

## **Permanent Program Finding**

Results of Review  
Permanent Program Permit Application No. 452  
Sunrise Coal, LLC  
Oaktown Mine - Russellville Surface Portal

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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 Permit Application No. 452 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 October 7, 2019 (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**

The application proposes a permit on 101.0 acres. The proposed permit area consists of 101.0 acres, of which 21.14 acres are proposed to be used for processing areas and support facilities. The remaining acreage is proposed to be unaffected.

The following is a summary of the pre-mining land uses and the proposed post-mining land uses. NOTE: Land uses are categorized under the definitions found in 62 Ill. Adm. Code 1701.5. Land use classifications under other regulatory programs and agencies may be different.

<u>Land Use</u>	<u>Pre-Mining Acres</u>	<u>Post-Mining Acres</u>
Cropland	58.20	36.51
Pastureland	1.03	22.79
Undeveloped Land	41.77	41.70
<b>Total</b>	<b>101.00</b>	<b>101.00</b>

### **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 application was filed with the Department on February 26, 2019 and was deemed complete on June 5, 2019. The applicant placed a newspaper advertisement of the proposed operation in the Lawrenceville Daily Record, a newspaper of general circulation in the area affected, once a week for four consecutive weeks, beginning on June 11, 2019. The applicant filed two copies of the application with the County Clerk of Lawrence County, in accordance with 62 Ill. Adm. Code 1773.13(a)(2), on June 27, 2019. Copies of the application were sent to the following 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 July 3, 2019, 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 - July 29, 2019 and IEPA - August 30, 2019.

Comments on this application were also received from the NRCS dated July 8, 2019 and USFWS dated October 4, 2019.

No requests for an informal conference or public hearing were received by the Department

All comments received in writing 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 County Clerk of the county in which the application is located.

### **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 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 and 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 not currently in violation of the State Act, Federal Act or other law or regulation referred to in Section 1773.15(b)(1).

Section 1773.15(e): The Department requested updated compliance information in its fee and bond request letter dated February 10, 2020. 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 no new 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 application as modified is accurate and complete and all requirements of the Federal and State Acts and the regulatory program have been met.

Section 1817.150: The applicant has proposed the creation of a road in the permit area. Pursuant to Section 1817.150(a)(2) & (3) the Department has determined that the road is a primary road. Pursuant to Section 1817.151(a) the construction or reconstruction of the road shall be certified in a report submitted to the Department by a qualified registered professional engineer within thirty (30) days after completion of construction. The report shall indicate that the primary road has been constructed or reconstructed as designed and in accordance with the approved plan.

#### 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 application, as modified.

Section 1773.15(c)(3)(A): The proposed area is not within an area under study or administrative proceedings under a petition, filed pursuant to Section 1764, to have an area designated as unsuitable for surface coal mining operations.

Section 1773.15(c)(3)(B): The proposed area is not within an area designated as unsuitable for mining pursuant to Sections 1762 and 1764, or subject to the prohibitions or limitations of Section 1761.11, except as delineated below:

Section 1761.11(a): The proposed area does not include any lands within the boundaries of the National Park System, the National Wildlife Refuge System, the National System of Trails, the National Wilderness Preservation System, the Wild and Scenic Rivers System, or National Recreation Areas designated by Act of Congress.

Section 1761.11(b): The proposed area is not on any Federal lands within the boundaries of any national forest.

Section 1761.11(c): The proposed surface coal mining and reclamation operations will not adversely affect any publicly owned park or any privately owned or publicly owned places included on the National Register of Historic Places.

Section 1761.11(d): The proposed area is within one hundred (100) feet measured horizontally of the outside right-of-way line of public roads in Lawrence County, described as follows:

The proposed area is adjacent to the right-of-way of County Road 1950 East and County Road 1840 North. The proposed activities in the application area include support operations for underground mining.

1761.11(d) The proposed area is adjacent to the right-of-way of County Road 1840 North road. The proposed coal mining activity in the application within 100 feet of the public road is construction of a mine access road. Thus, the provisions of Section 1761.14(b) do not apply.

No approvals from the authority with jurisdiction over the roads were required.

The applicant provided proper public notice and opportunity for a public hearing. No hearing was requested, and no written comments were submitted to the Department concerning these roads.

The Department finds the interests of the public and affected landowners will be protected from the proposed mining operations as a result of the measures to be taken by the applicant as described in the mining operations plan concerning these roads.

Section 1761.11(e): The proposed area is within three hundred (300) feet measured horizontally of two (2) occupied dwellings.

- \* The applicant shall establish a three hundred (300) foot buffer around the dwellings, not disturb within the buffer zones and shall install and maintain buffer zone markers to prevent disturbance within the buffer zones. (See Part IV. Permit Conditions, Condition N.)

Section 1761.11(f): The proposed area is not within three hundred (300) feet measured horizontally of any public building, school, church, community or institutional building, or public park from which the applicant will be required to maintain a three hundred (300) foot buffer zone.

Section 1761.11(g): The proposed area is not within one hundred (100) feet measured horizontally of a cemetery.

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 area (see Appendix C).

Section 1773.15(c)(6): The applicant has not proposed the use of any existing structures in the application requiring compliance with Section 1700.11(d).

Section 1773.15(c)(7): The applicant will submit fees required by these regulations before the permit is issued. The fee required is \$2,525.00 for the term of the permit, which may be paid in annual increments. 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): See Part III – Subpart B.

Section 1773.15(c)(9): The applicant has satisfied the requirements for a long-term, intensive agricultural post-mining land use, in accordance with the requirements of Section 1817.111(d).

Section 1773.15(c)(9): The requirements of this section are not applicable to this application because the only post mining cropland is in areas not to be affected by any mining activities.

Section 1773.15(c)(10): The operation as approved will not affect the continued existence of endangered or threatened species or result in destruction or adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 USC 1531 *et seq.*, see Appendix F).

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. (Part IV. Permit Conditions, See Condition O.)

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)

PRIME FARMLANDS  
(Section 1785.17)

A soil survey was submitted by the applicant that shows prime farmland soils identified in this application which have been historically used as cropland. The soil survey prepared by the USDA provides the required soil information.

The prime farmland identified in the permit is exempt from the provisions of Section 1785.17 as provided under Section 1823.11. The Department finds the area is to be actively used for an extended period of time and will affect a minimal amount of land. Prime farmland on the permit area, which is not planned to be disturbed, will retain its original capability. (See Appendix D.)

Section 1785.17(e)(1-5): The requirements of this section are not applicable to this application.

Section 1785.20: 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 application,
- B. The County Board of the county in which the application is located; 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, as amended (16 U.S.C. 1531 *et seq.*). If "take" as defined by these Acts is anticipated to result from permitted activities, it is recommended that the permittee apply for an Incidental Take permit from the Illinois Department of Natural Resources, Office of Resource Conservation for state listed species and to contact Department wildlife staff 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 (16 U.S.C. 668 *et seq.*). If "take" as defined by the Bald Eagle Protection Act is anticipated to result from permitted activities, it is recommended that the permittee should apply for an Incidental Take (non-purposeful take) permit from the U.S. Fish and Wildlife Service. The Department and the U.S. Fish and Wildlife Service shall be notified if a bald or golden eagle nest is observed in the permit area or in the vicinity of the permit area.

3. The permit area contains potential swarming habitat and potential summer habitat for the Indiana bat. None of this habitat is approved to be disturbed under this action. Prior to any disturbance to the identified potential habitat, the permittee shall provide a plan to the Department which includes a Protection and Enhancement Plan and an Incidental Take Authorization request for the Indiana bat meeting the specifications of the "Range-wide Indiana Bat Protection and Enhancement Plan Guidelines" (revised 2013) developed by the U.S. Fish and Wildlife Service and the Office of Surface Mining, or justify why a Protection and Enhancement Plan and Incidental Take authorization request are not required under those guidelines.
  4. The permittee has committed to installation of one barn owl (*Tyto alba*) box as part of the protection and enhancement plan for this state listed avian species. The permittee shall submit a plan to the Department regarding timing and location of the barn owl box upon commencement of re-vegetation activities.
- 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 thirty (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 Section 1778.15, the permittee shall possess all necessary legal rights to enter and conduct surface coal mining and reclamation operations within the permit area until final bond release is obtained.
- L. The permittee shall commence all groundwater and surface water monitoring approved by this permit upon initial disturbance of lands within the permit area. Monitoring shall be in accordance with the approved permit and/or as outlined in Appendix C of this finding document.
- M. Based on the information provided within the application the Department was unable to make stream classification determinations for Streams 2, 3, 4, 6, 7, 8, and 9 which are located within the permit area. No disturbance within 100 feet of Streams 2, 3, 4, 6, 7, 8, and 9 will commence as part of this permitting action. Prior to any disturbance within 100 feet of Streams 2, 3, 4, 6, 7, 8, and 9 the permittee shall provide a plan to the Department which includes a stream buffer variance request or a justification that each disturbed stream is ephemeral based on both parts of the definition of ephemeral stream found at 62 Ill. Adm. Code Section 1701.5 Appendix A.
- N. The permit area is within three hundred (300) feet measured horizontally of two occupied dwellings. Prior to any disturbance within the permit area, the permittee shall establish a three hundred (300) foot buffer around the dwellings and install and maintain buffer zone markers to prevent disturbance within the buffer zones.
- O. Pursuant to 62 Ill Adm. Code 1779.12, the applicant shall perform a Phase I cultural resource survey prior to mining operations currently proposed, and any future operations, for the areas within the permit boundary north of County Road 1840N. Survey shall be submitted to the Department for review and appropriate signoff prior to any disturbance in the area. The area requiring cultural survey is the approximate 41 acres located north and to the east of County Road 1840 N.

