

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF:	)	
	)	
MARATHON PETROLEUM	)	
COMPANY LP,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB No. 2018-049
	)	
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

**NOTICE OF FILING**

To:

Don Brown, Clerk of the Board  
Illinois Pollution Control Board  
James R. Thompson Center, Suite 11-500  
100 W. Randolph Street  
Chicago, Illinois 60601  
don.brown@illinois.gov  
(VIA ELECTRONIC MAIL)

Carol Webb, Hearing Officer  
Illinois Pollution Control Board  
1021 North Grand Avenue East  
P.O. Box 19274  
Springfield, Illinois 62794-9274  
(VIA ELECTRONIC MAIL)

**(SEE PERSONS ON ATTACHED SERVICE LIST)**

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Pollution Control Board a MOTION TO EXTEND TIME TO FILE THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RECOMMENDATION, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION  
AGENCY

Dated: April 12, 2018

1021 N. Grand Ave. East  
P.O. Box 19276  
Springfield, Illinois 62794  
217-782-5544

By: /s/ Sara G. Terranova  
Sara G. Terranova  
Assistant Counsel  
Division of Legal Counsel  
sara.terranova@illinois.gov

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

IN THE MATTER OF:	)	
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Petitioner,	)	
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v.	)	PCB No. 2018-049
	)	
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

**MOTION TO EXTEND TIME TO FILE THE ILLINOIS ENVIRONMENTAL  
PROTECTION AGENCY'S RECOMMENDATION**

NOW COMES the Illinois Environmental Protection Agency (Agency or Illinois EPA), by and through one of its attorneys, Sara G. Terranova, pursuant to 35 Ill. Adm. Code 101.500 and 101.522, requests that the Illinois Pollution Control Board (Board) grant Illinois EPA additional time to file its recommendation in the instant alternative thermal effluent limitations proceeding. In support of this motion, the Illinois EPA states as follows:

1. On January 26, 2018, the Illinois Department of Natural Resources (IDNR) reopened its consultation process with the Agency. *See* Letter from Keith M. Shank, IDNR, to Scott Twait, Illinois EPA (Jan. 26, 2018).
2. As a result of IDNR's consultation process, IDNR issued the Agency a letter containing specific recommendation points. *See* Letter from Keith M. Shank, IDNR, to Scott Twait, Illinois EPA (March 29, 2018) (Attachment A).
3. On April 6, 2018, the Agency discussed IDNR's recommendation points with Marathon Petroleum Company LP (Marathon). The Agency plans to meet again with Marathon and IDNR in the near future.

4. To allow for these continued discussions, the Agency is requesting an additional 60 days to file its recommendation.

5. Marathon has indicated it has no objection to the Agency's motion for extension of time file its recommendation.

WHEREFORE, the Illinois EPA requests the Board grant the Agency an additional 60 days (Tuesday, June 12, 2018), to file its recommendation.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION  
AGENCY

Dated: April 12, 2018

By: /s/ Sara G. Terranova  
Sara G. Terranova  
Assistant Counsel  
Division of Legal Counsel  
Sara.Terranova@illinois.gov

1021 N. Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794  
217-782-5544

**CERTIFICATE OF SERVICE**

I, Sara G. Terranova, Assistant Counsel for the Illinois EPA, herein certifies that I have served a copy of the MOTION TO EXTEND TIME TO FILE THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S RECOMMENDATION, via electronic mail upon:

Don Brown, Clerk of the Board Illinois Pollution Control Board 100 W. Randolph Street, Suite 11-500 Chicago, Illinois 60601 Don.Brown@illinois.gov	Carol Webb, Hearing Officer Illinois Pollution Control Board 1021 North Grand Avenue East P.O. Box 19274 Springfield, Illinois 62794-9274 Carol.Webb@illinois.gov
Illinois Department of Natural Resources Eric Lohrenz, General Counsel Virginia Yang, Deputy Legal Counsel One Natural Resource Way Springfield, Illinois 62702 Eric.Lohrenz@illinois.gov Virginia.Yang@illinois.gov	HeplerBroom LLC Joshua J. Houser Katherine D. Hodge 4340 Acer Grove Drive Springfield, Illinois 62711 jjh@heplerbroom.com khodge@heplerbroom.com

