and forfeiture of the performance bond.
PERMIT NUMBER: U004664

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<tr>
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<td>06/23/2017</td>
<td>18:00</td>
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</table>

**PERMITTEE NAME:** THE MONONGALIA COUNTY COAL COMPANY

**Violation is hereby:**
- [ ] Terminated
- [ ] Withdrawn
- [ ] Remains in force as written
- [ ] Show Cause submitted

**Extended to:**
- [ ] at
- [ ] NOV modified to CO #
- [ ] CO modified to NOV #

**Action taken to abate:**

Company was working diligently to replace the damaged pipe when I arrived. Pumping through the slurry line had ceased, a pipe segment was repaired, and pumping had been again, without leaking. There was no longer any black material discharging into the creek by this time.

**INSPECTOR'S CIVIL PENALTY ASSESSMENT RECOMMENDATION** (check)

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<th>Seriousness:</th>
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<tbody>
<tr>
<td>Negligence:</td>
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</tbody>
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**Good Faith:**
- [ ] Yes
- [ ] No

**Comments:**

---

**Austin Caperton**

[Secretary, Department of Environmental Protection]

[WV DEP Representative]

[Date]

**Names of individuals at informal Conference:**

<table>
<thead>
<tr>
<th>Results: CO was:</th>
<th>[ ] Upheld</th>
<th>[ ] Modified</th>
<th>Terminated</th>
<th>[ ] Withdrawn</th>
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**Comments:**

---

**SUPERVISOR:**

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**COMPANY REPRESENTATIVE:**

<table>
<thead>
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</table>
## INSPECTION COMMENTS

**LAB ANALYSIS PENDING.** Blacksville 2. Company reported a coal slurry spill that occurred below the coal stockpile and adjacent to the railroad track, caused by a leak in a section of pipe. Slurry had entered a culvert next to the state road, crossed under the road, and spilled into the WV Fork of Dunkard Creek. An unknown volume had spilled. Company was working diligently to repair the damage, and

### ENFORCEMENT STANDARD

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<td>Signs and Markers</td>
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<td>Refuse Impoundments</td>
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<td>Revegetation Requirements</td>
<td>1600 Disposal of Excess Spill</td>
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<td>Highwall Elimination</td>
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<td>1900</td>
<td>Postmining Land Use</td>
<td>2000 Cessated Mining Temporarily</td>
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<td>2100</td>
<td>Acid-bearing/Toxic Material</td>
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<td>2300</td>
<td>Change of Operator</td>
<td>2400 Permit Conditions</td>
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<td>Subsidence Plan</td>
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<tr>
<td>2900</td>
<td>Bonding Current</td>
<td>3000 Other Conditions</td>
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</tbody>
</table>

### WATER QUALITY TESTS

| Structure ID | Outfall | pH | Fe | Mn | Al | No Flow | Not Const. | Treatment |
|--------------|---------|----|----|----|----|---------|------------|-----------|----------|

App E - 39
COMMENT (cont.)

the pipe repair was completed during this inspection. NOW # 42 is being issued for disturbing the prevailing hydrologic balance in Dunkard Creek, due to this spill. Water was also observed discharging via NPDES outlet 002 at approximately 100 gpm. A lab sample of this effluent, and additional upstream and downstream lab samples, were collected.
It's listed as "progress date" on the attached.

Best Regards,
Kim

From: Parr, Jeffrey [mailto:jepparr@pa.gov]
Sent: Friday, August 18, 2017 9:45 AM
To: Betcher, Kim <kimbetcher@coalsource.com>
Subject: RE: Maple Creek_CO 171030_satisfactory progress

Hi Kim,

This email is to confirm that Compliance Order No. 171030 was placed into satisfactory progress on August 16, 2017. Please see the attached eFacts screen capture. Please note that "Progress Date" is Satisfactory Progress.

Please let me know if you need additional information.