V. CONCLUSIONS

Based upon the information contained in the application, information otherwise available and made available to the 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 permit 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

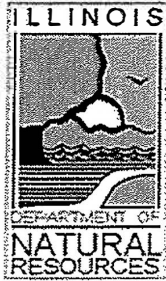
  
Colleen Callahan, Director

Dated: August 5, 2020

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**APPENDIX A**

REQUIRED MODIFICATIONS



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
www.dnr.illinois.gov

JB Pritzker, Governor  
Colleen Callahan, Director

October 7, 2019

Brent Bilsland  
Sunrise Coal, LLC  
1183 East Canvasback Drive  
Terre Haute, IN 47802

**Via Certified Mail**

7017 1000 0001 0938 9729

Re: Modification to Permit No. 452  
Oaktown Surface Mine

Dear Mr. Bilsland:

The Department, after reviewing the information contained in the surface Permit No. 452 application and information otherwise available to the applicant, and after considering all comments received, has determined that modification of the above-referenced application 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 (1) year from the date of this letter. Absent the modifications required by the Department, the application will not comply with the requirements of the Illinois Surface Coal Mining Land Conservation and Reclamation Act, regulations and the Illinois regulatory program. Failure to submit the required modifications will result in the Department issuing 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. Several sections under 62 Ill. Adm. Code 1700-1850 require maps, plans and cross sections as well as other engineering related designs to be “...prepared by, or under the direction of, and sealed by a qualified registered professional engineer licensed under the Professional Engineering Practice Act of 1989 [225 ILCS 325]...” As required by Part 1.6 of the application, the applicant shall include an Engineering Certification. As directed in the certification, all applicable maps and/or drawings shall be individually sealed in accordance with Section 15 of the Professional Engineering Practice Act of 1989, 225 ILCS 325/15.
2. Pursuant to 62 Ill. Adm. Code 1777.11(c), and as required by Part 1.1 of the application, the Department is requiring the submittal of verification by a responsible official of the applicant for the information being submitted as a result of this modification letter.
3. The property ownership Table 1.5.1 indicates Parcel ID No. 04-29-400-003 is owned by Dan, Marian, Jerry, Carolyn and Joe Weger Estate and Jody R. Andriano. Tables 2.1.1 and 9.1, for what is assumed to be this property, indicates the landowners are Joe, Jerry and Dan Weger. The applicant shall clarify the discrepancy to ensure the ownership information is consistent and accurate on the soils tables in order to demonstrate compliance with 62 Ill. Adm. Code 1784.15.
4. The applicant’s response in Table 2.2.9 incorrectly identified the Alvin soil series units 131D and 131D2 as limited capability soils. These soils shall be properly classified as high capability soils. Making this correction will also revise specific landowner Tables 2.1.1 and 9.1. The changes must also be reflected in the soils and the pre and post mine land use maps. In addition, Table 2.9.9 indicates .01 acres of Alvin 131E2 is eligible for a negative determination. That acreage should be included in the Selma 125 soils unit or the Alvin 131C soils unit. The applicant shall correct these discrepancies to demonstrate compliance with 62 Ill. Adm. Code 1784.15.
5. The Table 2.1.1 for Jerry Weger indicates that .07 and .50 acres of prime farmland cropland is requested for a negative determination. In order for that determination to be made, the applicant must demonstrate the acreage hasn’t been historically used as cropland. The applicant shall either provide adequate justification that these cropped acres haven’t historically be used for cropping purposes in response to Part 2.2.4, or revise the table to reflect the appropriate classification of the acreage. Be advised that the latter option would necessitate changes to the Grand Total Table 2.2.9, the Jerry Weger Table 9.1 and the Grand Total Table 9.1. The applicant shall clarify the issue or correct these discrepancies demonstrate compliance with 62 Ill. Adm. Code 1784.15.

6. The response to Part 3.2.5 shall be revised to indicate that a buried pipeline will be included in the permit area in order to be consistent with the written response to that question. In addition, the written response shall be revised to indicate the pipeline will be buried a minimum of forty two (42) inches, as outlined by the standard specifications for such lines. These changes are required to ensure compliance with 62 Ill. Adm. Code 1817.133.
7. In order to demonstrate compliance with 62 Ill. Adm. Code 1817.95, the applicant's response to Part 3.4.4 shall be revised to include a description of the procedures to be employed to control runoff from areas where topsoil has been removed. Such steps could include mulching, vegetating or rocking such areas.
8. The response to Part 8.4 indicates the applicant proposes to reclaim affected cropland areas to pasture standards. However, the responses to Part 8.4.1, 8.4.3, 9.1.2 and 9.1.3.2 are inconsistent with that proposal. In addition, the response to Part 8.4 states the land will be purchased during the application review process, while the response to Part 8.4.3 discusses the return of the land back to landowners after crop production is met. It is unclear as to what "landowners" are being referenced. In order to demonstrate compliance with 62 Ill. Adm. Code 1777.11, the applicant shall correct these discrepancies to ensure the proposed permit clearly outlines the intended reclamation plan for the affected portion of the proposed permit area. In addition, the applicant shall ensure the Post Mining Land Use Map – Map 3a reflects any changes as a result of these corrections.
9. To demonstrate compliance with 62 Ill. Adm. Code 1823.14(e), the applicant's response to Parts 8.4.7 (language and subsequent table) and 9.2.1 shall be revised to reflect a consistent topsoil thickness for the post mining capability acres involved.
10. The applicant failed to provide the pasture reclamation plan in Part 10.5. The applicant shall provide the information to meet the obligation of 62 Ill. Adm. Code 1817.116.
11. Pursuant to 62 Ill. Adm. Code 1823.11, the response to Part 2.2.4 shall be completed and address all of the parameters required to be eligible for the underground mine exemption being sought.
12. The response to Part 3.3.1 describes how the permit boundary will be designated. Pursuant to 62 Ill. Adm. Code 1817.11(d), unaffected areas shall be designated by markers. The applicant shall describe how unaffected areas will be designated.
13. Table 9.5.1.8 contains information concerning "Haul Road Removal" dimensions. Pursuant to 62 Ill. Adm. Code 1780.37, these roads are not considered "haul roads" but Transportation Facilities. This information shall be provided in Table 9.5.1.11 **Pavement/Gravel Area Reclamation** under roads. The applicant shall specify the material type of the road. If different materials are proposed to be used, the applicant shall separate the road dimensions by material type.

14. In response to Table 4.6.3, the applicant provided the lat/long location of SW-1 as Latitude 38.8489, Longitude 89.5461. However, this lat/long location is not located in the vicinity of the proposed permit area. Pursuant to 62 Ill. Adm. Code 1779.25(a)(2), the applicant shall revise the lat/long location provided for SW-1.
15. The following are in response to Part 4.4.3 of the application:
  - a. The applicant references a “static water level map” that does not appear to be included within the application. Pursuant to 62 Ill. Adm. Code 1780.21(b)(1)(B), the applicant shall provide a potentiometric map depicting the elevation of shallow groundwater within the proposed permit area. Additionally, the potentiometric map shall incorporate groundwater elevation data collected from the two (2) recently installed piezometers.
  - b. The applicant failed to include a narrative detailing the groundwater elevation data collected from the two (2) recently installed piezometers. Pursuant to 62 Ill. Adm. Code 1780.21(b)(1)(B), the applicant shall provide a narrative describing the data collected from the two (2) recently installed piezometers in relation to stream bottom elevations.
16. The following are in response to Attachment 6.2.1 of the application:
  - a. The applicant references what appears to be data from the two (2) recently installed piezometers. However, the data is reported under “GW Well #1” and “GW Well #2” and the piezometers are depicted on the Hydrogeological Map as “P-1” and “P-2”. Pursuant to 62 Ill. Adm. Code 1777.11(a)(2), the applicant shall clarify this discrepancy and amend all applicable parts with the correct nomenclature for the piezometers.
  - b. The applicant provided groundwater elevation data from what appears to be the two (2) recently installed piezometers. However, only two (2) sampling events were provided for each piezometer and these sampling events occurred nine (9) days apart. Therefore, the Department has determined that additional sampling events are necessary in order to determine the seasonality of groundwater elevations within the proposed permit area. Pursuant to 62 Ill. Adm. Code 1780.21(b)(1)(B), the applicant shall provide additional sampling events with groundwater elevation data from the two (2) recently installed piezometers. If additional sampling event data results in changes to stream classifications, the applicant shall amend all applicable portions of the application related to streams.
17. In response to the Hydrogeological Map – Map 5 of the application, the applicant depicted surface elevation contours that conflict with elevations reported on boring logs included within the application. For example, Boring RU221C has a reported surface elevation of



432.4 on the boring log, but the boring is depicted on the Hydrogeological Map between the 438 and 440 elevation contours. Pursuant to 62 Ill. Adm. Code 1777.14(a) and as described in the Instructions page of the application, the applicant shall provide accurate topographic elevation contours within the proposed permit area and adjacent areas.

