

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

**METROPOLITAN WATER RECLAMATION
DISTRICT OF GREATER CHICAGO,**

Petitioner,

V.

**ILLINOIS ENVIROMENTAL PROTECTION
AGENCY,**

Respondent.

PCB No. 2016-028
(Time-Limited Water
Quality Standard)

NOTICE OF FILING

To: Don Brown, Clerk of the Board
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph, Suite 11-500
Chicago, Illinois 60601
Via Electronic Mail
(SEE PERSONS ON ATTACHMENT)

Brad Halloran, Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph, Suite 11-500
Chicago, Illinois 60601
Via Electronic Mail

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Pollution Control Board ILLINOIS EPA'S RECOMMENDATION, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION
AGENCY

Dated: May 13, 2019
1021 North Grand Avenue East
PO Box 19276
Springfield, Illinois 62794

By: /s/ Stefanie N. Diers
Stefanie N. Diers
Assistant Counsel
Division of Legal Counsel

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

METROPOLITAN WATER RECLAMATION)	
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Petitioner,)	
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v.)	PCB No. 2016-028
)	(Time-Limited Water
)	Quality Standard)
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ILLINOIS ENVIROMENTAL PROTECTION)	
AGENCY,)	
)	
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ILLINOIS EPA’S RECOMMENDATION

NOW COMES the Illinois Environmental Protection Agency (Illinois EPA or Agency), by and through one of its attorneys, provides its recommendation for a Dissolved Oxygen Time-Limited Water Quality Standard (TLWQS), pursuant to 35 Ill. Adm Code 104, Subpart E submitted by the Metropolitan Water Reclamation District of Great Chicago (MWRD). The Agency states as follows:

PROCEDURAL BACKGROUND

This proceeding involves MWRD’s requests for a TLWQS for those Combined Sewer Overflows (CSO) outfalls potentially impacting the Chicago Area Waterway System (CAWS) and the Des Plaines River (DPR) from the confluence of the Chicago Sanitary and Ship Canal to the I-55 bridge, which has been segmented as the Brandon Pool and Upper Dresden Island Pool. The CSO discharges are governed by National Pollutant Discharge Elimination System (NPDES) permits issued to its O’Brien, Calumet and Stickney Wastewater treatment plants in the CAWS. Initially, in 2015, the Petitioner sought a variance from the recently adopted dissolved oxygen

standard. (35 Ill. Adm. Code 302.405)¹. The Board converted that petition to TLWQS petition by operation of law in February 2017. Shortly thereafter, the Board identified classes of dischargers that may be covered by the TLWQS in its April 12, 2017 Order. On June 22, 2017, the Board determined that the previously-filed petition for a variance was not in substantial compliance with the requirements for TLWQS. On April 12, 2017, the Board granted the Petitioner and any other potential member of the discharger classes 90 days from its Order to file an amended petition. At this time no other participants have come forward, and therefore, this matter will proceed as an individual TLWQS.

The amended petition in this TLWQS proceeding was filed on July 26, 2018. On March 28, 2019, the Board found the amended petition to be in substantial compliance. Therefore, the Agency must file its recommendation by May 13, 2019.

PETITIONER'S REQUESTED RELIEF

The Clean Water Act, and regulations adopted thereunder by United States Environmental Protection Agency (USEPA), allow for variances from a water quality standard for a limited period of time. *See* 40 CFR 131.14. A water quality standards variance is defined as a “time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the WQS variance.” In Illinois, water quality standard variances are called TLWQS. 415 ILCS 5/3.488. USEPA will approve a water quality standard variance if a state can prove, among other things, that attaining the designated use and criterion are not feasible throughout the term of the water quality standard variance because of one of the factors listed in 40 C.F.R. 131.13(10)(g) (10(g) factors). 40 C.F.R.131.14(b)(2)(i)(A)(2)

In this proceeding, the Petitioner is asking for a TLWQS for dissolved oxygen for a 5-year

¹ The Amended Petition also cites to 35 Ill. Admin. Code 302.206 as the standard they are seeking a TLWQS from.

