



Illinois Department of Natural Resources

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

Bruce Rauner, Governor
Wayne A. Rosenthal, 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 Marathon Petroleum Company LP (hereinafter referred to as MPC) for the incidental take of the black sandshell (*Ligumia recta*). The Illinois Department of Natural Resources (hereinafter referred to as the Department) has determined that the taking is incidental to activities associated with the installation of three 72-inch diameter steel pipe monopiles filled with concrete and the subsequent removal of three existing pipe cluster mooring structures at MPC's Wood River Barge Dock in Madison County, Illinois.¹

Procedural History

The Department received a conservation plan from ARCADIS U.S. on behalf of MPC on February 27, 2015, as a request for authorization for the incidental take of black sandshell. The Department requested additional information on March 23, 2015, to make the conservation plan complete as prescribed by Ill. Adm. Code 1080.10. That additional information was received by the Department on March 25, 2015. The public notice period will be detailed under #6 of the Compliance section below.

Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria that 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 only be incidental to, the carrying out of an otherwise lawful activity:

The stated and apparent purpose of this proposed action is the installation of three 72-inch diameter steel pipe monopiles filled with concrete and the subsequent removal of three existing pipe cluster mooring structures at MPC's Wood River Barge Dock in Madison County, Illinois. The new monopiles will be vibration/hammer driven into the riverbed to a depth to be determined during construction. Each monopile will then be filled with concrete. When installation of the monopiles is complete, the existing pipe cluster mooring structures at the site will be removed. Take of the black sandshell could occur when the new structures are placed on the riverbed, when they are filled with concrete, or as a

¹ The project location is further described as adjacent to the left descending bank of the Mississippi River at River Mile 196.6 (N38.82662°, W90.108847°), located at the levee side of West 7th St, Hartford, Illinois.

result of removal of the existing pipe cluster mooring structures. The take of black sandshell that could result from this project is not the purpose of MPC'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:

A conservation plan prepared by ARCADIS U.S. on behalf of MPC describes measures that will be implemented to minimize the potential adverse effects of the project on black sandshell mussels. MPC will minimize the effect of this project on black sandshell mussels and their habitat by utilizing the following practices:

MPC has selected the monopile design for their new mooring structures. These have a smaller footprint than the existing pipe cluster structures and are more durable. The total area directly affected by installation of the three monopile structures will be approximately **7.9 square meters (85 square feet)**.

MPC proposes to conduct a thorough survey of the area of potential impact no more than 45 days before project initiation. The survey area will include the footprint of the new monopile structures and a 1.5-meter (5-foot) buffer area around each of the proposed structures. All freshwater mussels found in the surveyed area will be identified to species and enumerated. Any endangered or threatened species will be marked for individual identification. All mussels found in the survey area will be relocated to an area approximately 50 to 100 meters downstream at which suitable habitat has been identified. Prior to relocation, a habitat survey will be conducted in the downstream area to confirm that suitable habitat is still present. MPC will prepare a report summarizing the survey methodology, species and numbers of mussels located, age and size of each mussel, and maps of the area searched and the relocation site. That report will be provided to the Department no later than 60 days after completion of the survey and relocation.

If any endangered or threatened species are relocated, MPC proposes to conduct a follow-up survey of the relocation site in the second year after relocation. This survey will be done to assess the survival and condition of relocated mussels. A report on this survey, if it occurs, will be provided to the Department within 30 days of survey completion.

Additional minimization and/or mitigation measures may be required beyond those proposed by MPC above, based on the life history needs of the black sandshell mussel. Further required measures are presented under the Authorities section below.

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

MPC has fully anticipated the minimization and mitigation that will be required as part of this project and has committed to funding any required measures as part of the cost of operating the Wood River Barge Dock facility. MPC understands that if any additional activities are planned at the facility that may affect black sandshell mussels or other endangered or threatened species, coordination with the Department will be required.

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:

Freshwater mussels are secretive animals that spend almost all of their lives buried in river (or rarely, lake) bottoms. They require stable river / stream substrates and depend on host fish for completion of one stage of their life cycle. Black sandshell mussels have an elongate shell that is pointed at the posterior end with a smooth, shiny, and dark green to brown or black surface. Black sandshell prefers gravel and/or firm sand substrates in medium to large rivers. Their larvae (glochidia) have been observed to transform on members of the sunfish family as well as walleye (*Sander vitreus*) and sauger (*Stizostedion canadense*). It is a widespread species that is fairly common in the Upper and Middle Mississippi, Ohio, Rock, and Kankakee Rivers but is rare elsewhere. It formerly occupied large stretches of the Fox, Illinois, Vermilion, and Wabash Rivers.

In September 2014, personnel from EA Engineering, Science, and Technology, Inc. performed a survey for freshwater mussels in and near the area that will be affected by this project. The survey found a total of 44 freshwater mussels in the areas that will be directly affected by monopile installation and the buffers around those locations. One individual black sandshell was found.

The Illinois Natural Heritage Database includes 99 element occurrence records for the black sandshell that are classified as extant populations. The black sandshell is listed as a threatened species in Illinois because of its reduced distribution and abundance relative to historic records. The species now occurs in about 47% of drainages in which it was formerly found. The decline of the species is believed to be related to siltation and pollution as well as the fragmentation of riverine habitat by dams.