18. In response to the boring logs provided in Part 4 of the application, the applicant does not specify what coordinate system was used in reporting the location of the borings. Pursuant to 62 Ill. Adm. Code 1783.25(a)(1), the applicant shall clarify what coordinate system the provided location data is from, or provide the location data for the borings in a known coordinate system.
19. The Department is in receipt of a letter addressed to the applicant dated August 30, 2019 from the Illinois EPA requesting clarification or additional information. Pursuant to 62 Ill. Adm. Code 1784.14, please provide responses to those questions contained in the referenced IEPA letter as a part of this modification package. Including this information will assure coordination with each agency's regulations. If any response to the IEPA's comments would result in changes to this permit application, clearly indicate which application part and/or map is being revised.
20. Pursuant to 62 Ill. Adm. Code 1817.57(b), and required by Part 3.3.3, the applicant shall provide a description of signs and markers associated with stream buffer zones. In response to Part 3.3.3 of the application, the applicant states "Not applicable. No perennial or intermittent streams are within the proposed permit area." Given, the applicant has only provided an ephemeral stream justification for two streams (Stream 1 and Stream 5), the Department is unable to make an ephemeral determination for Streams 2, 3, 4, 6, 7, 8 and 9, which are located within the proposed permit boundary. Therefore, the applicant's statement of "No perennial or intermittent streams are within the proposed permit area" shall be revised or the applicant shall provide an ephemeral justification for Streams 2, 3, 4, 6, 7, 8, and 9.
21. Pursuant to 62 Ill. Adm. Code 1817.57, 1701.5 Appendix A, and required by Part 6.2.1, the applicant is required to provide a justification that each disturbed stream is ephemeral based on both parts of the definition of ephemeral stream found at Section 1701.5 Appendix A. The Department is aware that Streams 2, 3, 4, 6, 7, 8 and 9 are not to be disturbed as part of this permitting action. The applicant has classified these streams in Table 6.2.1 and Stream Map - Map 10 as ephemeral. Given, the applicant has only provided an ephemeral stream justification for two streams (Stream 1 and Stream 5), the Department is unable to make an ephemeral determination for Streams 2, 3, 4, 6, 7, 8 and 9. The applicant shall revise or remove these ephemeral classifications from Table 6.2.1 and Stream Map - Map 10, or the applicant shall provide an ephemeral justification for Streams 2, 3, 4, 6, 7, 8 and 9.
22. Pursuant to 62 Ill. Adm. Code 1784.21(a)(2)(B), and required by Part 7.1.3, the applicant shall provide a description of the riparian vegetation and a narrative discussing any critical

habitat for threatened and endangered aquatic species, for each intermittent and perennial stream discussed in Part 6. The applicant shall provide a general discussion on how stream habitat will be avoided, or replaced and enhanced where practicable, and provide general information on the steps taken to comply with Section 404 of the Clean Water Act regarding streams and associated riparian areas. In response to Part 7.1.3.1 of the application, the applicant states “There are no streams which meet the OMM definition of intermittent or perennial.” Given, the applicant has only provided an ephemeral stream justification for two streams (Stream 1 and Stream 5), the Department is unable to make an ephemeral determination for Streams 2, 3, 4, 6, 7, 8 and 9, which are located within the proposed permit boundary. Therefore, the applicant’s statement of “There are no streams which meet the OMM definition of intermittent or perennial” shall be revised or the applicant shall provide an ephemeral justification for Streams 2, 3, 4, 6, 7, 8 and 9.

23. The response to Part 5.3.1.1 references Attachment 5.3.1 and Table 5.3.1 for the design summary information associated with the proposed temporary diversions. Given the discharge structure for Basin No. 1 is designed for a twenty five (25) year – six (6) hour precipitation event, the applicant has designed the ditches that are directly tributary to the sediment basin with the same design event as required by the Department. In accordance with the Department’s Technical Guidance Document No. 2 (TGD No. 2), the Department requires the use of Table 13 from Bulletin 70 from the Illinois State Water Survey (ISWS) for rainfall depths for given storm events. However, ISWS has published an updated Bulletin 70 in March 2019 which reflects changes to the rainfall depths for a given storm event. In certain scenarios, the rainfall depth values have increased significantly. Pursuant to 62 Ill. Adm. Code 1817.43, the Department requires the design of the proposed temporary diversions to be modified to include the most recent storm data published by ISWS. This document can be found at:

<https://www.ideals.illinois.edu/bitstream/handle/2142/103172/ISWS-CR-2019-05-REVISED.pdf?sequence=4&isAllowed=y>

24. The response to Part 5.3.1.3 references Attachment 5.3.1 for cross-sections of the proposed temporary diversions. Pursuant to 62 Ill. Adm. Code 1784.24 and the design changes required, the applicant shall modify the cross-sections accordingly.
25. The response to Part 5.3.1.4 references Attachment 5.3.1 for profiles of the proposed temporary diversions. Pursuant to 62 Ill. Adm. Code 1784.29 and the design changes required, the applicant shall modify the profiles accordingly.
26. The response to Part 5.3.2.1 references Attachment 5.3.2.1, Attachment 5.4.1.2 and Table 5.3.2 for culvert design information and SEDCAD modeling. Pursuant to 62 Ill. Adm. Code 1817.150(c), the applicant shall modify the culvert design calculations to use the updated ISWS rainfall depths for given storm events.

27. The response to Part 5.3.2.2 references Attachment 3.8.3.2 for profile and cross-section drawings for the proposed culverts. Pursuant to 62 Ill. Adm. Code 1817.150(c), the applicant shall modify the profiles and cross-sections for the proposed culverts.
28. The application questions for 5.4.1 Impoundment Design references Table 5.4.1 and Attachment 5.4.1.2 for sediment basin design, discharge structure design, and cross-sections. The following modifications are required:
  - a. Pursuant to 62 Ill. Adm. Code 1817.49, the applicant shall modify the impoundment and discharge structure design calculations to use the updated ISWS rainfall depths for given storm events. The associated profiles and cross-sections shall be modified to account for the changes in designs.
  - b. The Drainage Notes included in Attachment 5.4.1.2 provide calculations for the required volume of Basin No. 1. However, these calculations do not include the runoff from the Waste Water Plant, as depicted on Map 6 – Operations Map. Pursuant to 62 Ill. Adm. Code 1817.49, the applicant shall modify the design of Basin No. 1 to include the volume of water reporting to the sediment pond from the Waste Water Plant.

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

Sincerely,



Nick San Diego, Supervisor  
Land Reclamation Division

NSD:JSc

cc: J. Kuhlman  
W. Gillespie  
Lawrence County Clerk

## 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 mining company has classified map units 131D and 131D2 (Alvin series) as non-cropland capable soils. The USDA NRCS classifies these soils as important farmland and both soil types qualify as high capability lands under the definition in 62 ILCS Section 1701. Please correct this discrepancy on both the pre-mining and post-mining land use maps.

**Response:** The applicant was required to correctly identify these soil units to the appropriate capability class. Please see Appendix A, Modification No. 4 and the applicant's response.

**Comment:** In Part III of the mining operations permit discussion, the mining company has indicated that they will follow the IDOA's *Water and Sewer Line Construction Standards and Policies* using 30 inches of topcover over the 6-inch pipe. However, the IDOA standards specify a minimum of 42 inches and recommend 60-inches through cropland areas. Please correct the minimum topcover depth over pipe.

**Response:** The applicant was required to modify the pipeline depth to the required specifications. Please see Appendix A, Modification No. 6 and the applicant's response.

**Comment:** The mining company has shown a negative determination request for non cropland prime farmland. However, the Company should note that negative determination changes the reclamation to high capability lands and may not qualify for undeveloped as a land use. Negative determination lands in Table 9.1 (Post-Mining Land Use) should be changed to a high capability land use.

