



Illinois Department of Natural Resources

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www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (Act) (520 ILCS 10/5.5) and the regulations adopted to implement the Act (17 Ill. Adm. Code 1080), authorization is hereby granted to Hillsboro Energy, LLC (hereinafter referred to as Hillsboro) for the incidental take of the State-threatened Ornate Box Turtle (*Terrapene ornata*). The Illinois Department of Natural Resources (hereinafter referred to as Department) has determined that this taking is incidental to activities associated with the installation, operation, maintenance, and reclamation of two (2) ventilation shaft sites above and connected to the underground Deer Run Mine facility, each site consisting of a bleeder shaft, a turbine pump and borehole, two (2) utility boreholes, associated stockpiles; and including improvements to an access road, and installation of a waterline. The project lies primarily within the boundaries of the Department's Coffeen Lake State Fish and Wildlife Area – Upland Management Site, in Montgomery County, Illinois. The Department issued an Amendment to License Agreement Number 6634A authorizing this use of the property on April 21, 2020. A small portion of the project lies on property owned privately with impacts considered under a surface land use agreement.

Procedural History

A Conservation Plan, prepared by Alliance Consulting, Inc. on behalf of Hillsboro, was submitted to the Department on November 18, 2019, as a request for authorization for the incidental take of the Ornate Box Turtle. The Department requested additional information on January 2, March 2, and April 23, 2020, to make the Conservation Plan complete as prescribed by Ill. Adm. Code 1080.10. Additional information was received by the Department on January 21, April 14, and May 7, 2020. The final Conservation Plan was accepted as complete by the Department on May 7, 2020. The public notice period and public comments will be detailed under #6 of the Compliance section below.

Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria which must be satisfied for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each are listed below.

1. The taking will not be the purpose of, but will be only incidental to, the carrying out of an otherwise lawful activity:

The stated and apparent purpose of this proposed action is to provide necessary ventilation for the Deer Run Mine in Montgomery County. Ventilation shafts are necessary to provide adequate levels of oxygen within the mine via fresh air flow in, while also providing a suitable path for depleted air, gasses, and dust to vent out. The location and dimensions of the ventilation shafts were determined by air flow calculations that consider specifications of the particular mine, as well as compliance with regulations put forth by the Mine Safety and Health Administration to ensure adequate air quality for the health and safety of mine workers.

In total, Hillsboro is proposing two (2) ventilation shaft sites, each consisting of a bleeder shaft with a concrete pad for a ventilation fan and a temporary drill pit/subsoil stockpile, one (1) borehole for a vertical turbine pump with a concrete pad and a temporary drill pit/subsoil stockpile, two (2) utility boreholes, a gravel work yard, and a topsoil stockpile. Additionally, a gravel access road connecting each site with the main road and a waterline are required. Each borehole and shaft will be fully encased by a steel pipe, installed to depth of approximately 525 feet, and fully grouted in place. All openings will be protected to prevent entry by wildlife, livestock, people, and/or machinery. The surface casing will be high enough above ground to prevent groundwater or surface water drainage from entering the hole. Each borehole and shaft will be permanently sealed within 60 days of becoming inactive. Each borehole will be plugged during reclamation below the natural soil level.

The access road consists of an upgrade to an existing 3,080-foot-long by 15-foot-wide gravel road that will be partially removed at the request of the site superintendent at Coffeen Lake State Fish and Wildlife Area – Upland Management Site. Removal of the gravel road shall be from the northern mine shaft to the creek that runs east-west through the site and feeds into the McDavid Branch. A 12-inch, 7,500-foot-long waterline will also be installed and buried to a minimum depth of 5 feet. Electrical and communication wires may be buried in the same ditch. The waterline will be capped and left in place during reclamation. Once mining activity has finished at the site, equipment and concrete pads on the surface will be removed and the topsoil will be replaced. The area will then be revegetated. Proposed activities may result in direct burial or crushing of, dispersal of, and/or noise and vibration disturbance to Ornate Box Turtle.