Thanks,
Jeff

Jeffrey V Parr | Compliance Specialist
Department of Environmental Protection | New Stanton District Office
131 Broadview Road | New Stanton, PA 15672
Phone: 724.925.5542 | Fax: 724.925.5555
www.dep.pa.gov

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From: Betcher, Kim [mailto:kimbetcher@coalsource.com]
Sent: Friday, August 18, 2017 9:28 AM
To: Parr, Jeffrey <jepparr@pa.gov>
Subject: Maple Creek_CO 171030_satisfactory progress

Jeff,
To follow-up from our phone conversation, would you please provide me with written confirmation that the Ginger Hill CO has been put into satisfactory progress so I have something for our file.

Thank you!
<table>
<thead>
<tr>
<th>Column</th>
<th>Value</th>
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<tr>
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<td>Date Receipt</td>
<td>08/16/2017</td>
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<tr>
<td>Status</td>
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</table>
Good Morning Kristy,

This email is your confirmation that the Compliance Orders listed below (171025, 171028 and 171032) are marked comply/closed. Please see attached.

Please let me know if you need anything else or if this email will not satisfy your request.

Thanks,

Jeff

Jeffrey V Parr | Compliance Specialist
Department of Environmental Protection | New Stanton District Office
131 Broadview Road | New Stanton, PA 15672
Phone: 724.925.5542 | Fax: 724.925.5555
www.dep.pa.gov

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From: Knopsnider, Kristy [mailto:KristyKnopsnider@coalsource.com]
Sent: Tuesday, October 31, 2017 9:35 AM
To: Parr, Jeffrey <jeparr@pa.gov>
Subject: Information Request for CO 171025, 171028, and 171032

Jeff, Illinois Department of Natural Resources is requesting information in regards to the C.O.’s listed below. Could you please provide me with written confirmation that we have achieved satisfactory progress for the following CO’s.

C.O. 171025 Canterbury Coal Company
C.O. 171028 Canterbury Coal Company
C.O. 171032 Murray Keystone

Thank you for your time,

Kristy L. Knopsnider
Environmental Specialist
Murray Energy Corporation
46220 National Road
St. Clairsville, OH 43950
Office: (740)-338-3256
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App E - 48
West Virginia Department Of Environmental Protection

MR-15 NOTICE OF VIOLATION

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PERMITTEE NAME: MURRAY AMERICAN ENERGY, INC.

OPERATOR NAME

MSHA ID#: 06-91452 NPDES #: WV038288

OWNER/CONTROLLER

Whereas an inspection of the above operation by the undersigned Authorized Representative of the Director was completed on the 023rd day of August, 2017. The inspection revealed a violation of the provisions of Chapter 22, Article 3 of the Code of West Virginia. You are hereby notified that you are in violation of the provisions listed below.

WV CODE 22, Art. 3, Sect. 38-2(b)(9)

[DOV] Description of Violation:

You have failed to minimize the disturbance of the prevailing hydrologic disturbance at the mine site and associated off-site areas, in that AMD being pumped to the Flaggy Meadows AMD treatment plant had leaked into Little Indian Creek, north of the #24 pump. Noticeable orange staining in the creek was observed as a result of this spill. Operator said that once the low-pressure indicator was triggered, the pump automatically shut off.

[REM] Remedial Measures:

Pump had been shut off for hours by the time this spill was observed and reported. Operator locked out the pump to prevent it from further operation until necessary repairs are made. Be sure to repair pump and hose as necessary before continuing pumping operations. Because pumping was no longer occurring, and orange water was no longer entering the stream, this violation was abated immediately.

MUST BE CORRECTED BY DATE 09/03/2017 18:00

☑ NOV issued ☐ CO modified to NOV

☑ Resulted in Off-Site Impact

AUTH. COMPANY REPRESENTATIVE: Justin Reynolds

DELIVERY METHOD / DATE TIME: Hand 8/4/2017 09:00:00

CERTIFIED MAIL NUMBER:

ADDRESS: 46226 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950

WV DEP REP. Joel A Brown

[Secretary, Department of Environmental Protection] [WV DEP Rep/Date]