**Response:** This comment has been forwarded to the applicant.

Illinois Environmental Protection Agency

Comment: 1. As depicted on the Operations Map and described in the application, a wastewater treatment system is proposed for the facility, however, it does not appear that an NPDES discharge monitoring point is proposed. To ensure compliance with Subtitle C and Subtitle D regulations a separate outfall is required for the proposed treatment system.

Response: Please see Appendix A, Modification No. 19 and the applicant's response.

Comment: 2. The report entitled "Site Specific Resource Information and Threatened and Endangered Species Review" was completed by HMG Engineers. Applicant should clarify whether this report was submitted to IDNR as part of an EcoCAT review? If so, did IDNR issue a letter terminating the consultation? In the event that a letter has not been issued, applicant should provide information regarding the status of the review/consultation.

Response: Pursuant 17 Ill. Adm. Code Section 1075, the Department consulted with ORCP (previously the Office of Realty and Environmental Planning) via the online EcoCAT (Ecological Compliance Assessment Tool) system regarding state listed species within the permit boundary and adjacent area. The initial consultation was conducted on March 29, 2019. In response to the consultation a termination letter dated April 4, 2019 was provided which concluded that adverse effects to the protected resources identified are unlikely.

Furthermore, a copy of the initial consultation and termination letter was forwarded via e-mail to Iwona Ward with the Illinois Environmental Protection Agency on October 24, 2019.

U.S. Department of Agriculture, Natural Resource Conservation Service

Comment: This is in response to the memorandum dated July 3rd, 2019. After reviewing the permit application submitted by Sunrise Coal, LLC, submittal 452, I have the following comments. Any bare soil exposed following surface coal mining should be seeded, limed, fertilized and mulched to minimize soil erosion. Please refrain from using tall fescue or reed canary grass in seeding mixtures and only plant native trees and shrubs for wildlife areas. Following mining and reclamation activities, drainage should be provided where necessary to return the affected areas to their pre-mining land use. Wetlands should be returned to historic hydrologic conditions. Prime farmland should be reclaimed according to state laws, rules, regulations and administrative codes.

Response: This comment has been forwarded to the applicant.

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

Comment: Thank you for your letter dated July 3, 2018, requesting review of permit application No. 452 by Sunrise Coal, LLC (Oaktown Mine), for surface coal mining and reclamation operations in Lawrence County, Illinois. The permit area is 101.0 acres and the proposed mining activity will impact a total of 21.14 acres; 79.86 acres will be left undisturbed. The permit area includes 58.77 acres of cropland, 1.03 acres of pasture, and 41.20 acres of undeveloped. These comments are provided under the authority of and in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.); the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.); the Migratory Bird Treaty Act (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.) and, the National Environmental Policy Act (83 Stat. 852, as amended P.L. 91-190, 42 U.S.C. 4321 et seq.)

Response: This comment has been noted and forwarded to the applicant.

Comment: 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 fat pocketbook mussel (*Potamilus capax*), endangered Indiana bat (*Myotis sodalis*), threatened eastern prairie fringed orchid (*Platanthera leucophaea*), threatened northern long-eared bat (*Myotis septentrionalis*), and threatened rabbitsfoot mussel (*Quadrula cylindrica cylindrica*). There is no designated critical habitat in the project area at this time.

Response: This comment has been noted and forwarded to the applicant.

Comment: Information in the permit application indicates that the fat pocketbook, rabbitsfoot, and eastern prairie fringed orchid are not likely to occur on or adjacent to the permit area. Based on the location of the permit area and description of the proposed permit area, the Service concurs that the proposed actions are not likely to adversely affect the fat pocketbook, rabbitsfoot, and eastern prairie fringed orchid. Based on the location of the project and information in the permit application, the Service also concurs that the proposed project is not likely to adversely affect the sheepnose mussel.

Response: This comment has been noted and forwarded to the applicant.

Comment: Information in the permit application indicates that 0.52 acres of forested habitat will be impacted by the proposed mining activity; however, the habitat is not suitable for the Indiana bat. Based on the lack of suitable habitat, the Service concurs that the proposed project is not likely to adversely affect the Indiana bat and that a Protection and Enhancement Plan for the Indiana bat is not necessary for the proposed permit in accordance with the 2013 Range-wide Indiana Bat PEP Guidelines. The northern long-eared bat consultation was completed with delivery of the verification letter provided under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions. Should this project be modified or new information indicate listed or proposed species may be affected, consultation or additional coordination with this office, as appropriate, should be initiated.

Response: This comment has been noted and forwarded to the applicant.

Comment: Applicants should be directed to our Information, Planning, and Conservation System (IPaC) at the link below to determine whether any federally threatened and endangered species, designated critical habitat, or other natural resources of concern may be affected by a proposed project and to obtain a preliminary or official U.S. Fish and Wildlife species list. For projects that require FWS review, request an official species list from the Regulatory Documents page. <https://ecos.fws.gov/ipac/>

Response: This comment has been forwarded to the applicant. In addition, the Department has supplied the Service's website to future applicants as an encouraged and available resource.

**APPENDIX C**  
**Sunrise Coal, LLC – Oaktown Mine**  
**Application for Permit No. 452**  
**And**  
**Permit No. 452 Shadow Area**  
**Assessment and Findings of Probable Cumulative Hydrologic Impacts**

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Map No. 1 – Assessment Area Map

## APPENDIX C

### **Sunrise Coal, LLC – Oaktown Mine Application for Permit No. 452**

**And**

### **Permit No. 452 Shadow Area**

### **Assessment and Findings of Probable Cumulative Hydrologic Impacts**

Sunrise Coal, 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(c) 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 proposed Oaktown Mine. The nearest historical mining operation to the proposed Oaktown Mine was the Alpha Mine, which was a small surface mining operation that is located approximately three (3) miles to the northwest in Crawford County.

##### **B. Active Coal Mines -**

The Oaktown Mine is an Indiana based mining operation, with previously approved underground operations, totaling approximately 18,711 acres, that extend into Illinois. This proposed permit area is primarily to allow for the development of a man and materials shaft for access to the underground workings from Illinois. The nearest active mining operation to this facility is the Vigo Coal Operating Company, Inc. Friendsville Mine, which is located over 30 miles south in Wabash County.

## **II. PROBABLE CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA) OF APPLICATION FOR PERMIT NO. 452**

### **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 Application for Permit No. 452**

The Cumulative Impact Area (CIA) is that area, including the permit area, within which impacts resulting from the operation may interact with the hydrologic impacts of all other current and anticipated coal mining on the surface and groundwater systems.

The proposed permit area totals approximately 101 acres and is located in Section 29 of Township 5 North, Range 10 West of Lawrence County. The proposed permit area is primarily surrounded by a mixture of privately-owned rural properties and/or agricultural lands and forested land. The region’s hydrologic system can be characterized by the Illinois portion of the Old Busseron Creek-

Wabash River HUC-12 watershed (05120111170), which is approximately 3,238 acres in size and entirely encompasses the proposed permit area.

The applicant proposed a 161-acre surface water CIA that includes the proposed permit area and the drainage ditch that is located immediately downstream of the proposed permit area. The entire length of this drainage ditch, until its confluence with the Wabash River, is included in the proposed surface water CIA.

The applicant did not propose a groundwater CIA for the proposed Oaktown Mine. The applicant believes that the absence of coal, coal refuse, or other potential contaminants being stored, handled, or disposed of on the surface will assure against groundwater contamination.

There are no historical coal mining operations located in close proximity to the proposed Oaktown Mine. The nearest historical mining operation was the Alpha Mine, which was a surface mine located approximately 3 miles northwest of the proposed Oaktown Mine. Historical mining is not included in the CIA determination because any potential effects from past mining are already reflected in the hydrogeologic data collected for the proposed operations. Additionally, per the definition of a CIA, the Department shall only consider current and anticipated mining operations on the cumulative effects of the proposed mining operation. No current or anticipated mine operations located within close proximity to the proposed Oaktown Mine are known to the Department at this time, with the exception of the previously approved underground operations of the Oaktown Mine itself.

Therefore, due to the lack of other existing or anticipated mining operations within the Illinois portion of the Old Busseron Creek-Wabash River watershed, the Department has determined that the existing and proposed Oaktown Mine is hydrologically isolated. This determination negates the need for a CIA as a single, isolated mine cannot have a cumulative effect on the hydrologic system. Consequently, the Department has concluded that a CIA is not required and the Department's 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**

**1. Permit Area and Shadow Area**

For purposes of this CHIA, the Department will discuss the Application for Permit No. 452 area, the shadow area, and the adjacent area.

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 “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.

