BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

VILLAGE OF HOMEWOOD, HOMEWOOD ILLINOIS, VILLAGE OF ORLAND PARK, ORLAND PARK ILLINOIS, VILLAGE OF MIDLOTHIAN, MIDLOTHIAN ILLINOIS, VILLAGE OF TINLEY PARK, TINLEY PARK ILLINOIS, EXXONMOBIL OIL CORPORATION, VILLAGE OF WILMETTE, WILMETTE ILLINOIS, CITY OF COUNTRY CLUB HILLS, COUNTRY CLUB HILLS ILLINOIS, NORAMCO-CHICAGO, INC., FLINT HILLS RESOURCES JOLIET LLC, CITY OF EVANSTON, EVANSTON ILLINOIS, VILLAGE OF SKOKIE, SKOKIE ILLINOIS, ILLINOIS DEPARTMENT OF TRANSPORTATION, METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO, VILLAGE OF RICHTON PARK, RICHTON PARK ILLINOIS, VILLAGE OF LINCOLNWOOD, LINCOLNWOOD ILLINOIS, CITY OF OAK FOREST, OAK FOREST ILLINOIS, VILLAGE OF LYNWOOD, LYNWOOD ILLINOIS, CITGO HOLDINGS, INC., VILLAGE OF NEW LENOX, NEW LENOX, ILLINOIS, CITY OF LOCKPORT, LOCKPORT ILLINOIS, CATERPILLAR, INC., CITY OF CREST HILL, CREST HILL ILLINOIS, CITY OF JOLIET, JOLIET ILLINOIS, MORTON SALT, INC., CITY OF PALOS HEIGHTS, PALOS HEIGHTS ILLINOIS, VILLAGE OF ROMEOVILLE, ROMEOVILLE ILLINOIS, IMTT ILLINOIS LLC, STEPHA CO., VILLAGE OF PARK FOREST, PARK FOREST ILLINOIS, OZINGA READY MIX CONCREATE, INC., OZINGA MATERIALS, INC., MIDWEST MARINE TERMINALS LLC. VILLAGE OF MOKENA, MOKENA ILLINOIS, VILLAGE OF OAK LAWN, OAK LAWN ILLINOIS, VILLAGE OF DOLTON, DOLTON ILLINOIS, VILLAGE OF GLENWOOD, GLENWOOD ILLINOIS, VILLAGE OF MORTON GROVE, MORTON GROVE ILLINOIS, VILLAGE OF LANSING, LANSING ILLINOIS, VILLAGE OF FRANKFORT, FRANKFORT ILLINOIS, VILLAGE OF WINNETKA, WINNETKA ILLINOIS, VILLAGE OF LA GRANGE, LA GRANGE ILLINOIS, INOREDION, INC., VILLAGE OF CHANNAHON, CHANNAHON	**PCB 16-14 (Homewood)** **PCB 16-15 (Orland Park)** **PCB 16-16 (Midlothian)** **PCB 16-17 (Tinley Park)** **PCB 16-18 (ExxonMobil)** **PCB 16-20 (Wilmette)** **PCB 16-21 (Country Club Hills)** **PCB 16-22 (Noramco-Chicago)** **PCB 16-23 (Flint Hills Resources)** **PCB 16-25 (Evanston)** **PCB 16-26 (Skokie)** **PCB 16-27 (IDOT)** **PCB 16-29 (MWRDGC)** **PCB 16-30 (Richton Park)** **PCB 16-31 (Lincolnwood)** **PCB 16-33 (Oak Forest)** **PCB 19-7 (Village of Lynwood)** **PCB 19-8 (Citgo Holdings)** **PCB 19-9 (New Lenox)** **PCB 19-10 (Lockport)** **PCB 19-11 (Caterpillar)** **PCT 19-12 (Crest Hill)** **PCB 19-13 (Joliet)** **PCB 19-14 (Morton Salt)** **PCB 19-15 (Palos Heights)** **PCB 19-16 (Romeoville)** **PCB 19-17 (IMTT Illinois)** **PCB 19-18 (Stepan)** **PCB 19-19 (Park Forest)** **PCB 19-20 (Ozinga Ready Mix)** **PCB 19-21 (Ozinga Materials)** **PCB 19-22 (Midwest Marine)** **PCB 19-23 (Mokena)** **PCB 19-24 (Oak Lawn** **PCB** 19-25 (Dolton) **PCB** 19-26 (Glenwood) 19-27 (Morton Grove) **PCB** 19-28 (Lansing) **PCB** 19-29 (Frankfort) PCB 19-30 (Winnetka) **PCB** 19-31 (La Grange) **PCB** 19-32 (Ingredion) **PCB** 19-33 (Channahon)