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION  
AGENCY

Dated: April 12, 2018

By: /s/ Sara G. Terranova  
Sara G. Terranova  
Assistant Counsel  
Division of Legal Counsel  
Sara.Terranova@illinois.gov

1021 N. Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794  
217-782-5544

## **Attachment A**





## Illinois Department of Natural Resources

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

Bruce Rauner, Governor  
Wayne A. Rosenthal, Director

March 29, 2018

Mr. Scott Twait  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
PO Box 19276  
Springfield, IL 62794-9276

**RE: Alternative Thermal Effluent Limitations, Section 316(a) of the Clean Water Act and 35 Ill. Adm. Code 304.141(c), Marathon Petroleum Company LP Refinery Endangered Species Consultation Program EcoCAT Review #1808455**

Dear Mr. Twait:

The Department has received your information for this project for the purposes of consultation pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. Additionally, the Department may offer recommendations for species covered under the *Fish & Aquatic Life Code* [515 ILCS 5, *et seq.*]; the *Illinois Wildlife Code* [520 ILCS 5, *et seq.*]; and the *Herpetiles-Herps Act* [510 ILCS 69].

The proposed action is the development of Illinois Environmental Protection Agency (Agency) recommendations to the Illinois Pollution Control Board in Case PCB 2018-049, a request for Alternative Thermal Effluent Limitations (Petition) by Marathon Petroleum Company (Marathon) for its petrochemical refinery plant in Robinson, Crawford County, Illinois. The Department has focused its evaluation on Exhibit 4 supporting Marathon's Petition.<sup>1</sup>

In its review of the Petition and its supporting documents, the Department noted the fish assemblage data report<sup>2</sup> (Report) documented the occurrence of four individual Illinois state-listed endangered **bigeye chub** (*Hybopsis amblops*) in Robinson Creek, two of them at Marathon's Outfall 001 and one upstream and one downstream from Outfall 001 in Robinson

<sup>1</sup> Exhibit 4: *Technical Support Documentation for Alternative Thermal Effluent Limitations under Section 316(a) of the Clean Water Act and 35 Ill. Adm. Code 304.141(c) for the Marathon Petroleum Company LP Refinery located in Robinson, Illinois.*

<sup>2</sup> *Biological and Water Quality Assessment of Robinson and Sugar Creeks and Tributaries 2016* (Midwest Biodiversity Institute, 2017)

Creek. Four additional individual **bigeye chubs** were documented in a nearby stream known as LaMotte Creek. The **bigeye chub** is an Illinois state-listed endangered species. However, the **bigeye chub** was not identified as a state-listed endangered species in the Report when it was prepared nor in other documents filed to support the Petition before the Illinois Pollution Control Board. After discussions with this Department, Marathon filed an Addendum to its Petition with the Illinois Pollution Control Board acknowledging the occurrence of the **bigeye chub** in Marathon's thermal outfall into its receiving waters (i.e., Robinson Creek).<sup>3</sup>

The Department has reviewed the Petition and its Addendum and believes that neither document satisfies *Title 35 Environmental Protection Code Part 106 Subpart K*, specifically Section 106.1130 (e)(4) provisions concerning "criteria and methodology used to assess whether a balanced indigenous community of shellfish, fish and wildlife will be maintained in the receiving waters and the protection of threatened and endangered species."

Based on available information, the Department believes the Petition does not demonstrate the proposed Alternative Thermal Effluent Limits will protect endangered species present in the receiving waters and will support a balanced indigenous community pursuant to Section 106.1130(e).<sup>4</sup> Furthermore, Section 106.1105 requires a demonstration "to assure the protection and propagation of a balanced, indigenous population...in and on the body of water into which the discharge is to be made."