The “adjacent area” is defined as:

[T]he 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 described in Section II.A.2 above, the Application for Permit No. 452 proposes to permit approximately 101 acres for various surface support facilities to aid the previously approved underground mining operations. Specifically, the Application for Permit No. 452 proposes the construction of a man and material shaft, office/bathhouse, warehouse and supply yard, fuel drop borehole, rockdust borehole, power borehole, access roads, and a sedimentation basin. For purposes of this CHIA, the permit and adjacent areas for the Application for Permit No. 452 are delineated on Map No. 1 as those areas where the surface water and groundwater resources could be reasonably expected to be adversely impacted by the proposed mining operations. The previously approved shadow area has been delineated within it's respective shadow area CHIA.

As previously approved by the Department for Permit No. 452, the shadow area is described as:

The approximately 18,711-acre tract of land located in parts of Sections 3-10 and 14-18 of Township 4 North, Range 10 West; parts of Sections 1-3 and 10-16 of Township 4 North, Range 11 West; parts of Sections 28-33 of Township 5 North, Range 10 West; parts of Sections 25-27 and 34-36 of Township 5 North, Range 11 West of Lawrence County; and parts of Sections 17-21 of Township 5 North, Range 10 West; parts of Sections 13 and 24 of Township 5 North, Range 11 West of Crawford County.

**a. Regional Hydrologic Area**

The proposed permit area is located within the Mount Vernon Hill Country in Lawrence County. The Mount Vernon Hill Country in Lawrence County consists of glacial till, outwash, and eolian sediments deposited by the Illinoian and Wisconsinan glacial stages during the Pleistocene. The major drainage systems of the region consist of the Wabash River and its tributaries. Per the Illinois State Geologic Survey (ISGS), potential sources of groundwater are found within unconsolidated

sand and gravel deposits in the Embarras and Wabash River Valleys and Pennsylvanian aged sandstones located less than 300 feet in depth. Nearby towns like Lawrenceville and Birds are documented as obtaining water from community wells completed in shallow sand and gravel deposits, while residents of Russellville, which is an unincorporated village located less than two (2) miles from the proposed permit area, utilize domestic water wells to obtain groundwater from similar sand and gravel sources.

**b. Permit Area Surface Waters Assessment Area**

The Permit Area Surface Waters Assessment area has been defined as the approximate 161 acre area that includes the proposed permit area and the receiving stream immediately downstream of the proposed permit area. The proposed permit area is located entirely in one (1) single HUC-12 watershed. This watershed, Old Busseron Creek-Wabash River (051201111703), is approximately 15,072 acres in size; however, only approximately 3,238 acres of this watershed are in Illinois. The Department cannot determine potential impacts within another State; therefore, for purposes of this assessment, this watershed is limited to only those portions located within the State of Illinois. The proposed permit area and the defined Permit Area Surface Waters Assessment Area both represent less than 5% of the Old Busseron Creek-Wabash River watershed.

**c. Permit Area Groundwater Assessment Area**

The Permit Area Groundwater Assessment Area has been defined as the proposed permit area, which is 101 acres in size. The Permit Area Groundwater Assessment Area has been selected based upon the Department's assessment of the possible hydrologic impacts which may occur as a result of operations proposed within the Application for Permit No. 452. 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.

**d. Shadow Area Surface Waters Assessment Area**

The previously approved shadow area at the Oaktown Mine totals approximately 18,711 acres. The Shadow Area Surface Waters Assessment Area was previously defined as the 24,700-acre area that includes the approved shadow area and the area one-half mile away from the perimeter of the shadow area. The Department limited the assessment area to the one-half mile area around the shadow area because lands beyond the one-half mile area historically are unaffected by room and pillar mining operations. The Shadow Area Surface Waters Assessment Area has not changed and will not be re-evaluated as part of this CHIA.

**e. Shadow Area Groundwater Assessment Area**

The Shadow Area Groundwater Assessment Area was also previously defined as the approximately 24,700-acre area that includes the approved shadow area and the area one-half mile away from the perimeter of the shadow area. As described above, this assessment is limited to the area one-half mile away from the perimeter of the shadow area because lands beyond the one-half

mile area historically are unaffected by room and pillar mining operations. The Shadow Area Groundwater Assessment Area has not changed and will not be re-evaluated as part of this CHIA.

## **2. Geologic Information Required by 62 Ill. Adm. Code 1784.22**

### **a. Baseline Geologic Information**

The applicant notes the absence of geologic structures such as faults in the proposed permit area and adjacent areas. However, a structural anticline is known to exist to the south/southwest of the proposed permit area. This structural anticline, known as the Hardinville Anticline, is oriented in a northwest/southeast manner. The Hardinville Anticline terminates with an elongated domal feature known as the Russellville Dome, which is located approximately four (4) miles south/southeast of the proposed permit area.

The unconsolidated materials in the region are typically glacially derived and Pleistocene in age. These deposits primarily consist of glacial till, outwash, and eolian sediments deposited by the Illinoian and Wisconsinan glacial stages. The proposed permit area was not glaciated during the Wisconsinan glacial stage, but, eolian loess deposits derived from nearby Wisconsinan glacial sediments form the upper soil horizon in the proposed permit area. Regionally, the fine-grained loess deposits commonly overlie glacial deposits of the Glasford Formation, which was deposited during the Illinoian glacial stage. However, these glacial deposits from the Illinoian glacial stage are mostly eroded away or absent within the proposed permit area. In total, the unconsolidated material within the proposed permit area ranges from approximately 12-35 feet in thickness.

The uppermost bedrock in the region is commonly of the Pennsylvanian aged Bond, Modesto, or Mattoon formations. These Pennsylvanian-aged formations typically consist of shales, sandstones, coal, and minor amounts of limestone. Regionally, bedrock strata dips gently to the south/southeast toward the Wabash River. The consolidated overburden above the Springfield No. 5 Coal Seam ranges between 390-568 feet in thickness within the previously approved shadow area. Boring logs from within the proposed permit area indicate approximately 420-430 feet of consolidated overburden exists above the Springfield No. 5 Coal Seam. The Springfield No. 5 Coal Seam itself varies in thickness between 3-7 feet and averages approximately 5 feet in thickness within the previously approved shadow area. Generally, the Springfield No. 5 Coal Seam is overlain by a dark gray to black silty shale and underlain by a fireclay typical of the Illinois Basin.

The applicant reports that minor Pennsylvanian aged bedrock aquifers may be present in the proposed permit area at depths less than 300 feet. Private water wells within the previously approved shadow area are documented as being completed into shallow Pennsylvanian aged sandstones, although yields tend to be generally less than 10 gallons per minute (gpm). However, a much larger percentage of private water wells within the previously approved shadow area are documented as obtaining water from sand and gravel outwash material associated with the Embarras and Wabash River Valleys. The sand and gravel outwash material associated with the Embarras and Wabash River Valleys does not extend into the proposed permit area.

**b. Geologic Information Findings**

According to the Illinois State Geologic Survey (ISGS), the bedrock in southern Illinois consists of layered beds of shale, sandstone, limestone, and coal. No acid-base accounting information was provided, as no coal or coal waste materials will be brought to the surface within Illinois. The previously approved underground mining operations route all coal and coal waste materials through underground mine works to Sunrise Coal's Indiana facility. The potential sources of acid-forming materials, which are mainly the coal refuse materials generated at the preparation plant, will be disposed of in Indiana.

**3. Hydrologic Information Required by 62 Ill. Adm. Code 1784.14**

**a. Baseline Information**

**i. Surface Water Quantity Baseline Information**

The surface water features in the vicinity of the proposed permit area primarily consist of the Wabash River, its tributaries, and the smaller unnamed streams that feed into those tributaries. In addition, a small portion of an artificial, man-made ditch flows through the proposed permit area and numerous other man-made drainage systems are located near the proposed permit area.

The Wabash River is known to be a perennial stream near the proposed permit area. Perennial streams, in a normal year, are streams, or parts of streams that flow continuously during all of the calendar year as a result of groundwater contributions or surface water runoff. Generally, the direct tributaries to the Wabash River are commonly perennial or intermittent in nature, while the smaller streams that feed into those tributaries are commonly intermittent or ephemeral in nature. A stream is classified as ephemeral when the drainage area is less than 1 square mile in size and no groundwater contributions to stream flow exist at any time of the calendar year. The applicant installed shallow piezometers within the proposed permit area to determine if the unnamed tributary that flows through the portion of the proposed permit area that is to be disturbed may potentially receive groundwater contributions. The piezometers, known as P-1 and P-2, are located adjacent to the stream bank of the stream in question and are screened across the unconsolidated material directly above the uppermost bedrock. P-1 and P-2 were monitored on a monthly basis from March 2019 to September 2019, which, based on local precipitation data from Vincennes airport, was a time period that received above average rainfall. Sampling data from P-1 and P-2 indicate groundwater elevations to be below the bottom elevation of the unnamed tributary in question during this time period.