ILLINOIS, COOK COUNTY DEPARTMENT OF TRANSPORTATION AND HIGHWAYS, VILLAGE OF NILES, NILES ILLINOIS, SKYWAY CONCESSION COMPANY LLC, VILLAGE OF ELWOOD, ELWOOD ILLINOIS, CITY OF CHICAGO, CHICAGO ILLINOIS, VILLAGE OF CRESTWOOD, CRESTWOOD ILLINOIS and VILLAGE OF RIVERSIDE, RIVERSIDE ILLINOIS	)	**PCB** 19-34 (CCDTH) **PCB** 19-35 (Niles) **PCB** 19-36 (Skyway) **PCB** 19-37 (Elwood) **PCB** 19-38 (Chicago) **PCB** 19-40 (Crestwood) **PCB** 19-48 (Riverside)
Petitioners,	)	
v.	)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

NOTICE OF FILING

TO: See Attached Service List

PLEASE TAKE NOTICE that on September 23, 2019, Petitioner, Metropolitan Water Reclamation District of Greater Chicago ("MWRD" or "the District") electronically filed with the Office of the Clerk of the Illinois Pollution Control Board its **Responses of Metropolitan Water Reclamation District of Greater Chicago to Board's Questions to Petitioners in Order of July 24, 2019**, copies of which are hereby served upon you.

Respectfully submitted,

Metropolitan Water Reclamation District of Greater Chicago

/s/ Fredric P. Andes
One of its Attorneys

Fredric P. Andes
BARNES & THORNBURG
One North Wacker Drive
Suite 4400
Chicago, IL 60606-2833
P: (312) 214-8310
F: (312) 759-5646
Fredric.Andes@btlaw.com

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

VILLAGE OF HOMEWOOD, HOMEWOOD ILLINOIS, VILLAGE OF ORLAND PARK, ORLAND PARK ILLINOIS, VILLAGE OF MIDLOTHIAN, MIDLOTHIAN ILLINOIS, VILLAGE OF TINLEY PARK, TINLEY PARK ILLINOIS, EXXONMOBIL OIL CORPORATION, VILLAGE OF WILMETTE, WILMETTE ILLINOIS, CITY OF COUNTRY CLUB HILLS, COUNTRY CLUB HILLS ILLINOIS, NORAMCO-CHICAGO, INC., FLINT HILLS RESOURCES JOLIET LLC, CITY OF EVANSTON, EVANSTON ILLINOIS, VILLAGE OF SKOKIE, SKOKIE ILLINOIS, ILLINOIS DEPARTMENT OF TRANSPORTATION, METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO, VILLAGE OF RICHTON PARK, RICHTON PARK ILLINOIS, VILLAGE OF LINCOLNWOOD, LINCOLNWOOD ILLINOIS, CITY OF OAK FOREST, OAK FOREST ILLINOIS, VILLAGE OF LYNWOOD, LYNWOOD ILLINOIS, CITGO HOLDINGS, INC., VILLAGE OF NEW LENOX, NEW LENOX, ILLINOIS, CITY OF LOCKPORT, LOCKPORT ILLINOIS, CATERPILLAR, INC., CITY OF CREST HILL, CREST HILL ILLINOIS, CITY OF JOLIET, JOLIET ILLINOIS, MORTON SALT, INC., CITY OF PALOS HEIGHTS, PALOS HEIGHTS ILLINOIS, VILLAGE OF ROMEOVILLE, ROMEOVILLE ILLINOIS, IMTT ILLINOIS LLC, STEPHA CO., VILLAGE OF PARK FOREST, PARK FOREST ILLINOIS, OZINGA READY MIX CONCREATE, INC., OZINGA MATERIALS, INC., MIDWEST MARINE TERMINALS LLC. VILLAGE OF MOKENA, MOKENA ILLINOIS, VILLAGE OF OAK LAWN, OAK LAWN ILLINOIS, VILLAGE OF DOLTON, DOLTON ILLINOIS, VILLAGE OF GLENWOOD, GLENWOOD ILLINOIS, VILLAGE OF MORTON GROVE, MORTON GROVE ILLINOIS, VILLAGE OF LANSING, LANSING ILLINOIS, VILLAGE OF FRANKFORT, FRANKFORT ILLINOIS, VILLAGE OF WINNETKA, WINNETKA ILLINOIS, VILLAGE OF LA GRANGE, LA	**PCB 16-14 (Homewood)** **PCB 16-15 (Orland Park)** **PCB 16-16 (Midlothian)** **PCB 16-17 (Tinley Park)** **PCB 16-18 (ExxonMobil)** **PCB 16-20 (Wilmette)** **PCB 16-21 (Country Club Hills)** **PCB 16-22 (Noramco-Chicago)** **PCB 16-23 (Flint Hills Resources)** **PCB 16-25 (Evanston)** **PCB 16-26 (Skokie)** **PCB 16-27 (IDOT)** **PCB 16-29 (MWRDGC)** **PCB 16-30 (Richton Park)** **PCB 16-31 (Lincolnwood)** **PCB 16-33 (Oak Forest)** **PCB 19-7 (Village of Lynwood)** **PCB 19-8 (Citgo Holdings)** **PCB 19-9 (New Lenox)** **PCB 19-10 (Lockport)** **PCB 19-11 (Caterpillar)** **PCT 19-12 (Crest Hill)** **PCB 19-13 (Joliet)** **PCB 19-14 (Morton Salt)** **PCB 19-15 (Palos Heights)** **PCB 19-16 (Romeoville)** **PCB 19-17 (IMTT Illinois)** **PCB 19-18 (Stepan)** **PCB 19-19 (Park Forest)** **PCB 19-20 (Ozinga Ready Mix)** **PCB 19-21 (Ozinga Materials)** **PCB 19-22 (Midwest Marine)** **PCB 19-23 (Mokena)** **PCB 19-24 (Oak Lawn** **PCB** 19-25 (Dolton) **PCB** 19-26 (Glenwood) 19-27 (Morton Grove) **PCB** 19-28 (Lansing) **PCB** 19-29 (Frankfort) PCB 19-30 (Winnetka)