time-period from the dissolved oxygen standards found at 35 Ill. Adm. Code 302.206 and 302.405. Petitioner believes the requested five-year term is necessary and plans to take interim measures to address water quality and continue its evaluation of the issues and investigations of adequate solutions to address dissolved oxygen in the CAWS and DPR segments. Amended Petition, at 3. The Petitioner also notes that, if the Board grants the requested relief, the Petitioner may need to come back to the Board and ask for another TLWQS at the end of the first five years of the TLWQS because attainment issues will continue over a much longer time. Amended Petition, at 21. The terms of the TLWQS beyond the initial five-year period will likely be different than the current one being sought because of improvements to TARP (Tunnel and Reservoir Plan) that will likely change dissolved oxygen attainment. TARP will not be completed until 2029. Petitioner expects to seek a revised TLWQS before the term of this TLWQS is completed. Id.

Petitioner asserts they cannot meet the dissolved oxygen water quality standard and it is not feasible because of two of the 10(g) factors:

Factor 3: Human cause conditions or sources of pollution prevent the attainment of the designated use and cannot be remedied or would cause more environmental damage to correct than to leave in place.

Factor 6: Widespread economic and social impact would result from controls more stringent than those required by the CWA Section 301(b) and 306.

Amended Petition at 13-14; See 35 Ill. Adm. Code 104.560(a)(3), (6); 40 C.F.R. 131.10(g)(3) and (6).

During the term of the TLWQS, the Petitioner proposes the highest attainable condition is the effluent condition authorized by the existing NPDES permits that address MWRD's CSO outfalls and conditions of the 2011 Consent Decree. (Amended Petition, at 16 and Petitioner's

Exhibit L and Special Condition # 8 for O' Brien, Special Condition #13 for Stickney and Special Condition #13 for Calumet at Petitioner's Exhibits C, D and E.). Additionally, the Petitioner proposes a series of conditions and interim measures that will apply to MWRD during the term of the TLWQS, which will help minimize dissolved oxygen nonattainment and reduce any possible impacts from the nonattainment. Amended Petition, P. 16-21. As the interim measures are implemented, MWRD will analyze the data it collects from such actions and make modifications and adjustments to improve dissolved oxygen levels in the CAWS and DPR segments.

AGENCY'S RECOMMENDATION

The Board's procedural rules requires the Agency to file a recommendation after the Board determines the Amended Petition is in substantial compliance with the Board's requirements. 35 Ill. Adm. Code 104.550. The Agency's recommendation must include an analysis of (1) petitioner's justification that attainment of the designated use and criterion is not feasible because of one of the 10(g) factors; (2) the petitioner's proposed highest attainable condition; (3) the petitioner's proposed eligibility criteria. 35 Ill. Adm. Code 104.550(b). Furthermore, the Agency's recommendation must also include any information the Agency believes is relevant to the disposition of the petition, including any past or pending enforcement actions, recommended term of TLWQS, and a list of persons that are seeking coverage under the TLWQS. Finally, the Agency's recommendation must specify the Agency's position on whether the Board should adopt, adopt with conditions or deny the Petitioner's requested TLWQS. *Id.*

The Agency believes the Board should adopt the proposed dissolved oxygen TLWQS with conditions for the O'Brien and Stickney CSO discharges. However, at this time the Agency believes the Petitioner needs to further demonstrate the need for the dissolved oxygen TLWQS for the Calumet CSO discharges, which are impacted by the Thornton Reservoir before the

Agency can support their request. MWRD completed the Thornton Reservoir and it has been in operation since December 31, 2015, and in full operation since December 31, 2016. The petitioner needs to demonstrate that there is a need for relief for the Calumet CSO discharges from the dissolved oxygen water quality standard due to CSO events. This analysis should be in progress: as per Special Condition #13 item 12 of the Calumet NPDES Permit, MWRD is required to submit its post-construction study to the Agency, by June 30, 2019, of whether (a) CSOs in the Calumet WWTP portion of the CAWS are causing or contributing to violations of applicable water quality standards and, if so, (b) upon notification by the Agency, develop and implement a revised CSO Long-Term Control Plan (LTCP) for assuring that discharges from the CSOs do not cause or contribute to violation to applicable water quality standards or cause use impairments in the receiving waters.

