

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590**MAR 16 2020**

REPLY TO THE ATTENTION OF

WW-16J

Bradley P Halloran, Hearing Officer  
Illinois Pollution Control Board  
100 West Randolph, Suite 11-500  
Chicago, Illinois 60601

Re: Proposed Chloride Time-Limited Water Quality Standard for the Chicago Area Waterway System and Des Plaines River Watershed, PCB2016-014 (Consolidated)

Dear Illinois Pollution Control Board:

On December 17, 2019, the Illinois Pollution Control Board issued an Amended Hearing Officer Order providing public notice of a hearing and requesting comments from interested parties on a proposed chloride time-limited water quality standard that would apply to several waterbodies in the Chicago Area Waterway System and Des Plaines River watershed. The U.S. Environmental Protection Agency is providing the enclosed comments to assist the Board as it considers the proposed time-limited water quality standard. These comments do not reflect a final EPA position on this proposal or constitute EPA approval of any time-limited water quality standard that may be adopted and submitted. Formal EPA review can occur only after Illinois has completed its processes for public participation and adoption and submitted the adopted time-limited water quality standard to EPA for review and approval.

Thank you for the opportunity to comment on the proposed chloride time-limited water quality standard. If you have any questions regarding our comments, please contact Aaron Johnson of my staff at 312-886-6845 or [johnson.aaronk@epa.gov](mailto:johnson.aaronk@epa.gov).

Sincerely,

A handwritten signature in blue ink that reads "David Pfeifer".

*for* David Pfeifer, Chief  
Watersheds and Wetlands Branch

Enclosure

**Enclosure – EPA Comments on PCB2016-014 Chloride Time-Limited Water Quality Standard (TLWQS) for the Defined Chicago Area Waterway System and Lower Des Plaines River Watershed****Background**

In 2015, the Illinois Pollution Control Board (Board) adopted numeric chlorides criteria for protection of Illinois' aquatic life use designations for the Chicago Area Waterway System and Des Plaines River Watershed. Numerous dischargers are seeking a Time-Limited Water Quality Standard (i.e., a variance)<sup>1</sup> from Illinois' water quality standards pertaining to chlorides on the basis that "human caused conditions (i.e., reliance on salt for de-icing of roadways and thoroughfares) that cannot be remedied prevent the attainment of the water quality standards."

40 CFR § 131.14 requires that the variance satisfy the following requirements:

- The variance must include the requirements that "represent the highest attainable condition the water body or waterbody segment applicable throughout the term of the WQS variance based on the documentation required in (b)(2) of this section" (40 CFR § 131.14(b)(1)(ii)), and
- The term of the variance must "only be as long as necessary to achieve the highest attainable condition" (40 CFR § 131.14(b)(1)(iv)).

To satisfy the highest attainable condition requirements, the Board could evaluate each discharge's specific situation, identify the discharger-specific requirements necessary to achieve the highest attainable condition for each discharger, including any additional pollution control technologies that could be implemented to reduce effluent chloride loading, and grant discharger-specific variances and/or multiple discharger variance(s) with discharger-specific conditions based upon each discharger-specific evaluation, where appropriate. Alternatively, the Board is considering a collaborative watershed/workgroup-based approach that would not require an upfront evaluation of each discharger's individual ability to reduce its chloride load but would instead establish requirements to participate in the workgroup and implement Best Management Practices (BMPs) that would apply to all dischargers seeking coverage under the variance.

EPA agrees that, for widespread pollution problems, such as the application of salt for de-icing of roads, where numerous point and nonpoint sources contribute to the pollutant loading and are willing to cooperate on a pollutant reduction strategy, a collaborative watershed approach led by a watershed workgroup may be appropriate and effective. See, e.g., Essay 8.f.i.C of EPA's Response to Public Comments Water Quality Standard Regulatory Revisions. Given the number of entities contributing chloride in the watershed, EPA also agrees with the Illinois Environmental Protection Agency (Illinois EPA) that, "[u]ntil most chloride users located within

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<sup>1</sup> As discussed in the Board's April 26, 2018 Final Board Order adopting Illinois' TLWQS rules at 327 Ill. Adm. Code, Part 104, Subpart E, TLWQS are Illinois' term for water quality standards variances, as that term is defined at 40 CFR 131.3(o). For purposes of these comments, EPA will use the terms "TLWQS" and "variance" interchangeably.

the watershed have coverage under the proposed chlorides TLWQS, are participating in the chlorides watershed group and are performing the BMPs, chloride reductions will not achieve the desired goals” (Illinois EPA’s Recommendation at 12). EPA agrees that the proposed collaborative watershed approach would represent the highest attainable condition for the affected waterbodies if the variance contains enforceable conditions necessary to ensure that each entity is in fact participating in the watershed workgroup and implementing the actions recommended by the workgroup that are necessary to reduce chlorides to the greatest extent feasible. Dischargers that are not willing to accept such conditions should not be eligible for coverage under the proposed TLWQS and so would instead be subject to Illinois’ unvaried chlorides criteria unless they seek and obtain an individual variance.