GRANGE ILLINOIS, INOREDION, INC., VILLAGE OF CHANNAHON, CHANNAHON ILLINOIS, COOK COUNTY DEPARTMENT OF TRANSPORTATION AND HIGHWAYS, VILLAGE OF NILES, NILES ILLINOIS, SKYWAY CONCESSION COMPANY LLC, VILLAGE OF ELWOOD, ELWOOD ILLINOIS, CITY OF CHICAGO, CHICAGO ILLINOIS, VILLAGE OF CRESTWOOD, CRESTWOOD ILLINOIS and VILLAGE OF RIVERSIDE, RIVERSIDE ILLINOIS	)	**PCB** 19-31 (La Grange) **PCB** 19-32 (Ingredion) **PCB** 19-33 (Channahon) **PCB** 19-34 (CCDTH) **PCB** 19-35 (Niles) **PCB** 19-36 (Skyway) **PCB** 19-37 (Elwood) **PCB** 19-38 (Chicago) **PCB** 19-40 (Crestwood) **PCB** 19-48 (Riverside)
Petitioners,	)	
v.	)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

RESPONSES OF METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO TO BOARD'S QUESTIONS TO PETITIONERS IN ORDER OF JULY 24, 2019

Questions for Petitioners

13. 104.530(a)(2)
Identification of the currently applicable water quality standard for the pollutant or parameter for which a TLWQS is sought

Specific Water Quality Standards
The Joint Petition specifically identifies the currently applicable water quality standard for which a TLWQS is sought as 35 Ill. Adm. Code 302.407(g)(3). This is the 500 mg/L year-round chloride standard that applies to the CAWS/LDPR Aquatic Life Use waters. Joint Pet. at 1.2-1.3. However, while the Joint Petition identifies other waterways within the watershed that are subject to chloride standards for General Use at 35 Ill. Adm. Code 302.208(g) and the CSSC at 35 Ill. Adm. Code 303.449, it is not clear what other water quality standards for which a TLWQS is sought.

The Joint Petition states the scope of the watershed "includes some areas not covered by the Board's CAWS/LDPR water quality standards. Those areas are covered by the General Use standards, which include the winter chloride standard of 500 mg/L." Joint Pet. at 1.4. The Joint Petitioners identify the following receiving waters as General Use Waters: Hickory Creek, Union Ditch, Spring Creek, Marley Creek, and East Branch of Marley Creek. Additionally, the Joint Petition points to the CSSC and the Calumet River System, stating, "these reaches still need to be included in the TLWQS for the Watershed . . . ." Joint Pet. at 2.2. The chloride water quality

standard applicable to the CSSC is 35 Ill. Adm. Code 303.449; however, Joint Petitioners note, "[A]s to the CSSC, it is not yet known whether the site-specific criteria for that reach that were adopted by the Board will be approved by U.S. EPA. If not, then the 500 mg/L standards for the rest of the Watershed would apply." Joint Pet. at 2.2.

While both the General Use chloride standard at 35 Ill. Adm. Code 302.208(g) and the CAWS/LDPR standard at 35 Ill. Adm. Code 302.407(g)(3) are both 500 mg/L year-round, they have different sections in the Board's rules.

a) Please identify each of the currently applicable water quality standards for which a TLWQS is sought for the various use designations. Please comment on any necessary revisions to Table 1 below based on the response.

RESPONSE: Table 1 correctly sets forth the applicable water quality standards for which the TLWQS is being sought for each receiving water, except for certain portions of the Lower Des Plaines River. The portion of the river from the Kankakee River to the I-55 bridge, and the portion of the river from the confluence with the Chicago Sanitary and Ship Canal to the Will County line, are covered by the General Use standards. The remainder of the Lower Des Plaines River within the scope of this proceeding is covered by the CAWS/LDPR standards. Also, Table 1 does not identify the use designations for the various receiving waters, other than for the General Use waters. For the Chicago Sanitary and Ship Canal, the use designation is CAWS and Brandon Pool Aquatic Life Use B. For all other CAWS waters included in Table 1, the use designation is CAWS Aquatic Life Use A. For the Lower Des Plaines River, the use designations are as follows: (1) From the confluence with the Kankakee River to the I-55 bridge is General Use; (2) from the I-55 bridge to Brandon Road Lock and Dam is Upper Dresden Island Pool Aquatic Life Use; and (3) from Brandon Road Lock and Dam to the confluence with the Chicago Sanitary and Ship Canal is CAWS and Brandon Pool Aquatic Life Use B.