Published scientific research on the thermal tolerance of the **bigeye chub** is limited to a single test performed on a single animal.<sup>5</sup> While this test can be criticized on several grounds such as, non-regional location of the study area, the Lutterschmidt/Hutchinson test currently constitutes the best evidence of the thermal upper tolerance limits and such effects upon this species.<sup>6</sup> Among these effects are spasm and the inability of the **bigeye chub** to "right" itself (i.e., to turn upright) when in waters with upper thermal temperatures.

The Department notes that a single test on a single animal does not provide a statistical confidence level; reliance on a single study or test is insufficient. Thermal tolerance testing on a larger sample of **bigeye chubs** taken from a regional watershed, such as the Illinois Wabash River or the Illinois Vermilion River, would provide greater confidence about the thermal tolerance of this endangered fish population.

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<sup>3</sup> *Motion for Leave to File an Addendum to Exhibit 4 of the Petition to Approve Alternative Thermal Effluent Limitations and Addendum to Technical Support Documentation for Alternative Thermal Effluent Limitations (Electronic Filing)*; filed February 28, 2018; granted March 14, 2018.

<sup>4</sup> *Title 35 Environmental Protection Code Part 106 Subpart K, Section 106.1130(e)(4)* requires the petition to demonstrate "a balanced indigenous community, as defined, of shellfish, fish and wildlife will be maintained in the receiving waters and that threatened and endangered species will be protected."

<sup>5</sup> "The Critical Thermal Maximum: Data to Support the Onset of Spasms as the Definitive Endpoint," William I. Lutterschmidt and Victor H. Hutchinson, *Canadian Journal of Zoology*, February 1997, pp.1553-1560.

<sup>6</sup> As reported, Loss of Righting Response occurred at 30.1°C (86.18°F); Onset of Spasms occurred at 31.7°C (89.06°F).



The Department also believes that supporting thermal data for the Petition indicate temperatures in the study area which exceed those temperatures tolerated by the **bigeye chub**.<sup>7</sup> When such temperature exceedances occur during summer months, any **bigeye chubs** present in Robinson Creek, whether at, below and above Outfall 001, would be forced to vacate the affected reaches of Robinson Creek. If any **bigeye chubs** in Robinson Creek were unable to escape such temperatures, injury or death from thermal shock would likely occur.

The Department believes that any of the above survival behaviors to avoid thermal exceedances attributed to thermal discharges from Outfall 001 would constitute a "take" (i.e., harass, harm, or injury) which is prohibited by the *Illinois Endangered Species Protection Act* [520 ILCS 10/3].<sup>8</sup> As defined by law, "Take" means, in reference to animals and animal products, to harm, hunt, shoot, pursue, lure, wound, kill, destroy, harass, gig, spear, ensnare, trap, capture, collect, or to attempt to engage in such conduct.<sup>9</sup>

The *Illinois Endangered Species Protection Act* empowers the Department to authorize any "taking" otherwise prohibited if that "taking" is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.<sup>10</sup> Providing the Department can determine the "taking" will not reduce the likelihood of the survival or recovery of the **bigeye chub** in the wild in Illinois, an *Incidental Take Authorization* could be sought and obtained by Marathon pursuant to 17 Ill. Adm. Code 1080. The Department may authorize the "taking" of listed species for purposes of scientific research.<sup>11</sup> The Department may issue the necessary "scientific research permit" upon approval of a detailed research proposal for a thermal bioassay of the **bigeye chub**.

The Department further notes that the current thermal discharge levels for Outfall 001 may be a contributing factor to the unusually-high rate of Deformities, Eroded fins, Lesions, and Tumors (DELTS) documented in the aquatic community by Midwest Biodiversity Institute (MBI), environmental contractor for Marathon. Although MBI observed no DELTs on the **bigeye chub**, the high rate of DELTs on other fish found in the study area indicate an adverse impact to the "balanced indigenous community" of fish, as well as a risk to the **bigeye chub**. Lesions on fish are often related to bacterial infections; placing additional thermal stress on fish already affected by chemical stressors is likely to aggravate existing pathological conditions. The Department is concerned that the proposed alternative thermal limitation will increase the incidence of DELTS, thus harming the "balanced indigenous community." The Department believes the proposed Alternative Thermal Effluent Limits warrant additional assessment of the impacts to all indigenous fish.