Total estimated area of impact within species habitat for the proposed actions is **6.18 acres**. The Department concurs that the take of Ornate Box Turtle that could result from the proposed project is not the purpose of Hillsboro's activities but is incidental to the carrying out of an otherwise lawful activity.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking:

Proposed avoidance, minimization and mitigation were included in Hillsboro's conservation plan.

To meet the "maximum extent practicable" standard, additional minimization and/or mitigation measures may be required beyond those proposed by Hillsboro, based on the life history needs of the Ornate Box Turtle. **All required minimization and mitigation measures are presented under the Authorization section below.**

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided.

Hillsboro states in their Conservation Plan that they have the authority and funding to complete the project and implement all proposed conservation measures. Further, Hillsboro states that implementation of the Conservation Plan is a dedicated part of the overall budget for the project.

The Department accepts this provision as assurance that adequate funding will be available to carry out the terms of the conservation plan.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of survival or recovery of the endangered species or threatened species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Ornate Box Turtle (*Terrapene ornata*) is an Illinois state-threatened reptile species.

Habitat: The Ornate Box Turtle inhabits prairie grasslands, pastures, fields, sandhills, and open woodland areas. The species is terrestrial but occasionally enters slow, shallow streams. For shelter, the Ornate Box Turtle burrows into friable soil or uses burrows made by other species. They hibernate through winter, roughly October to April, in burrows up to 5 feet in depth.

Distribution: Their overall range covers most of the central United States. The Ornate Box Turtle can be found from southeastern Wyoming to Wisconsin and Indiana, and south to Arizona and Louisiana.

Reproduction: Mating occurs in the spring or late summer. Nesting occurs between May and August. Females lay 1-2 clutches of 1-8 eggs each year. Eggs hatch in 9-12 weeks. Males are sexually mature in 8-9 years, females in 10-11 years.

Population: The Ornate Box Turtle is at risk from increased urbanization, increased agriculture, road mortality, and poaching.

Range in Illinois: Ornate Box Turtle has been observed in the last ten (10) years in 30 of 102 Illinois counties. There are currently 55 extant Element Occurrence Records for Ornate Box Turtle in the Illinois Natural Heritage Database.

Incidental Take Authorizations: The Department has nine (9) previously issued or pending Incidental Take Authorizations for the Ornate Box Turtle. This is the first authorization to be granted in Montgomery County. Previous projects in other counties for which take was authorized include a water line extension, a commercial development project, wind farm construction, and electric transmission line installations.

Based on the amount of habitat impacted by this project, the number of known occurrences of Ornate Box Turtle in Illinois, an assessment of the potential effect of this project on individual species in the project footprint, the conservation methods included in this authorization for take and the conservation plan, and the understanding that vulnerability and recovery information on the species remains limited; it is the conclusion of the Department that the taking anticipated as a result of this project will not reduce the likelihood of survival or recovery of the species in the wild within the State of Illinois, the biotic community of which the species are a part, or the habitat essential to the species' existence in Illinois.

5. Any measures required under Section 5.5(b)(6) of the Act will be performed.

Additional measures are listed below under "Authorization". This authorization is, by definition, subject to those terms and conditions and the signature of a representative from Hillsboro indicates their commitment to performing those measures.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application.

Public notice of Hillsboro's request for authorization of incidental take was published in the *Breeze Courier* (official state newspaper) on May 18, 2020, and in *The Journal-News* on May 18, 26, and June 4, 2020. A copy of the Conservation Plan was deposited at the Hillsboro Public Library, where it was available for public review. The deadline for public comment was extended to August 1, 2020, due to an inadvertent posting. The applicant provided analysis and response, per Ill. Adm. Code 1080.30, and increased the project's proposed mitigation and post-construction monitoring commitments as a result.