Seasonally Applicability of TLWQS

The information and monitoring data provided in the appendices focus on chloride levels in the winter months of December – April. For example, the Joint Petition states, "The monitoring results for chloride levels in the Watershed during the period of January 2006 through April 2017 indicate that many of the reaches do not consistently meet the water quality standards in the winter." Joint Pet. at 2.1.

While the current chloride standards for General Use at Section 302.208(g) and CAWS/LDPR at Section 302.407(g)(3) apply year-round, the previously applicable TDS/chloride standards at 302.407(g)(2) and the CSSC chloride standard at 303.449 are seasonal.

b) please clarify if petitioners are seeking a TLWQS for only the winter months of December–April. If not, please provide additional justification for including summer months.

RESPONSE: Yes, petitioners are seeking a TLWQS for only the winter months of December – April.

14. **104.530(a)(4)**
a map of the proposed watershed, water body or waterbody segment to which the TLWQS will apply, as well as a written description of the watershed, water body, or waterbody segment, including the associated segment code;

The Joint Petition lists specific waterbodies within the proposed chloride TLWQS watershed, and the individual submittals reference specific waterbodies for the locations of the discharges. (Joint Pet. at 1.4). The map of the proposed chloride watersheds (Joint Pet. App. 4) does not specifically identify these waterbodies.

i. For clarity, please specifically depict and label each of these waterbodies on the map of the proposed chloride TLWQS watersheds.

ii. Additionally, please identify each of the segments by aquatic life use for the Board's current rules.

iii. 35 IAC 104.530(a)(4) requires the "associated segment code." For the area encompassed by the outlined Proposed Chloride Watersheds, please provide the Hydrologic Unit Codes (HUC). Please depict on the map the HUC to the level that was used to delineate the outline, such as: HUC2 (Regions), HUC4 (Subregions), HUC6 (Basin), HUC8 (Subbasins), HUC10 (Watersheds), and HUC12 (Subwatersheds).

RESPONSE: A map and table are attached to this response that provide the information requested.

15. **104.530(a)(12)**
the proposed highest attainable condition of the watershed, water body, or waterbody segment identified in subsection (a)(4) expressed as set forth in Section 104.565(d)(4), including projected changes in the highest attainable condition throughout the proposed term of the TLWQS

The "highest attainable condition" is defined as the "highest attainable interim use and interim criterion" or "interim use and interim criterion" per Section 104.565(d)(4)(B)(i), (ii) (35 Ill. Adm. Code 104.565(d)(4)(B)(i), (ii)).

For an interim criterion, Joint Petitioners propose either a range from 269 to 280 mg/L or a single value of 275 mg/L chloride, where compliance would be assessed as a five-year average of the prior five winters at Lockport (representing the downstream end of CAWS) and at Channahon (representing the downstream end of LDPR). Joint Pet. at 8.2.

As a basis for the proposed interim criterion, the Joint Petition cites the winter seasonal average or estimated seasonal average chloride concentrations for the following locations: Ruby Street Bridge is 255 mg/L (2015-2017), Channahon is 199 mg/L (2017), and Lockport is 208 mg/L (2017). Joint Pet. at 8.1. Estimated chloride concentrations based on specific conductance are graphed in App. 56 as Figure 3 for Ruby Street Bridge (2016-2017), as Figures 4 and 6 for Channahon (2016-2017), and

as Figure 5 for Lockport (2007-2015). Measured weekly chloride concentrations are listed in App. 14 for Ruby Street Bridge and Channahon, and in App. 55 for Lockport, but without yearly averages.

i. Please cite the sources for the above values of 255 mg/L, 199 mg/L, and 208 mg/L.