The applicant has collected site specific surface water quantity data from two (2) monitoring points associated with the proposed permit area. These monitoring points, SW-1 (upstream) and SW-2 (downstream), are both located along the same unnamed tributary that piezometers P-1 and P-2 are located adjacent to. The applicant collected stream flow data from SW-1 and SW-2 on a monthly basis from November 2018 to April 2019. The surface water quantity data collected



during this monitoring period is summarized in Table No. 1 below. The applicant will continue to monitor SW-1 and SW-2 for the life of the permit.

**Table No. 1 – Area Specific Surface Water Quantity**

<b>DATE</b>	<b>SW-1</b>	<b>SW-2</b>
11/28/2018	0.028 cfs	0.375 cfs
12/17/2018	0.067 cfs	1.333 cfs
1/14/2019	0.042 cfs	0.250 cfs
2/11/2019	0.139 cfs	0.833 cfs
3/11/2019	0.042 cfs	0.463 cfs
4/01/2019	0.035 cfs	0.259 cfs

The applicant is proposing to construct one (1) sedimentation pond for the Application for Permit No. 452. This sedimentation pond, proposed as Basin #1, will collect surface water runoff from the areas that are to be disturbed during operations, which is approximately 21 acres in size. Basin #1 is proposed to be removed and the land restored to pasture after active operations.

**ii. Surface Water Quality Baseline Information**

The Wabash River is included on the Illinois Environmental Protection Agency’s (IEPA) 2018 303(d) List. The 303(d) List was developed to fulfill the requirements set forth in Section 303(d) of the Federal Clean Water Act and the Water Quality Planning and Management regulation at 40 CFR Part 130. The 303(d) process focuses on identifying existing water quality problems and developing restorative measures.

The Wabash River stream segment IL\_B-06, which is 78.16 miles in length, is noted as being impaired by mercury and polychlorinated biphenyls (PCB’s). The sources for these impairments are noted as being atmospheric deposits – toxics and unknown sources. The Wabash River is not supporting for fish consumption, but is fully supportive for aquatic life, primary contact, and secondary contact stream usages.

The applicant collected site-specific surface water quality data for the Application for Permit No. 452. The surface water quality data collected from the upstream SW-1 and downstream SW-2 monitoring points is summarized in Table No. 2 below. The applicant will monitor the surface water quality at these locations for the life of the permit.

**Table No. 2- Area Specific Surface Water Quality**

	SW-1 (Upstream)			SW-2 (Downstream)		
	<u>Min</u>	<u>Max</u>	<u>Avg</u>	<u>Min</u>	<u>Max</u>	<u>Avg</u>
pH	7.09	7.61		7.16	7.72	
TDS	120	620	<b>392</b>	210	450	<b>352</b>
TSS	< 10	< 10		< 10	25	
Acidity	< 10	< 10		< 10	< 10	
Alkalinity	93	230	<b>184</b>	40	202	<b>138</b>
Sulfate	< 4	13	<b>6.5</b>	< 4	7	<b>5.5</b>
Chloride	< 6	136	<b>46</b>	< 6	25	<b>13</b>
Iron (Total)	0.18	0.54	<b>0.33</b>	0.18	1.43	<b>0.65</b>
Mang. (Total)	0.036	0.110	<b>0.056</b>	< .01	0.16	<b>0.073</b>

There are no Public Water Supplies (PWS) that obtain their water supply from a surface water source within ten (10) miles of the proposed permit area. The nearest PWS is the Birds-Pinkstaff Water District, which receives its water from a groundwater aquifer.

Surface water within the proposed permit area that is to be disturbed will be routed to a sedimentation pond and eventually discharged through an approved NPDES Outfall. The quality of water the applicant proposes to discharge from the NDPEs Outfall is within all applicable State and Federal effluent limits. The surface water in the remaining portions of the proposed permit area will remain undisturbed.

**iii. Groundwater Quantity Baseline Information**

Groundwater conditions in the vicinity of the proposed permit area have been described in a report by Selkregg (1957). According to this report, groundwater possibilities are excellent in thick sand and gravel deposits associated with the Wabash and Embarras River Valleys. This document also notes the possibilities of Pennsylvanian aged sandstone aquifers at depths less than 300 feet. In support of Selkregg's conclusions, the City of Lawrenceville and residents of the Village of Russellville obtain potable water from groundwater wells completed in sand and gravel outwash deposits. Furthermore, Illinois State Geologic Survey (ISGS) records indicate a few private water wells completed in Pennsylvanian aged sandstones to exist within the vicinity of the proposed permit area. These wells are reported to typically yield less than 10 gallons per minute, which limits the potable use of these aquifers to domestic supplies. The applicant also notes the possibilities of minor groundwater aquifers in the unconsolidated till material that underlies the Wisconsin loess. These potential aquifers are commonly localized sand lenses, which tend to be discontinuous in nature and suitable for domestic purposes only.

The applicant did not collect groundwater quantity data for the Application for Permit No. 452. This information was not collected due to the minimal amount of disturbance proposed within the Application for Permit No. 452. However, the applicant has previously conducted a Water User

Survey in relation to the shadow area permit for the Oaktown Mine. This Water User Survey reports there to be three (3) private water wells located within ½ mile of the proposed permit area. One (1) of the private water wells, noted as PWW 58, is located within 100 yards of the proposed permit area. Per ISGS records, this well obtains groundwater from a sandstone and limestone unit roughly 37-68 feet in depth. The remaining two (2) private water wells noted in the Water User Survey are over 2,000 feet from the proposed permit area. One (1) of the wells, noted as PWW 63, is reported to obtain groundwater from a sandstone unit roughly 30-38 feet in depth. The other well, noted as PWW 64, does not have well construction records available. Private wells PWW 58 and PWW 63 are both utilized for irrigation and livestock watering purposes.

There are three (3) PWS located within ten (10) miles of the proposed permit area that obtain their water supply from groundwater. These PWS include Flat Rock, Birds-Pinkstaff Water District, and the Hardinville Water Company. However, the Flat Rock and Birds-Pinkstaff Water District both purchase water from the Hardinville Water Company. The Hardinville Water Company has two (2) community water supply wells, both of which are roughly 40 feet in depth, that are completed in sand and gravel deposits related to the Wisconsin glacial stage. These wells are located over five (5) miles upstream from the proposed permit area.

The applicant does not propose any consumptive use of groundwater, therefore, no diminution, or interruption of any usable water supply is anticipated by the applicant. However, the applicant has committed to supplying an alternative, replacement water supply if necessary.

**iv. Groundwater Quality Baseline Information**

The applicant did not collect groundwater quality data for the Application for Permit No. 452. As stated previously, this information was not collected due to the minimal amount of disturbance proposed within the proposed permit area. The operations proposed primarily include constructing a man/material shaft and installing various boreholes. These features will be steel cased with the annulus cemented, which should isolate the openings and further decrease the minimal potential for adverse impacts to any existing or future water supply in the vicinity of the proposed permit area.

**v. Coal Processing Waste Disposal Baseline Information**

The Application for Permit No. 452 does not propose any coal processing waste to be created, stored, or disposed of within Illinois. The previously approved underground mining operations have been designed to transport coal and all coal processing waste material to the existing Sunrise Coal mine site located in Indiana.

**vi. Existing and Proposed Coal Combustion Waste/Coal Combustions By-Products Baseline Information**

The Application for Permit No. 452 does not propose to utilize or dispose of any coal combustion waste (CCW) or coal combustion by-products (CCB) within the proposed permit area.

**b. Findings**

**i. Permit Area Surface Water Quantity Findings**

During active operations at the Oaktown Mine, surface water runoff from affected areas is proposed to be routed to a single sedimentation pond, identified as Basin #1. The presence of this structure could have two possible effects. The first would be that the peak flows from storm events could be decreased because of the added detention time afforded by the pond. The second possibility, related to the first, is that base flow of the receiving stream could be increased as the pond would more slowly release water after rainfall events than before the pond was in place. However, these potential effects would only be temporary, as Basin #1 is proposed to be removed upon the cessation of active operations.

The proposed permit area, in relation to surface water quantity, comprises a small portion of the Old Busseron Creek – Wabash River watershed. Specifically, the 101 acre-area proposed in the Application for Permit No. 452 represents less than 3% of the Illinois portion of this watershed. Therefore, the Department does not anticipate any adverse effects to the hydrologic balance in regard to surface water quantity as a result of the proposed operations.

**ii. Permit Area Surface Water Quality Findings**

The applicant has proposed to monitor all surface water discharges from affected areas of the proposed permit area at an approved NPDES Outfall. Effluent from the approved NPDES Outfall is proposed to meet all applicable State and Federal standards and is compatible with the water quality of the receiving stream, as evident from data collected from surface water monitoring points SW-1 and SW-2. Adherence to these limits will ensure that adverse impacts will not occur to the surface water quality of the receiving streams as a result of the proposed operations. Although the Wabash River is included on the IEPA's 2018 303(d) List, the proposed operations will not discharge effluent directly into the Wabash River. As stated above, all discharges from the proposed permit area will first pass through an approved NPDES Outfall, which is proposed to discharge similar quality effluent as that of the receiving streams. Therefore, the effluent discharges from the approved NPDES Outfall should have negligible effects on the hydrologic balance.