To better ensure that the variance adopted by the Board contains the conditions necessary to satisfy 40 CFR § 131.14, EPA offers the comments below.

**Comment 1.** In Section 4(d) of its Revised Potential Draft Order Language, the Board proposed the following requirements regarding the information that must be included in the chloride workgroup’s annual reports:

- 2) Workgroup’s outreach strategy, including efforts to include other dischargers under the TLWQS, and outreach and training for nonpoint sources, and
- 6) Identification and description of any financial, technical, or other assistance the workgroup may be able to provide individual dischargers to overcome the impediments described in (4)(d)(4).

Given the number of entities involved and the widespread nature of the problem, such activities appear to be important components of a successful collaborative chloride reduction strategy and EPA agrees that it is important to include these requirements as conditions of the variance. As stated in EPA’s Response to Public Comments Water Quality Standard Regulatory Revisions, “[a] waterbody variance could be particularly successful where the state or authorized tribe finds that both point and NPS are willing to collaborate on a strategy to resolve the pollution challenges in the waterbody” (p. 3-319).

EPA notes that commenters questioned the authority of the Board to require dischargers to conduct these activities and proposed that these workgroup requirements be removed from Section 4(d). See, e.g., Responses of Metropolitan Water Reclamation District of Greater Chicago to Board’s Questions to Petitioners in Order of July 24, 2019 and Pre-Filed Questions of Illinois EPA Witnesses Submitted by the Illinois Environmental Regulatory Group. As noted above, the proposed collaborative watershed approach would represent the highest attainable condition for the affected waterbodies if the variance contains enforceable conditions necessary to be ensure that each entity is in fact participating in the watershed workgroup and implementing the actions recommended by the workgroup that are necessary to reduce chlorides to the greatest extent feasible. Dischargers that are not willing to accept such conditions should not be eligible for coverage under the proposed TLWQS and so would instead be subject to Illinois’ unvaried chlorides criteria unless they seek and obtain an individual variance.

**Comment 2.** As requested in the Joint Submittal, the proposed variance term is 15 years. However, based on Section 9.3 of the Joint Submittal, it appears that the identified best management practices (BMPs) proposed as the highest attainable condition for this variance (incorporated into the Board's February 13, 2020 Revised Potential Draft Order Language as Table 3) should all be completed and in place within approximately six years.

To address the BMP requirements that each discharger covered by the variance will implement after all pre-identified BMPs have been implemented, the Board's Revised Potential Draft Order Language included in its February 13, 2020 pre-filed questions includes requirements for the chloride workgroup to identify "[n]ew BMPs and treatment technologies to reduce chloride loading to the environment" (Section 4(d)(3)). Such a requirement would help ensure that dischargers covered by the variance will continue to reduce chlorides throughout the term of the variance, even after all BMPs initially identified in the Joint Submittal have been implemented.

To further ensure that the variance conditions for each discharger are updated based on new information and that dischargers covered by the variance continue to reduce chlorides to the extent achievable throughout the 15-year term of the variance, EPA suggests that the Board also make the following additions to its proposed rule language:

- (a) Revise Section 1(e) as follows: "The discharger is committed to implementing a pollutant minimization program which reduces chlorides into impacted waterways to greatest extent achievable and includes all the Best Management Practices (BMPs) identified by the Board's order granting the TLWQS and subsequently identified by the chloride workgroup in its annual reports as being achievable.
- (b) Revise Section 2(a) as follows: "The dischargers covered by this TLWQS must implement the Best Management Practices identified in Table 3 and any additional achievable Best Management Practices, including those identified by the chloride workgroup in its annual reports as being achievable according to the Implementation Schedule in Table 4."
- (c) Revise Section 3(a) as follows: By the deadline listed in Table 4, dischargers must each prepare a Pollutant Minimization Program for their own operations that identifies the steps it will take to reduce chlorides into impacted waterways to greatest extent achievable including the specific BMPs in Table 3 and those identified by the chloride workgroup in its annual reports as being achievable that it will implement along with the applicable monitoring, recordkeeping and reporting procedures, and the relevant schedule for implementation as provided in Table 4.