The Department has issued 14 previous authorizations for the incidental take of black sandshells. Project types included bridge repair/replacement, dredging of barge/boat channels, pipeline installation or removal, dam removal, and placement of rock and/or rip rap for navigation improvements. Typical minimization/mitigation measures have included reduction of the project footprint, relocation of mussels prior to construction, funding of species research, funding of species propagation, compensatory mitigation payments, and post-construction surveys to assess the status of mussels at project sites and relocation

areas. Post-project surveys completed to date show the continued presence of black sandshell mussels in and near project sites.

Based on the amount of habitat impacted by this project, the number of known occurrences of the black sandshell mussel in Illinois, an assessment of the potential effect of this project on individual mussels in the project footprint, and the conservation measures included in this authorization for incidental take, the Department has concluded that the taking proposed herein will not reduce the likelihood of survival or recovery of the black sandshell mussel 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.

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

These measures are listed below under "Authorization." This authorization is, by definition, subject to those terms and conditions and the signature of a representative of MPC indicates MPC's 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 MPC's request for authorization of incidental take was published in the Breeze Courier (official state newspaper) on April 16, 2015 and in The (Alton) Telegraph on April 16, 23, and 30 of 2015. A copy of the conservation plan was deposited at the Hartford Public Library, where it was available for public review. The deadline for public comment was May 30. No comments were received from the public.

Authorization

It is the determination of the Department that the measures that will be implemented by MPC will adequately minimize and mitigate the anticipated taking of black sandshells incidental to activities associated with the installation of three 72-inch diameter steel pipe monopiles filled with concrete and the subsequent removal of three existing pipe cluster mooring structures at MPC's Wood River Barge Dock in Madison County, Illinois. Further, the Department has concluded that the take authorized herein will not reduce the likelihood of survival or recovery of the black sandshell 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 MPC 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 the applicant under Compliance condition #2 above:

1. This authorization is effective upon the signature of the Department and shall remain in effect for a period of **seven (7) 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 MPC has failed to comply with any of these terms and conditions or has been responsible for the taking of black sandshells beyond that which is incidental to activities associated with the installation of three 72-inch diameter steel pipe monopiles filled with concrete and the subsequent removal of three existing pipe cluster mooring structures at MPC's Wood River Barge Dock in Madison County, Illinois.

2. The effective period of this authorization may be altered by mutual written agreement between MPC and the Department. The Illinois Endangered Species Protection Board shall be notified of any 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 is non-transferable.
4. All personnel working in the vicinity of the project shall receive educational materials including species identification information, protected status of the species, and protocol in place for when the species is encountered, living or dead. A copy of the educational flyer shall be provided to the Department. The Department shall be informed of any sighting and provided location information within 48 hours of such sighting.
5. The Department reserves the right of entry by its staff or representatives to inspect species, potential habitat, and species management practices. MPC shall notify the Department's Endangered Species Program of the initiation of the subject project.
6. MPC shall conduct, or cause to be conducted, a thorough search for freshwater mussels in the project area during biologically suitable mussel relocation periods. This search shall be conducted no more than 45 days prior to project initiation. Mussels will not be relocated when air temperatures are at or below 32 degrees Fahrenheit, nor when water temperatures are at or below 40 degrees Fahrenheit. All mussels will be held in mesh bags suspended in the river or in containers of water that is changed every hour (every half-hour when air temperatures are at or above 87 degrees Fahrenheit). Water in containers shall be taken from the river where the mussels were collected. No mussels shall be held for more than three (3) hours before being returned to suitable habitat in the river.

All freshwater mussels found shall be identified to species, marked, and enumerated. Those conducting the search must be qualified at accurate identification of freshwater mussel species. All native freshwater mussels found during this search shall have zebra mussels removed from their shells and be relocated to suitable habitat pre-approved by the Department. A report including, but not limited to, the survey methodology utilized, the species and numbers of mussels located, the age and size of each individual sampled, and maps of the area searched and the relocation site shall be provided to the Department within 60 days of completion of the survey and relocation effort.

7. MPC shall conduct, or cause to be conducted, a thorough search for freshwater mussels around the project area and relocation site in year three following completion of the project. For example, if the project is completed in 2015, this search for freshwater mussels shall be conducted in 2018 when water levels and temperatures are suitable. A report including, but not limited to, the survey methodology utilized, the species and numbers of mussels located (noting any marked individuals), the age and size of each individual sampled, and a map of the species locations shall be provided to the Department within 60 days of completion of the survey.

If no State-listed species are relocated, no year-three survey is required at the relocation site.

8. No compensatory mitigation is being sought for the actions proposed in MPC's conservation plan based on the Department's analysis of the species status in the local area, the project area footprint size, the number of individuals to be potentially impacted, and the benefits from relocation and monitoring efforts.

9. 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

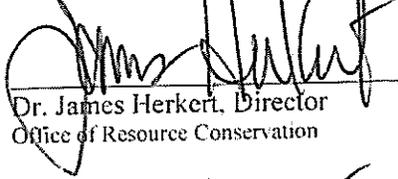
(217)557-8243

DNR.ITAcoordinator@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.

10. The MPC official identified below is authorized to execute this agreement. Execution by MPC indicates acceptance of all terms and conditions described in this authorization.
11. The execution of this agreement does not waive or excuse the responsibilities of MPC 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:



Dr. James Herkert, Director
Office of Resource Conservation

11-16-15

Date

For Marathon Petroleum Company LP:



Tim Haley
Environment, Safety & Regulatory Compliance Manager

11/5/2015

Date