The Agency attaches a list of the conditions in Attachment 1, it believes should be included if the Board grants the requested relief. Only the outfalls that are in and upstream of the CAWS and DPR segments are part of the relief requested by the Petitioner. The Agency attaches a table that includes Stream Segment Codes and the associated Uses for the CSO discharge and receiving water that are subject to this relief as Attachment 2.

10(g) Factors Analysis: Attainment of the Designated Uses Are Not Feasible

Petitioner claims that attainment of the designated use and dissolved oxygen water quality standard is not feasible primarily because of factor 3 (human caused conditions or sources of pollution that cannot be remedied or would leave more environmental damage to correct than to leave in place) and factor 6 (wide spread social and economic impact).

To successfully make a factor 3 demonstration, the Petitioner must do more than identify a human caused condition. Petitioner must show that the human caused condition cannot be

remedied or that, in remedying the condition, Petitioners would cause more environmental damage than to leave the human caused condition in place.

First, Petitioner asserts that human caused conditions is the primary cause of elevated dissolved oxygen levels in the CSOs. Amended Petition, at 13. The CSO outfalls exist because during wet weather events, the MWRD's system does not have the capacity to address these waters and water flow in the MWRD's combined system that is beyond the storage capacity of the system and has to be discharged through the CSO outfalls. Id. Massive flooding of streets and basements, plus severe damage to the sewer system, would result if the CSO outfalls did not exist. Id. MWRD's ongoing implementation of TARP will add additional storage capacity to the system, but TARP is not expected to be completed until 2029. When TARP is completed, MWRD will be able to avoid CSOs, extensive flooding and to also avoid adverse health effects of having diluted sewage backing up into many homes and buildings.

For the above stated reasons, the Agency agrees with the Petitioners that attainment of the designated use and dissolved water quality standard is not feasible because of human caused conditions (factor 3).

Secondly, Petitioner states that factor 6 justifies the petition for a TLWQS. The Petitioner asserts that elimination of CSOs near term, before the completion of the remaining TARP projects, will result in sewer flows having nowhere to go, and that could cause extensive flooding and damage to public infrastructure and other public and private property. Also, there could be adverse health effects from sewage backups. Moreover, to install additional aeration stations and aerated flow augmentation stations is very expensive and still unlikely to make the CAWS and DPR segments compliant with water quality standards. (Amended Petition, P.13-14). The petitioner further states, "In sum, it would be a substantial hardship to require the MWRD and its customers

to spend over \$650 million to try to comply with the new dissolved oxygen water quality standards, especially when all of the available evidence indicates that such expenditures would still not achieve consistent compliance under all conditions, and that major investments are being made in other projects (e.g., TARP) that will help address the dissolved oxygen issue.” Amended Petition, P. 15.

The Agency does not disagree with this statement or disagree that it might “result in a substantial and widespread negative economic and social impact on the public”; however, the Agency does not believe that the petition sufficiently makes the case for substantial and widespread negative economic and social impact on the public because it is lacking information on of the cost per user and whether it is affordable. However, as noted in the petition, only one factor is required, therefore, the Petitioner has demonstrated that attainment of the designated use(s) and criteria are not feasible throughout the term of the TLWQS because of their Factor 3 analysis.

Highest Attainable Condition Analysis

The highest attainable condition of a watershed must be specified as a quantifiable expression that is one of the following:

- 1) The highest attainable interim use and interim criterion; or
- 2) If no additional feasible pollutant control technology can be identified, the interim use and interim criterion that reflect the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the Board adopts the time-limited water quality standard and with the adoption and implementation of a Pollutant Minimization Program.