If the variance does not require dischargers to implement BMPs identified by the workgroup during future evaluations, a shorter variance term that reflects only the time necessary to implement the BMPs in Table 3 may be more appropriate. Similarly, if it is unclear how long each discharger will require to complete the identified BMPs, EPA suggests that a discharger-specific approach may be more appropriate.

**Comment 3.** Section 3(a) of the Board's Revised Potential Draft Order Language requires that each discharger covered by the variance "prepare a Pollutant Minimization Program [PMP] for their own operations that identifies the specific BMPs in Table 3 that it will implement along with the applicable monitoring, recordkeeping and reporting procedures, and the relevant schedule for implementation as provided in Table 4." Because these plans would allow facilities to tailor their BMP implementation to the specific sources of chloride in their effluent, EPA believes this requirement is an important component to ensure that the proposed collaborative watershed approach will achieve the greatest reductions achievable. To further strengthen this provision and ensure that these discharger-specific PMPs will achieve the highest attainable condition for the waterbody, EPA recommends that the Board include a provision in Section 3(a) requiring that these discharger-specific plans represent the plan expected to achieve the greatest achievable chloride reduction for the discharger.

Additionally, in response to commenters that questioned how these PMPs would be reviewed and implemented, Illinois EPA stated at the February 18, 2020 Board hearing that it anticipates that discharger-specific PMPs will be added to each discharger's permit at the time of permit reissuance. However, the Implementation Schedules included in Table 4 of the Board's Revised Potential Draft Order Language specifies that individual dischargers covered by the variance must prepare the PMP within "6 months *after the effective date of the variance*" (emphasis added). EPA supports the proposed language basing development and implementation of the PMPs on the effective date of the variance, not permit reissuance. While EPA believes that it may be possible to delay adding the PMP to the discharger's permit until the time of reissuance, EPA recommends that Illinois identify how the PMPs will be made available to the public and how implementation of the PMP will be enforced before the discharger's permit has been reissued.

**Comment 4.** Section 1(c) of the Board's Revised Potential Draft Order Language allows a "new source of chloride" to be eligible for coverage under the variance if it "offset[s] at least their additional loading." 40 CFR § 131.14(b)(1)(ii) provides that the variance requirements "shall not result in any lowering of the currently attained water quality, unless a WQS variance is necessary for restoration activities, consistent with paragraph (b)(2)(i)(A)(2) of this section." To be consistent with 40 CFR § 131.14(b)(1)(ii), the offset requirements included in Section 1(c) should ensure that the extension of coverage under the variance to new sources of chloride would not result in a lowering of water quality with respect to chloride.

In response to pre-filed questions from the Illinois Environmental Regulatory Group, Illinois EPA stated that its intent with the offsets is that "offsets should be achieved by actions that are not considered part of the time-limited water quality standard best management practices." EPA agrees with Illinois EPA and believes that such a condition on the offsets would be important to ensuring that such offsets are not allowing a lowering of water quality with respect to chloride.

**Comment 5.** As noted above, to ensure that the collaborative watershed/workgroup-led approach set forth in the Board's Revised Potential Draft Order Language results in the highest attainable condition, it is imperative that dischargers actually participate in and implement the results arising out of the workgroup process. To ensure that this occurs, EPA recommends that the Board make the following additions to its proposed rule language:

- (a) Revise Section 1(e) as follows: “The discharger is committed to implementing a pollutant minimization program which reduces chlorides into impacted waterways to greatest extent achievable and includes all the Best Management Practices (BMPs) identified by the Board’s order granting the TLWQS and subsequently identified by the chloride workgroup in its annual reports as being achievable. [This is the same revision recommended above in Comment 1, but these changes are included again here because they will also address EPA’s fifth comment.]
- (b) Revise Section 3(b), introductory paragraph as follows: “By the deadlines listed in Table 4, dischargers must submit an Annual Report to IEPA and the appropriate chlorides workgroup on the discharger’s prior year’s usage of deicing agents, ~~and~~ steps taken to minimize chloride use and participation in the chlorides workgroup. Dischargers must make the report publicly available and include the following:
- (c) Add the following as a new subsection at the end of Section 3(b):

**Workgroup Participation**

29) Description of the actions that the discharger took to participate in a chloride workgroup.

- (d) Add the following new Subsection 4(d)(4) (and then renumber the subsequent subsections):

4) Evaluation of the adequacy of each individual discharger’s participation in workgroup