RESPONSE: As to the 255 mg/L figure provided as to Ruby Street Bridge, the source for that figure is Appendix 56 of the Joint Petition (Table 3 on page 54). However, we believe, upon review, that the reference to that figure as reflecting data from Ruby Street is in error. The 255 mg/L figure is actually based on data from LDPRCW_03 (Oil Tank Dock), shown in that Table, while the relevant figure for Ruby Street (LDPRCW_01) is 234 mg/L. As to the 199 mg/L provided as to Channahon, a linear regression relationship was developed based on grab samples from the Oil Tank Dock and continuous specific conductance data from the USGS gage at Channahon. This relationship was then used to estimate average chloride values for the 2017 winter season (defined as December 2016 – April 2017). As to the 208 mg/L figure provided as to Lockport, that is a seasonal average for Lockport based on MWRD weekly ambient data from December 2016 – April 2017, calculated based on the data in Appendix 55.

ii. Petitioners state, "[T]he best indicator of progress in reducing chloride loading to the Watershed is going to be the long-term trend, looking at chloride levels at representative locations in the Watershed on an annual basis." Joint Pet. at 8.1. Joint Petitioners provide no specifics, however, as to how the proposed interim criterion would be implemented. Please address the following items and suggest revisions to draft Condition #5 under Question #20 below:

1. If the frequency of measurements will be specified;

RESPONSE: Yes. The frequency of measurements relative to compliance with the "highest attainable condition" levels specified above should be annual. (Data will be collected according to the procedures specified below in the Response to Question 15.ii.9.) Draft Condition #5 is not consistent with that annual frequency, so we have made suggested revisions to that condition in the attached markup.

2. If compliance with the interim criteria, after the first five years, would be assessed on an annual basis going forward using the previous 5 winters or more frequently;

RESPONSE: Compliance with the interim criteria would be assessed once every five years, based on measurements collected on a weekly basis over the previous five years.

3. If Joint Petitioners will consider proposing a new interim criterion during the 5-year re-evaluation cycles;

RESPONSE: Yes. At the end of each 5-year re-evaluation cycle, the petitioners would consider proposing a new interim criterion.

4. If the CAWS compliance point would be where MWRD conducts instream water quality sampling at the Lockport Forebay on the CSSC (RM 290.9), just upstream of the confluence with the Des Plaines River (*see* App. 56 at 2-3.);

RESPONSE: Yes.

5. If the LDPR compliance point would be the USGS gage 05539670 in Channahon, IL or the Des Plaines River at Oil Tanking (Site LPRCW_03) at River Mile 275.8 in Channahon, IL (*See* App. 14, App. 56 at 7, A-2. A-3.);

RESPONSE: The LDPR compliance point would be the USGS gage at Channahon, IL.

6. If these are the only two locations where compliance would be determined;

RESPONSE: Yes.

7. If separate compliance points are needed for the CSSC or General Use segments;

RESPONSE: No. The efforts to reduce chloride loadings are being implemented on a watershed-wide basis, so compliance with the goals should be assessed at points where the cumulative impacts of those efforts can be assessed – at Lockport and Channahon.

8. If monitoring and modeling would be required for edge of mixing zone compliance demonstrations in NPDES Permits; and

RESPONSE: No. The focus of this TLWQS, and the conditions included, is on implementation of management measures, rather than attainment of numeric effluent limits for each discharge.

9. If monitoring would be for chloride or if monitoring would be for conductance and then, using the linear regression model discussed in App. 56, be translated into an estimated chloride concentration.

RESPONSE: Chloride monitoring would be conducted weekly for the CAWS, at Lockport, since that is how chloride monitoring has historically been conducted for the CAWS. For the LDPR, at Channahon, monitoring would be for specific conductance, and those data would then be translated into estimated chloride concentrations using the linear regression model.

16. 104.530(a)(13)
a demonstration of the pollutant control activities proposed to achieve the highest attainable condition, including those activities identified through a Pollutant Minimization Program

The Joint Petition states that under the TLWQS each of the petitioners would be "required to prepare a Pollutant Minimization Plan that will identify the BMPs and the implementation deadlines for monitoring, recordkeeping, and reporting associated with the TLWQS, including appropriate documentation procedures . . . Additionally, progress reports for each petitioner will be required in an annual report that will be submitted to Illinois EPA." Joint Pet. at 9.1. For each of the discharger's source categories, the Joint Petition provides lists of BMPs and a schedule for implementation of all phases of the control program. (Joint Pet. at 2.08-2.19, 9.3-9.11)

The BMPs address deicing activities by the petitioners' own operations. The Joint Petition does not mention the contribution by entities within the jurisdiction of the petitioners, such as homeowners and facility owners whose runoff discharges to the Publicly Owned Treatment Works (POTW), MS4, or CSO. MS4 permits generally contain a public education and outreach component on storm water impacts as part of a storm water management program.

IEPA's recommendation suggests chloride workgroups conduct outreach to educate and train citizens and business on reducing chlorides. Rec. at 15. IMTT Illinois commented that public education and outreach are tasks that the General Assembly assigns to IEPA. PCB 19-17 Response to IEPA Recommendation 4-19-19 at 3.

i. Please comment on proposing language for conditions drafted below under Question #20 that addresses the workgroups' responsibilities for public education and outreach on chloride use.