The applicant will monitor permitted stream sampling points for the life of the mine while the Department continues to evaluate any potential impacts to surface water quality. No adverse effects to the hydrologic balance in regard to surface water quality are anticipated.

**iii. Permit Area Groundwater Quantity Findings**

The operations proposed within the Application to Permit No. 452 call for minimal surficial disturbances, which primarily consist of the installation of a man/material shaft and various boreholes. The applicant has proposed to case these features with steel and cement the annulus space during installation. These factors should prevent communication between the underground

mine workings and overlying aquifers and further reduce the minimal potential for adverse impacts to groundwater quantity as a result of the proposed operations.

The applicant is not proposing any consumptive uses of groundwater and as a result, no adverse impacts to the groundwater quantity, locally or regionally, are anticipated.

**iv. Permit Area Groundwater Quality Findings**

As stated above, the Application for Permit No. 452 proposes minimal surficial disturbances. No coal, coal refuse, or other potential contaminants are proposed to be stored, handled, or disposed of within the proposed permit area. The applicant has proposed to case all openings to the underground mine works with steel and cement the annulus space between the casing and natural material.

The applicant previously conducted a Water User Survey in relation to the Oaktown Mine shadow area permit. Three (3) private water wells have been identified to be located within ½ mile of the proposed permit area. One (1) of these wells is located in close proximity to the proposed permit area. Records from ISGS report this well to obtain groundwater from bedrock sources less than 70 feet in depth. However, the location of this private well appears to be upgradient from the proposed operations based on the uppermost bedrock structure in the area. Therefore, no adverse impacts in relation to groundwater quality are anticipated as a result of the proposed operations. The other two (2) private water wells noted in the Water User Survey are over 2,000 feet from the proposed permit area. Adverse impacts to these two (2) private water wells are not anticipated either.

Public Water Supplies in the area, such as the Hardinville Water Company and City of Lawrenceville, obtain water from groundwater sources. However, no PWS is located within five (5) miles of the proposed permit area. Furthermore, these PWS obtain groundwater from sand and gravel aquifers that are not hydrologically connected to the proposed permit area. Therefore, no adverse impacts to PWS, in regard to groundwater quality, are expected as a result of the proposed operations.

In summary, the applicant has proposed measures such as properly constructing all openings to the mine workings to limit the potential for adverse impacts to groundwater quality. Additionally, no coal, coal refuse, or other potential contaminants will be stored, handled, or disposed of within the proposed permit area. Private water wells noted in the Water User Survey are either upgradient or located over 2,000 feet from the proposed permit area and PWS in the area obtain water from groundwater sources that are not hydrologically connected to the proposed permit area. Therefore, the proposed operations are not anticipated to result in adverse impacts to the groundwater quality of the hydrologic balance.

c. **Findings Related to Existing and Proposed Coal Processing Waste Disposal**

As noted above, no coal nor coal processing wastes will be brought to the surface within Illinois. Therefore, no coal processing waste disposal findings are necessary, as these activities will not occur under the proposed Application for Permit No. 452.

d. **Findings Related to Coal Combustion Waste/Coal Combustion By-Products**

The Application for Permit No. 452 does not propose to utilize or dispose of coal combustion waste (CCW) or coal combustion byproducts (CCB).

**III. CONCLUSION**

The Department has now conducted a hydrogeologic assessment on the operations proposed within the proposed permit area. As noted in the discussions throughout this document, the Department has concluded that the proposed operations within the Application for Permit No. 452 will not have a negative impact on either the surface water or groundwater regimes.

Neither groundwater nor surface water would 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. Neither the applicant nor the Department anticipates that this will occur.

The Department reserves the right to initiate a groundwater monitoring program or require revisions to the proposed surface water monitoring program should the need arise. The applicant is required to monitor the surface water throughout the life of the mine, until a determination is made by the Department that the monitoring is no longer necessary.

In summary, the assessment and findings of the probable cumulative impact of all anticipated mining in the area on the hydrologic balance finds that this operation has been designed to prevent material damage to the hydrologic balance outside the permit area.

#### IV. REFERENCES AND ATTACHMENTS

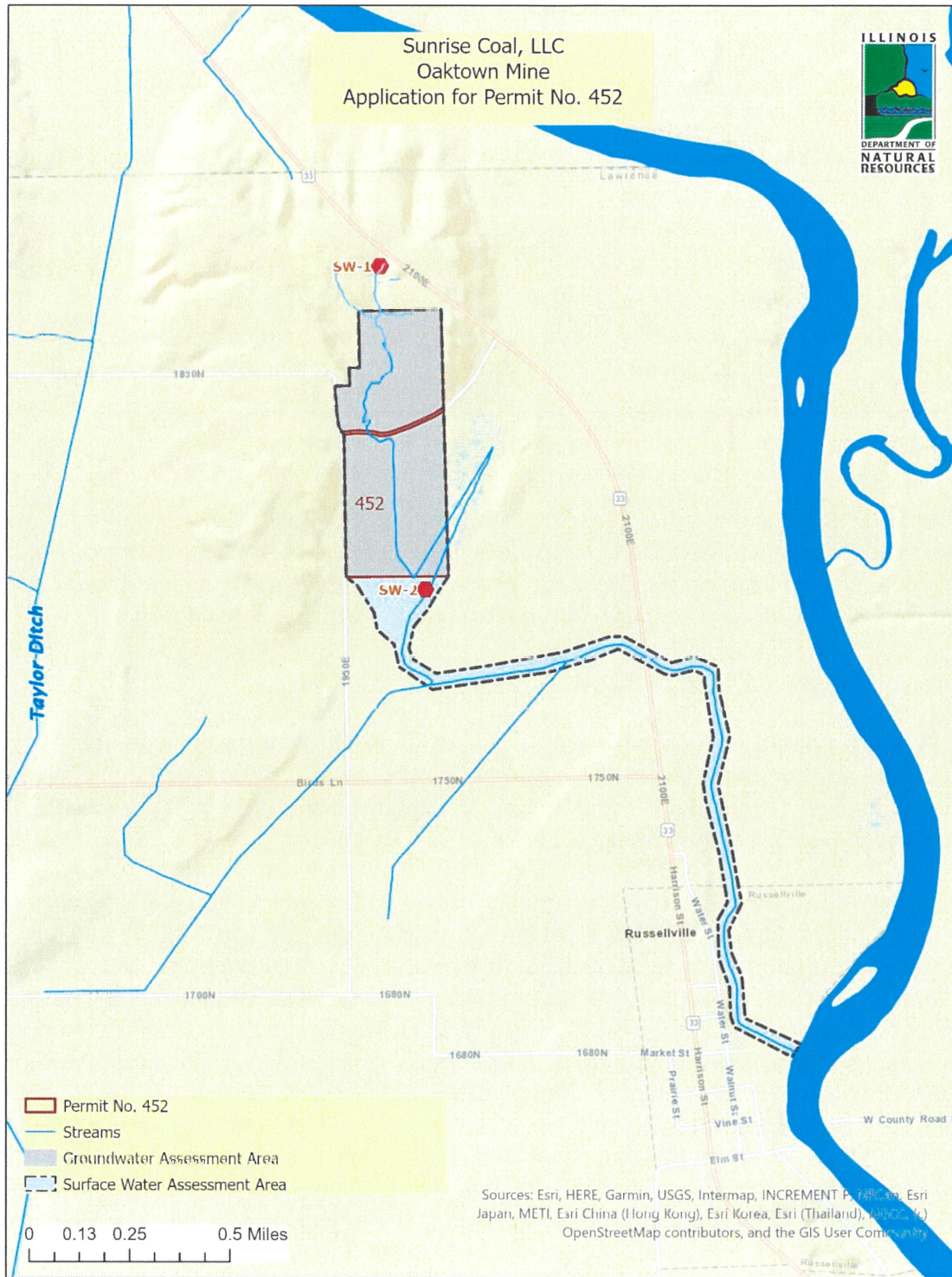
Illinois Environmental Protection Agency, Illinois Integrated Water Quality Report and Section 303(d) List – July, 2018

Illinois State Geologic Survey, Interactive Water and Related Wells Map

Illinois State Geologic Survey, *Lawrence County Coal Mine Map and Directory*.

Selkregg, L.F., et al, 1957, *Groundwater Geology in South-Central Illinois. A Preliminary Geologic Report*. Illinois State Geological Survey, Circular #225.

United States Department of the Interior, Office of Surface Mining, *Technical Reference for the Mid-Continent Region: Hydrologic Considerations for Permitting and Liability Release*, June 2007.