35 Ill. Adm. Code 104.565(d)(4)(B). The Agency believes the highest attainable condition in this case must be expressed as set forth in paragraph 2 above. This approach requires the Petitioners to identify the interim use and interim criterion that reflects the greatest reduction

achievable with the currently installed technologies and the adoption and implementation of a pollutant minimization program. It is the Agency's belief that the petitioner has made its demonstration, for the CSOs impacted by the McCook Reservoir, under Section 104.560(c), including the petitioner's proposed highest attainable condition.

For the CSOs impacted by the Thornton Reservoir, the Agency believes that the Petitioner needs to submit additional information on the necessity of the dissolved oxygen TLWQS, since the Thornton Reservoir is fully operational. As per Special Condition #13 item 12 of the Calumet NPDES Permit, MWRD is required to submit its post-construction study to the Agency, by June 30, 2019, of whether (a) CSOs in the Calumet WWTP portion of the CAWS are causing or contributing to violations of applicable water quality standards and, if so, (b) upon notification by the Agency, develop and implement a revised CSO Long-Term Control Plan (LTCP) for assuring that discharges from the CSOs do not cause or contribute to violation to applicable water quality standards or cause use impairments in the receiving waters.

The Petitioner has included a discussion of the Highest Attainable Condition (HAC) in the petition at Part I.D. with detailed Suggested Conditions in Part I.E.1. for O'Brien, Stickney, and Calumet. Amended Petition, P. 15-20 and Petitioner Exhibits C, D and E. The petition at Part I.D. indicates that "effluent condition authorized by the existing NPDES Permits that address the MWRD's CSO outfalls, and conditions of the Consent Decree". Amended Petition, P. 15-16. Additionally, the petition at Part I.E.1. contains a series of conditions and interim measures that should apply to MWRD during the term of the TLWQS for O'Brien, Stickney, and Calumet specifically as well as further actions and milestones with respect to TARP set forth in the Consent Decree. The petition states, "As the interim measures are implemented, MWRD will analyze the data it collects from such actions and make modifications and adjustments in an

effort to improve dissolved oxygen levels in the CAWS.” The Agency believes this statement should be reworded and incorporated into a condition as well. See Attachment 1.

The Agency agrees with the petitioner that the highest attainable condition for the receiving streams are the continued use of TARP and the Implementation of the Pollutant Minimization Program that has been proposed with the addition of the language suggested by the Agency to require MWRD to analyze the data it collects from the interim measures that are implemented and make modifications and adjustment to improve dissolved oxygen levels in the receiving stream.

Best Management Practices and Pollution Minimization Programs

The Agency supports the best management practice and pollution minimization programs suggested by the Petitioner in its Amended Petition along with the conditions recommended by the Agency in Attachment 1.

Term of the TLWQS

The Agency agrees with the proposed 5year term of the dissolved oxygen TLWQS. As noted in the Amended Petition, MWRD expects to apply for a revised TLWQS before the term of this initial TLWQS is completed.

Eligibility Criteria

Eligibility criteria is not necessary because this is a single discharger TLWQS.

Compliance with Federal and State Law:

The Agency believes the proposed TLWQS is consistent with applicable federal and regulations and would satisfy the requirement of Section 38.5 of the Illinois Environmental Protections Act.

Other Relevant Information:

The Board's regulations require the Agency to report any other information relevant to the disposition of the petition, including any pending enforcement action. 35 Ill. Adm. Code 104.550(b).

Enforcement Action: Consent Decree, Petitioner's Exhibit L

WHEREFORE, Illinois EPA respectfully submits its Recommendation and asks the Board to grant the TLWQS with conditions for the O'Brien and Stickney CSO discharges. However, the Agency needs for more is more information from the Petitioner to support a TLWQS for the Calumet CSO discharge.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION
AGENCY

By: /s/Stefanie N. Diers
Stefanie N. Diers
Assistant Counsel
Division of Legal Counsel

Date: May 13, 2019

Illinois Environmental Protection Agency
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ATTACHMENT 1: IEPA's Proposed Conditions to be included in a Dissolved Oxygen TLWQS

The Agency recommends that the Board grant Petitioners' requested time-limited water quality standard with the following conditions:

1. Conditions currently in the permits for Calumet, Stickney and O'Brien. (Special Condition #13 for Calumet, Special Condition #13 for Stickney and Special Condition #8 for O'Brien; Petitioner Exhibits C, D and E).
2. Suggested Conditions in the Amended Petition in Par I.E.1. (Amended Petition, P.16-20)
3. A requirement that MWRD will analyze the instream dissolved oxygen data and make modification and adjustments to improve dissolved oxygen levels in the receiving streams.
4. Follow actions and achieve milestones set forth in the Consent Decree detailed in Part I.E.1 of the Amended Petition. (Amended Petition, P. 20-21)

ATTACHMENT 2: Stream Segment Codes and the Associated Uses for the CSO discharge and receiving water

Discharge Number	Receiving Water	Segment Code	Aquatic Life Use
O'Brien Facility			
101	North Shore Channel	HCCA-02	CAWS A
102	North Shore Channel	HCCA-02	CAWS A
103	North Shore Channel	HCCA-02	CAWS A
104	North Shore Channel	HCCA-02	CAWS A
105	North Shore Channel	HCCA-04	CAWS A
106	North Shore Channel	HCCA-04	CAWS A
107	North Branch of Chicago River	HCC-02	CAWS A
109	Des Plaines River (Upstream of Brandon Pool)	G-28	General Use
110	North Shore Channel	HCCA-02	CAWS A
Stickney Facility			
131	Des Plaines River (Upstream of Brandon Pool)	G-28	General Use
132	Des Plaines River (Upstream of Brandon Pool)	G-28	General Use
133	Des Plaines River (Upstream of Brandon Pool)	G-15	General Use
134	Des Plaines River (Upstream of Brandon Pool)	G-30	General Use
135	Des Plaines River (Upstream of Brandon Pool)	G-30	General Use
136	Des Plaines River (Upstream of Brandon Pool)	G-32	General Use
142	S. Fork of S. Branch of Chicago River (upstream of CAWS)	HCA-01	Secondary Contact and Indigenous Aquatic Life
143	Chicago San. and Ship Canal	GI-03	CAWS B
144	Chicago San. and Ship Canal	GI-06	CAWS B
145	Chicago San. and Ship Canal	GI-06	CAWS B
146	Chicago San. and Ship Canal	GI-06	CAWS B
147	Chicago San. and Ship Canal	GI-06	CAWS B
148	Chicago San. and Ship Canal	GI-06	CAWS B
149	Chicago San. and Ship Canal	GI-06	CAWS B
150	Addison Creek (Upstream of Brandon Pool)	GLA-02	General Use
Calumet Facility			
004	Little Calumet River	HA-05	CAWS A
006	Calumet Sag Channel	H-02	CAWS A
007	Calumet Sag Channel	H-02	CAWS A
010	North Creek (upstream of CAWS)	HBAA01	General Use
151	Calumet River	HAA-01	CAWS A
152	Calumet River	HAA-01	CAWS A
153	Little Calumet River	HA-05	CAWS A
154	Calumet Sag Channel	H-02	CAWS A
156	Calumet Sag Channel	H-02	CAWS A
157	Calumet Sag Channel	H-02	CAWS A
158	Calumet Sag Channel	H-02	CAWS A
160	Calumet Sag Channel	H-02	CAWS A
163	Calumet Sag Channel	H-02	CAWS A

CERTIFICATE OF SERVICE

I, STEFANIE N. DIERS, Assistant Counsel for the Illinois EPA, herein certifies that she has served a copy of the foregoing NOTICE OF FILING and ILLINOIS EPA'S RECOMMENDATION , upon persons listed on the Service List, by sending an email from my email account (Stefanie.diers@illinois.gov) to the email addresses designated below with the following attached as a PDF document in an e-mail transmission on or before 5:00 pm on May 13, 2019.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: /s/ Stefanie Diers
Stefanie Diers
Assistant Counsel
Division of Legal Counsel

DATED: May 13, 2019

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