RESPONSE: We do not believe that petitioners, or the workgroups, should generally be required to conduct public education and outreach to other parties. In the Petition, petitioners have identified measures to reduce chloride loadings that occur due to activities within their control. Neither IEPA nor the Board have the authority to require those petitioners to seek to convince other entities that they should take chloride reduction measures as well. While such measures can be included in MS4 permits, that is because of statutory and regulatory requirements that apply to those specific sources within the permitting program. Authority to expand these requirements to all of the chloride petitioners does not exist. Therefore, the provisions below that impose such requirements should be removed from the proposed TLWQS conditions.

ii. IEPA suggested, "In its order granting the TLWQS, . . . the Board should identify the detailed set of measures the workgroup must implement." Rec. at 15. For the conditions drafted below under Question #20, please comment on proposing a detailed set of measures the workgroup must implement.

RESPONSE: We do not agree with the proposal to impose specific, detailed measures that the workgroup must implement. In the Joint Submittal, petitioners identified certain obligations that should be collectively assumed by petitioners, in order to ensure that all petitioners are complying with applicable State and Federal TLWQS/variance requirements. Those obligations primarily concern submittal of reports, annually and at the end of each five-year period within the term of the TLWQS. It is appropriate for the Board, in the TLWQS conditions, to require the workgroups to satisfy those obligations. However, it is not appropriate, or within the Board's authority, to impose additional obligations on the workgroups. In this response, we have marked up the proposed conditions set forth below, to delete the workgroup requirements that we believe should be deleted from the TLWQS.

17. 104.530(a)(15)
a proposed re-evaluation schedule to re-evaluate the highest attainable condition during the term of the TLWQS if that proposed term is longer than five years

The Joint Petition states, "As a condition of the TLWQS, dischargers would be required to participate in the group that conducts and submits this reevaluation. As noted above, the group structures will be developed, so that Petitioners can work collectively on activities under the TLWQS that require group effort." Joint Pet. at 10.2.

IEPA's Recommendation contained a proposed condition regarding a requirement to participate in such a workgroup. Rec. Att. 1. IEPA's Recommendation pointed out that the language of the General NPDES Permit No. ILR40 Special Condition D states:

> If the permittee performs any deicing activities that can cause or contribute to a violation of an applicable State chloride water quality standard, the permittee must participate in any watershed group(s) organized to implement control measures which will reduce the chloride concentration in any receiving stream in the watershed. IEPA Rec. at 15.

IMTT Illinois requested guidance on this requirement, including the specific purpose, what the workgroup is intended to accomplish, rules of group governance, the rights of smaller and non-members, and the Board's or IEPA's authority to require membership. PCB 19-17 Response to IEPA Recommendation 4-19-19.

Since both Joint Petitioners and IEPA are proposing a requirement to participate in a chloride workgroup as a condition of the TLWQS, please comment on proposing specific language for adoption in a Board Order containing the necessary details in draft Condition 4 under Question #20 below.

RESPONSE: As noted in the Response to Question No. 15, we do not believe that the Board has authority to dictate how the workgroups conduct their activities, as long as the TLWQS requirements (such as submittal of certain reports) are satisfied. Any other details of how the work is done should be left to the workgroup members to determine

collectively. Below, we have marked up draft Condition 4 to remove specific requirements that go beyond the Board's legal authority with respect to a TLWQS.

18. 104.530(c)

For a watershed, water body, waterbody segment, or multiple discharger TLWQS, the petition or amended petition may also include proposed eligibility criteria to be adopted by the Board to be used at the time of renewal or modification of an individual's federal NPDES permit or at the time an individual files an application for certification under section 401 of the federal Clean Water Act to obtain coverage under a Board-approved TLWQS.

In proposing eligibility criteria for dischargers who are not currently petitioners but who may want coverage under the TLWQS at a future date, IEPA states, "[A]ny discharger with a new source of chloride must offset at least their additional loading before receiving coverage under the TLWQS." Rec. at 27.

a. What types of guidelines would Joint Petitioners envision for offsets?

RESPONSE: Petitioners did not propose an offset requirement, so we have not envisioned any offset guidelines. If offsets are required as to new sources of chloride, petitioners believe that this requirement should not apply to minor discharges.

b. Would these dischargers be able to receive offsets from dischargers currently covered under the TLWQS that made quantifiable and verifiable reductions?

RESPONSE: If an offset requirement is included in the TLWQS as to new sources, then petitioners believe that offsets should be obtainable from currently covered dischargers that have made quantifiable and verifiable reductions.

c. Please comment on how IEPA and the dischargers might establish a trading system for such offsets?

RESPONSE: If an offset requirement is included as to new sources, then petitioners believe that trading of credits should be allowed. We have not given detailed consideration to how such a system should be established or operated. If an offset requirement is adopted, then IEPA should be tasked with developing a trading system, in consultation with stakeholders.

19. 104.565(a)

When the Board adopts a TLWQS, the Board will maintain, in its water quality standards, the underlying designated use and criterion addressed by the TLWQS, unless the Board adopts and USEPA approves a revision to the underlying designated use and criterion consistent with 40 CFR 131.10 and 131.11.