Authorization

It is the determination of the Department that the measures to be implemented by Hillsboro will adequately minimize and mitigate the anticipated taking of Ornate Box Turtle associated with the installation, operation, maintenance, and reclamation of two (2) ventilation shaft sites above and connected to the underground Deer Run Mine facility, each site consisting of a bleeder shaft, a turbine pump and borehole, two (2) utility boreholes, associated stockpiles; and including improvements to an access road, and installation of a waterline. The project lies primarily within the boundaries of the Department's Coffeen Lake State Fish and Wildlife Area – Upland

Management Site, Montgomery County, Illinois. Further, the Department has concluded that the taking authorized herein will not reduce the likelihood of survival or recovery of Ornate Box Turtle in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

All terms and conditions included in the aforementioned Conservation Plan submitted by Hillsboro to the Department are incorporated into this agreement by reference and are made a part thereof.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5] and the Administrative Rules for the Incidental Taking of Endangered and Threatened Species [Ill. Adm. Code 1080.40(b)], this authorization is issued subject to the following terms and conditions, which may include additions or modifications to the minimization and mitigation measures proposed by Hillsboro in the conservation plan:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of **five (5) years** from the date of the Department signature, unless terminated by written agreement of both parties.

This authorization may be revoked pursuant to the Act and Ill. Adm. Code 1080.80(b) if the Department finds that Hillsboro has failed to comply with any of these terms and conditions or has been responsible for the taking of Ornate Box Turtle beyond that which is incidental the installation, operation, maintenance, and reclamation of two (2) ventilation shaft sites above and connected to the underground Deer Run Mine facility lying primarily within the boundaries of the Department's Coffeen Lake State Fish and Wildlife Area – Upland Management Site in Montgomery County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between Hillsboro and the Department. The Illinois Endangered Species Protection Board shall be notified of such alteration.

Any substantive changes, including but not limited to a change in the project footprint or a change in the State-listed species which could potentially be affected, will require that a new conservation plan be submitted to the Department to initiate the review and public notice process as required by the Act.

3. This authorization may only be transferred upon approval and written authorization by the Department.
4. Notification to all on-site personnel shall be provided on the sensitive biological resources in the area; the identification of Ornate Box Turtle; regulations protecting the species; where the species might be found; avoidance areas; travel restrictions for equipment; how to report sightings or incidents that may involve take; the importance of avoiding take of the species; and response protocol if the species are

found. **Hillsboro shall submit a copy of the education materials to the Department.**

5. The Department reserves the right of entry by its staff or representatives to inspect potential habitat and species management practices.
6. Biological consultants employed by Hillsboro shall hold the necessary permits for work with non-listed and listed species; these include an Illinois Department of Natural Resources (IDNR) Scientific Collection Permit as authorized under 17 Illinois Administrative Code 520, a Herptile Scientific Permit as authorized under 17 Illinois Administrative Code 885, and an IDNR Endangered Species Permit as authorized under 17 Illinois Administrative Code 1070. Gloves shall always be worn when handling any species and properly disinfected or discarded between individuals.
7. Hillsboro shall notify the Department's Endangered Species Program by email correspondence of **construction commencement** of the project. A **project status report** shall be submitted to the Department within **90 days** following **construction** summarizing the implementation of minimization and mitigation measures and evaluating the effectiveness or status of those measures and shall include a project photo log. The report shall also include a map and GPS coordinates of any listed species found within and/or translocated from the project footprint, description of any injuries or mortalities, and the disposition of any individuals that were injured or killed.
8. Hillsboro shall notify the Department's Endangered Species Program by email correspondence of **reclamation** of the project. A **project status report** shall be submitted to the Department within **90 days** following **reclamation** summarizing the implementation of minimization measures and evaluating the effectiveness or status of those measures and shall include a project photo log. The report shall also include a map and GPS coordinates of any listed species found within and/or translocated from the project footprint, description of any injuries or mortalities, and the disposition of any individuals that were injured or killed.
9. Any discoveries of additional State-listed species beyond those identified in this agreement **halts work** and shall be reported to the Department within 48 hours accompanied by location information (photograph, map, and GPS coordinates).
10. Hillsboro shall conduct, or cause to be conducted, the following pre-construction, construction, or post-construction efforts:
 - a. A qualified and permitted Biological Monitor shall conduct visual encounter searches for listed species during the active period on days when construction activities occur, including removal of the rock lane. The Monitor shall provide clearance ahead of vehicles utilizing the access road and investigate presence of the species throughout the construction area.