08/04/2017

Contact Joel A Brown at (304) 457-3219 upon completion. Failure to complete the above measures within the above time period may result in a Cessation Order or revocation of the permit and forfeiture of the performance bond.
Arkwright. Inspector was notified of a spill in Little Indian Creek, north of the #24 pump borehole. Water being pumped to the Flagg Meadow AMD plant had leaked into the stream, causing orange staining. As a result, NOV #44 is being issued.
**ENFORCEMENT STANDARD**

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<td>Diversions and Drainage Control</td>
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<td>Fugitive Dust Control</td>
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<td>Bonding Current</td>
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<tr>
<td></td>
<td>Other Conditions</td>
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<td>FC</td>
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</table>

**AUTH. COMPANY REPRESENTATIVE**

Justin Reynolds

**DELIVERY METHOD / DATE TIME**

Hand 8/4/2017 09:00:00

**CERTIFIED MAIL NUMBER**

**ADDRESS**

45226 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950

**WV DEP REP.**

Joel A Brown

---

Arkwright: NOV #44 is being terminated. The discharge of orange water into Little Indian Creek had already ceased prior to notification of this violation condition. No further abatement actions were required by the time the inspector arrived.
West Virginia Department Of Environmental Protection

违例后续检查报告

permit number: U007083

原检查和违例数据

日期: 08/03/2017

时间: 16:30

形式: 6

设施: 3000

标准: 44

新违例活动

日期: 08/03/2017

时间: 18:00

Permittee name: MURRAY AMERICAN ENERGY, INC.

违例情况: 遂令

是否延长: 否

是否撤回: 否

是否持续有效: 否

是否有原因陈述: 否

是否有NOV修改: 否

是否有CO修改: 否

采取的行动: 一个低压设置触发了泵的关闭。水在几个小时之前就停止泄漏到溪流中，这之前违例情况被发现并报告。没有进一步的行动来消除违例。操作员已锁了泵来防止进一步的抽水，直到需要进行检查和维修。

检查员的民事处罚评估建议

严重性: 1 2 3 4 5 6 7 8 9 10

轻率: 0 1 2 3 4 5 6 7 8

诚信: 0 1 2 3 4 5 6 7 8

合意协议有效: 是

否

Comments:

Authorized Company Representative: Justin Reynolds

Delivered Method / Date Time: Hand 8/4/2017 09:00:00

Certified Mail Number:

Address: 48226 NATIONAL ROAD, SAINT CLAIRSVILLE, OH 43950

WV DEP Rep: Joel A Brown

Austin Caperton

[Secretary, Department of Environmental Protection]

[DEP Representative]

Date: 8/4/2017

结果: CO 有效

 Upheld

 Modified

 Terminated

 Withdrawn

Comments:

Supervisor: __________________ Date: ___________ Time: ___________

Company Representative: __________________ Date: ___________
APPENDIX F

THREATENED AND ENDANGERED SPECIES
62 Ill. Adm. Code 1773.15(c)(10)

The Department submitted the permit application for Significant Revision No. 6 to Permit No. 382 to the U.S. Fish and Wildlife Service (USFWS) for consultation regarding potential effects of the proposed longwall shadow area expansion on federally listed threatened and endangered species. Additionally, pursuant to 17 Ill. Adm. Code 1075 the Department consulted the Illinois Office of Realty and Environmental Planning/Division of Ecosystems and Environment online EcoCAT (Ecological Compliance Assessment Tool) system regarding state listed species known to occur within the proposed expansion boundary and adjacent area.

The USFWS indicated in a letter to the Department dated August 4, 2017 that “the list for the proposed permit area includes the endangered Indiana bat (Myotis sodalis), endangered piping plover (Charadrius melodus), and threatened northern long-eared bat (Myotis septentrionalis). There is no designated critical habitat in the project area at this time.” The USFWS also “concurs that the proposed permit actions are not likely to adversely affect any federally listed species”. No critical habitat or known occurrences for any listed species were identified through the EcoCAT consultation process, a termination letter was received on July 11, 2016. Based on these consultations, Department review of the application, and use of the most current species data available, the Department finds that the operation as approved will not affect the continued existence of listed threatened or endangered species or result in destruction of adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 USC 1531 et seq.).