Chloride Rulemaking. A rulemaking was filed on May 21, 2018 proposing to amend the chloride water quality standards for General Use Waters at 302.208(g). *See* In the

Matter of: Proposed Amendments to: 35 Ill. Adm. Code 302.102 and 302.208(g) Water Quality Standards for Chlorides (R18-32).[1]

The Board's current chloride water quality standard for CAWS/LDPR, besides the CSSC, is the same as the chloride water quality standard for General Use Waters. See R08-9(D) (June 18, 2015), slip op. at 12.1.

i. Since several of the Joint Petitioners are seeking the TLWQS for their discharges to General Use Waters and since the General Use chloride standard is the same as the CAWS/LDPR chloride standard, please address the potential impact of R18-32 and any proposed chloride water quality standard revisions on each individual petitioner.

RESPONSE: As to R18-32, the Board has recently granted a Motion for Extension of Time, which will allow the petitioner in that proceeding to wait until May of 2020 to submit a revised proposal to the Board for further consideration. Even if that proposal were ultimately adopted by the Board, we do not believe that it would eliminate the need for a TLWQS for the dischargers covered in the Joint Petition. However, there is no need to consider that issue in detail, given the timing of the two proceedings. It is not clear if R18-32 will proceed, and even if it does proceed, it will likely be several years before final action is taken, so we believe that its pendency should not affect or delay this TLWQS proceeding.

Compliance Strategy. The Joint Petition does not identify a strategy for eventual compliance. The Joint Petition repeatedly states, "There are no feasible options to achieve standards compliance." Joint Pet. at 2.1. While Best Management Practices will help reduce chloride loadings to the waterbodies, they are "not expected to result in compliance with the standards – certainly not at any point in the near future." Joint. Pet. at 2.4 Joint Pet. at 2.4.

The TLWQS rule provides that the Board can adopt a revision to the underlying designated use and criterion during the term of the TLWQS. *See* 35 IAC 104.565. While Joint Petitioners request a 15-year TLWQS term, no work towards proposing a revision to the underlying designated use or criterion is proposed during this extended period. After 15 years, Joint Petitioners can file for an extension, but the petition must contain "a demonstration of whether new or additional information has become available to indicate the designated use and criterion are not attainable in the future…" See 35 IAC 104.590(c)(3). Joint Petitioners have already indicated the chloride water quality standards are not attainable during the winter now or in the future, but Petitioners do not propose a strategy for eventual compliance, such as performing studies to collect new or additional information to propose a revision of the underlying designated use and/or criterion during the course of the requested 15 years.

ii. Please propose a strategy for eventual compliance.

[1] https://pcb.illinois.gov/documents/dsweb/Get/Document-89321

RESPONSE: At the end of each five-year period during the term of the TLWQS, including at the end of the full 15-year term, petitioners will be submitting a report to the Board, which will identify progress that has been made toward eventual compliance, and propose any changes to the TLWQS conditions that are believed to be reasonable steps to promote further progress. If, at the end of the 15 years, petitioners conclude, based on the information that has been collected throughout the TLWQS term, that the designated use and/or criterion are not attainable going forward, then they would expect to propose revisions of the use and/or criterion.

Aquatic Life Monitoring. Joint Petitioners make no mention of monitoring aquatic life. During the requested 15-year term, joint petitioners commit to track progress made in implementing BMPs and changes in water quality based on averaging monitoring results once after 5 years, but not aquatic life. Since chloride water quality standards are contained under the Aquatic Life Use designations, monitoring the response of aquatic life to the TLWQS throughout the term is key to ensure the proposed once-in-5-years interim criterion does not result in degradation of the indigenous aquatic life in the proposed chloride watershed.

iii. Please comment on proposing monitoring of aquatic life during the requested 15- year term to ensure the proposed once-in-5-years interim criterion does not result in degradation of the indigenous aquatic life in the propose chloride watershed and to document any improvements.

RESPONSE: The conditions specified in the Joint Petition will lead to significant reductions in chloride loadings to the watershed as compared to the present condition. Therefore, no degradation of the indigenous aquatic life in the watershed will occur. As for documenting positive changes, we do not believe that it possible, given the plethora of factors/stressors – chemical and physical – that can affect the status of indigenous aquatic life in the CAWS and the LDPR. Assessing reductions in chloride loadings and then attempting to connect those reductions to observable changes in the aquatic community is not possible or scientifically valid. Moreover, aquatic life monitoring is not included in the Federal or State requirements for TLWQS/variances, and is therefore beyond the Board's authority to include in the TLWQS.

20. 104.565(d)
All orders adopting a TLWQS will include…(3) The TLWQS requirements and conditions that apply throughout the term of the TLWQS

104.505(d)
A TLWQS, once adopted by the Board and approved by USEPA, will be the applicable standard for the purposes of the Clean Water Act in developing NPDES permit limits and requirements under 35 Ill. Adm. Code 309 for the term of the TLWQS. Any limitations and requirements necessary to implement the TLWQS will be included as enforceable conditions of the NPDES permit for any permittee granted coverage under the TLWQS by the Board or Agency.