- b. During the active period for the reptile species; new, clean exclusionary silt fencing shall be installed along the access road and enclosing the entire construction work areas. Fencing shall be buried at least six (6) inches in the ground, staked, and maintained in an upright position throughout the duration of the project construction and reclamation phases.
 - c. Visual encounter searches shall occur prior to fencing installation and the species shall be removed to outside of the exclusion fence and within Department property. Species data shall be collected by a qualified and permitted biologist on each individual translocated including GPS coordinates of where it was found and where it was relocated, length, approximate age, sex, and photograph. Ornate Box Turtles shall be humanely marked to facilitate recapture identification during post-construction surveys.
 - d. During species active periods, speed limits of construction vehicles traveling on access roads shall be limited to 12 mph or less to reduce the potential take of listed species.
 - e. All reptile exclusion fence shall be removed upon completion of construction and reinstalled for reclamation activities, and prior to the beginning of the listed reptile species' next active period (March 15 through October 15).
 - f. If excessive water or wind erosion is identified, then temporary seeding and mulching or erosion barriers may be utilized around the stockpiles. Any temporary or permanent revegetation shall utilize the seed mixes in the Conservation Plan.
 - g. Signs alerting operations and maintenance staff to the presence of protected Ornate Box Turtles and the speed limit of 12 mph shall be placed at each end and along the gravel access road within the project area throughout the duration of use (construction to reclamation) of the area.
 - h. Post-reclamation, soil preparation and seeding shall occur during weather conditions favorable to germination and to specifications identified in the Conservation Plan.
11. Post-reclamation, Hillsboro shall support a thorough Turtle Dog Trapping Survey for Ornate Box Turtles during appropriate species active periods within 5 years following reclamation for no less than four (4) days in coordination with the Department.

A report including, but not limited to, the survey methodology utilized, the species and numbers of individuals, any specific habitat features, approximate age, sex, a map of the species locations, survey coverage areas, and search times shall be provided to the Department within 90 days of completion of survey.

12. Mitigation to the maximum extent practicable is required by the Act. Mitigation requirements for this authorization are as follows:
- a. Hillsboro shall contribute \$4,500 per acre for 6.18 acres of potential impact to the Ornate Box Turtle. In total, **\$27,810** shall be provided in compensatory

mitigation to the Illinois Department of Natural Resources - Illinois Wildlife Preservation Fund to bring conservation benefit to the Ornate Box Turtle.

- b. Mitigation shall be provided **within 90 days of execution of this agreement**. Mitigation payments are nonrefundable, including events of revocation or termination.

Mitigation values are based on the Department's best current understanding of the species life history needs, real estate values, and impact analysis relevant to the project site's proposed conceptual design elements available at the time of review.

- 13. All reports, notifications, and other project documentation shall be submitted to:

Illinois Department of Natural Resources
Office of Resource Conservation
Endangered Species Program – Incidental Take Authorization Coordinator
One Natural Resource Way
Springfield, IL 62702-1271

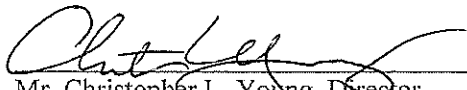
(217)557-8243
DNR.ITAcordinator@illinois.gov

The Department's Endangered Species Program shall provide all reports required under this agreement to the Illinois Endangered Species Protection Board and to the Department's Natural Heritage Database.

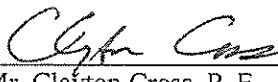
- 14. The Hillsboro official identified below is authorized to execute this agreement. Execution by Hillsboro indicates acceptance of all terms and conditions described in this authorization.
- 15. The execution of this agreement does not waive or excuse the responsibilities of Hillsboro to comply with other Federal, State, or local regulations, including but not limited to obtaining any required permits for the execution of this project.

For the Illinois Department of Natural Resources:

For Hillsboro Energy, LLC:



Mr. Christopher L. Young, Director
Office of Resource Conservation



Mr. Clayton Cross, P. E.
Principal Project Manager

10/30/2020
Date

10-20-2020
Date