The Department also questions the location of the stations where compliance will be measured. Given the large segments of Robinson Creek which will be included (1.7 miles and, currently, four miles), further data is needed demonstrating that these distances below Outfall 001 are

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<sup>7</sup> *Motion for Leave to File an Addendum to Exhibit 4 of the Petition to Approve Alternative Thermal Effluent Limitations and Addendum to Technical Support Documentation for Alternative Thermal Effluent Limitations (Electronic Filing)*; filed February 28, 2018; granted March 14, 2018; Figure 2, p. 6.

<sup>8</sup> "Sec. 3. It is unlawful for any person: (1) to possess, take, transport, sell, offer for sale, give or otherwise dispose of any animal or the product thereof of any animal species which occurs on the Illinois List;"

<sup>9</sup> 520 ILCS 10/2.

<sup>10</sup> 520 ILCS 10/5.5 and 17 Ill. Adm. Code Part 1080.

<sup>11</sup> 520 ILCS 10/4 and 17 Ill. Adm. Code Part 1070.

necessary to achieve compliance with the proposed alternative thermal effluent limitations. The Department believes that thermal compliance measured at Outfall 001, or as close as feasible to the discharge point, will avoid or minimize disruption of the "balanced indigenous community."

For the reasons stated above, the Department offers the following:

*Recommendation #1:* *The Department recommends the need for a bioassay of the upper thermal tolerance limits of the Illinois Wabash Valley population of the endangered bigeye chub to establish whether the proposed Alternative Thermal Effluent Limits are protective of endangered species known to be present in receiving waters. The test subjects should be taken from the same population which will be subject to the proposed Alternative Thermal Effluent Limits to address the possibility that different populations of this species may have developed higher or lower tolerances. The research should seek to establish the temperatures which stimulate avoidance behavior (harassment), loss of righting response (harm), onset of spasms (injury), and death. Any proposed bioassay should follow standards and procedures approved by the Department pursuant to the "1070" research permit issued under the Illinois Endangered Species Protection Act.*

*Recommendation #2:* *The Department recommends the need for a bioassay of representative fish species is warranted to identify the character and likely causes of observed DELTs and to determine whether granting the Alternative Thermal Effluent Limits is likely to increase the incidence and/or severity of DELTs on fish in the receiving waters.*

*Recommendation #3:* *The Department recommends that compliance with the Alternative Thermal Effluent Limits should be measured at Outfall 001, or as near as feasible, rather than the proposed point 1.7 miles farther downstream on Robinson Creek, to minimize disruption of the "balanced indigenous community," including the stated-listed bigeye chub.*

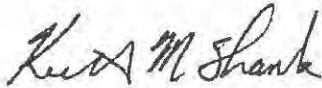
*Recommendation #4:* *The Department recommends the need for Marathon to seek and obtain an Incidental Take Authorization for the endangered bigeye chub from the Department.*

Consultation on the part of the Department is closed, unless the Illinois Environmental Protection Agency desires additional information or advice related to these recommendations. Pursuant to 1075.40(h), please notify the Department of the Agency's disposition of these recommendations. Consultation for Part 1075 is valid for two years unless new information becomes available which was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the recommended action has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The Department's natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the project being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are unexpectedly encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations.

Please contact me with any questions about these recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith M. Shank". The signature is fluid and cursive, with the first name "Keith" and last name "Shank" being more prominent than the middle initial "M".

Keith M. Shank, Chief  
Impact Assessment Section  
Department of Natural Resources  
(217) 785-4984  
[keith.shank@illinois.gov](mailto:keith.shank@illinois.gov)