Map 1 – Current CIA and Assessment Map



## APPENDIX D

### DECISION ON PROPOSED POST-MINING LAND USE OF PERMIT AREA

The pre-mining and approved post-mining land use acreage of the permitted area is as follows:

	<u>Pre-mining</u>	<u>Post-mining</u>
Cropland	58.20	36.51
Pastureland	1.03	22.79
Undeveloped	41.77	41.70
Total	101.00	101.00

\*The Department notes that other agencies with environmental and land use authority may use land use definitions other than 62 Ill. Adm. Code 1701.5. Reports for those agencies which may be included in the application will classify and tabulate land uses based on their definitions. As a result, those land use tabulations may not directly correlate with the above tables.

#### Discussion of Proposed Post-Mining Land Uses:

The applicant proposed to reduce the cropland acreage in the permit area while increasing the pasture acreage by the same amount. This change was proposed as a result of the exemption from the prime farmland requirements requested by the applicant and subsequently granted by the Department. Please see further discussion below.

The Department finds the areas affected by surface coal mining activities will be restored in a timely manner to conditions that are capable of supporting the use which they were capable of supporting before mining or to higher or better use achievable under the criteria and procedures of 62 Ill. Adm. Code 1817.133, or as noted above. The plan of restoration submitted by the applicant does not present any actual or probable hazard to public health or safety nor does it pose any actual threat of water diminution or pollution as indicated in Appendix C, and the proposed land uses following mining are not impractical or unreasonable as all the post-mining land uses existed prior to mining and are compatible with the surrounding areas. The land uses are consistent with applicable land use policy and plans known to the Department and no objections were received from any governmental agency with such authority. The plan does not involve unreasonable delay in implementation and is not in violation of any other applicable law known to the Department. Federal court decisions, commonly known as the "Flannery decisions" and current regulations provide for the distinct difference between surface and underground mining. As a result, the prime farmland identified in the permit is exempt from the provisions of 62 Ill. Adm. Code 1785.17, as provided under Section 1823.11. The Department finds that the areas are to be actively used for an extended period of time and that the areas will affect a minimal amount of land.

## APPENDIX E

### THREATENED AND ENDANGERED SPECIES Endangered Species Act of 1973, 16 USC 1531, et seq. 62 Ill. Adm. Code 1773.15(c)(10)

The Department reviewed permit application No. 452s for potential effects of coal mining operations and related activity on federally listed threatened and endangered species. The following factors were considered for all species that could potentially be adversely affected: status of species in the proposed permit area and adjacent area, site specific resource information, direct and indirect effects, and cumulative effects

Five primary sources were utilized to identify federally listed threatened and endangered species that could potentially be affected by the proposed coal mining operations and related activities. These sources include threatened and endangered species review information submitted by the applicant, public comments, the U.S. Fish and Wildlife Service (USFWS), the Illinois Department of Natural Resources/Division of Real Estate Services and Consultation/Office of Realty and Capital Planning (ORCP), and Department records.

#### Information Submitted by the Applicant

The threatened and endangered species review submitted by the applicant as a requirement of the Department's application addressed state listed species known to occur in Lawrence and Crawford Counties and applicable adjacent areas using records obtained from the Illinois Natural Heritage Database. Records for one state listed threatened or endangered species, the barn owl (*Tyto alba*), was deemed by the applicant as possible to occur on the proposed project area. The applicant provided Site Specific Resource Information and Protection and Enhancement Plan for this species. This species is not currently listed as federally threatened or endangered.

Information within the application indicates that the permit area contains potential swarming habitat and potential summer habitat for the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (*M. septentrionalis*). None of the identified potential suitable habitat is to be disturbed under this action. A small area of forested habitat totaling 0.52 acres is to be disturbed as part of this approved action. An assessment of this area concluded that no suitable habitat for the Indiana bat is present within the 0.52 acres of the forested habitat to be disturbed under this action. Based on this information and in accordance with USFWS revised 2013 edition of the "2009 Range-wide Indiana Bat Protection and Enhancement Plan Guidelines" (Guidelines), no Protection and Enhancement Plan (PEP) for the Indiana bat is required. Information within the application indicate that the project will not impact known northern long-eared bat hibernacula or disturb known northern long-eared bat maternity roost trees or trees within a quarter mile of a known maternity roost tree. Therefore, the project is consistent with the northern long-eared bat Final 4(d) rule (Federal Register, January 2016) and subsequent "no critical habitat" determination (Federal Register, April 2016) issued by the USFWS.

## Public Comments

No public comments were received regarding this application.

## U.S. Fish and Wildlife Service

The USFWS provided comments and concurrence on this application in a letter dated October 04, 2019. The USFWS identified five federally listed species for the proposed permit area, the endangered fat pocketbook mussel (*Potamilus capax*), endangered Indiana bat (*Myotis sodalis*), threatened eastern prairie fringed orchid (*Platanthera leucophaea*), threatened northern long-eared bat (*Myotis septentrionalis*), and threatened rabbitsfoot mussel (*Quadrula cylindrica cylindrica*). The USFWS concluded that there is “no designated critical habitat in the project area at this time.”

The USFWS stated that “based on the location of the permit area and description of the proposed permit area, the Service concurs that the proposed actions are not likely to adversely affect the fat pocketbook, rabbitsfoot, and eastern prairie fringed orchid.” Furthermore, the USFWS also stated that “Based on the location of the project and information in the permit application, the Service also concurs that the proposed project is not likely to adversely affect the sheepsnose mussel.”

Based on the forested habitat to be impacted by the proposed action has been deemed unsuitable for the Indianan bat, the USFWS stated that “based on the lack of suitable habitat, the Service concurs that the proposed project is not likely to adversely affect the Indiana bat and that a Protection and Enhancement Plan for the Indiana bat is not necessary for the proposed permit in accordance with the 2013 Range-wide Indiana Bat PEP Guidelines.”

The Department completed the USFWS’s Information Planning and Consultation (IPaC) Determination Key: Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency, which was submitted to the Service via IPaC on September 5, 2019. The USFWS stated that “The northern long-eared bat consultation was completed with delivery of the verification letter provided under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.”

## Illinois Office of Realty and Capital Planning

Pursuant 17 Ill. Adm. Code Section 1075 the Department consulted with ORCP (previously the Office of Realty and Environmental Planning) via the online EcoCAT (Ecological Compliance Assessment Tool) system regarding state listed species within the permit boundary and adjacent area. The initial consultation was conducted on March 29, 2019 and a termination letter was provided on April 04, 2019 which concluded that adverse effects to the protected resources identified are unlikely. Taking into account the consultation termination issued by ORCP, the Department concurs that the operations as approved are unlikely to adversely affect any species protected under the Illinois Endangered Species Protection Act (520 ILCS 10/1 *et seq.*).

## Department Records and Determination

The Department utilized the Illinois Department of Natural Resources DIRT (Detailed Impact Review Tool) mapping system to review whether or not the project lies within the buffer zone of documented occurrences of any state or federally listed threatened or endangered species.

The applicant submitted the required information to the Department regarding the Indiana bat and the northern long-eared bat. The Department has determined that the applicant correctly and diligently followed the protocol specified in the Guidelines (USFWS, 2013); by following these guidelines the applicant is in compliance with the USFWS and Office of Surface Mining Reclamation and Enforcement (OSMRE) 1996 Biological Opinion on the implementation of the Surface Mining Control and Reclamation Act of 1977 (PL 98-87) with regard to assuring compliance with the Endangered Species Act. The Department determined that an Indiana bat PEP was not necessary for this application because the potential suitable habitat for this species within the proposed operations area is not to be disturbed under this action. Furthermore, the applicant utilized the key to the northern long-eared bat 4(d) rule for federal actions to conclude that proposed actions are not prohibited, therefore a PEP for this species was not required.

The Department considered site specific resource information, information provided by the applicant, concurrence by the USFWS that adverse effects to federally listed species are not likely, termination of the ORCP Section 1075 consultation, and Department records. The Department has determined the proposed mining operations and reclamation activities will not affect the continued existence of threatened or endangered species or result in destruction or adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 USC 1531 et seq.).

## Literature Cited

Federal Register. (January 2016). 50 CFR Part 17 – Endangered and threatened wildlife and plants; 4(d) rule for the Northern long-eared bat. FR/Vol. 81, No. 9/Thursday January 14, 2016/Rules and Regulations. Pp. 1900-1922.

Federal Register. (April 2016). 50 CFR Part 17 – Endangered and threatened wildlife and plants; Determination that designation of critical habitat is not prudent for the Northern long-eared bat. FR/Vol. 81, No. 81/Wednesday April 27, 2016/Rules and Regulations. Pp. 24707-24714

U.S. Fish and Wildlife Service. (2013). (2009 revised) Range-wide Indiana bat protection and enhancement plan guidelines.