The Joint Petition proposes specific language for some conditions and limitations that would be necessary to implement the TLWQS to include in a Board Order. IEPA's Recommendation also proposes some conditions for the TLWQS. Joint Pet. at 9.2 –

9.11; Rec. at 22-24, Att. 1. Petitioners filed responses to IEPA Recommendation on April 16, 18 and 19, 2019 with suggested revisions to the conditions. Given the wide breadth of the TLWQS with multiple dischargers over multiple watersheds with relief from multiple uses and standards, it would be helpful to all parties to see the specific proposed language of the TLWQS before the public prepares for hearing.

Please comment on the following language or propose revised language for a Board Order:

RESPONSE: Attached is a marked-up version of the language below, which reflects changes in the language for the Board Order that Petitioners believe are appropriate. The attachment does not include revised versions of the 4 Tables and 1 Figure that were appended to the Board's language and referred to in the Board's language. As to Table 1, Petitioners proposed changes to that Table in their Response to Question No. 13. As to Table 2, any Petitioners who believe that the information as to their specific facility in Table 2 is not appropriate is filing a separate response on their particular issue. As to Table 3, Petitioners note that the Board's language appears to reflect the BMPs proposed by Petitioners, as modified in IEPA's Recommendations. As the Board knows, many of the Petitioners filed comments, expressing concerns as to specific elements of IEPA's Recommendations. Subsequently, the Board, in its July 16, 2019 Order, directed IEPA to consider and provide substantive responses to those Petitioner comments. Therefore, we believe that rather than provide a marked-up version of Table 3 at this point, Petitioners think that it is more appropriate to review IEPA's response, which should include a revised set of BMPs, and then suggest any specific changes to those BMPs that might still be needed, To the extent that the Board requires a substantive response on Table 3 at this time, Petitioners would propose that the BMPs be included in the eventual Board Order as they were proposed in the Joint Petition. We continue to believe that those BMPs were legally and technically appropriate. As to Table 4 and Figure 1, Petitioners have no changes to propose.

In lieu of the applicable water quality standards for chloride and total dissolved solids for the waterways listed in Table 1 for the dischargers listed in Table 2 and the watershed depicted in Figure 1; the Board grants a Time Limited Water Quality Standard (TLWQS) for chloride subject to the following conditions.

Additional dischargers not listed in Table 2, wishing to be considered eligible under this TLWQS for chloride, must meet the Eligibility Criteria listed below and receive approval from IEPA.

a. <u>Eligibility Criteria</u>

i. A discharger must be located in the Chicago Area Waterway System (CAWS) or Lower Des Plaines River (LDPR) watersheds as identified by the Board pursuant to Section 104.565(d)(2)(A)(i).

ii. The discharger must belong to one of the classes identified by the Board pursuant to 35 Ill. Adm Code 104.540.

iii. The discharger, if a new source of chloride, must offset at least their additional loading before receiving coverage under the TLWQS.

iv. The discharger must have joined and will be participating in either the CAWS chlorides workgroup or the LDPR chlorides workgroup.

v. The discharger is committed to implementing a pollutant minimization program which includes all the Best Management Practices (BMP) identified by the Board's order granting the TLWQS.

vi. The discharger is committed to implementing any required BMP not currently being implemented within 12 months.

vii. The discharger must commit to participating in the re-evaluation proposal pursuant 35 Ill. Adm. Code Section 104.580.

viii. The discharger must submit the following information to the Illinois EPA:

1. the location of the discharger's activity and the location of the points of its discharge;

2. identification of discharger's NPDES permits;

3. identification and description of any process, activity, or source that contributes to a violation of the chlorides water quality standard, including the material used in that process or activity;

4. a description and copy of all Pollutant Minimization Plans that are currently being implemented or were implemented in the past; and

5. identification of any other BMPs being implemented to reduce chloride in the

discharge that are not identified by the Board's order granting the TLWQS.

ix. Within 90 days, IEPA must notify the discharger whether it is approved to be covered under this TLWQS.

b. Best Management Practices

i. The dischargers covered by this TLWQS must implement the Best Management Practices identified in Table 3 according to the Implementation Schedule in Table 4.

c. Individual Dischargers Covered by this TLWQS

i. By the deadline listed in Table 4, dischargers must each prepare a Pollutant Minimization Program 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.

ii. 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. Dischargers must make the report publicly available and include the following:

BMPs

1. List of the BMPs being used and to what extent

2. Analysis of BMPs that the discharger has implemented over the term of the TLWQS, including a discussion of the effectiveness and environmental impact of the BMPs, and any hinderances or any unexpected achievements or setbacks

3. Analysis of any alternative treatments or new technology that could be implemented by the discharger to reduce chloride loadings to the waterways

Deicing Agents Used

4. Types of deicing agents used and whether they are used as dry, pre-wetted, or liquid (e.g., sodium chloride rock salt, calcium chloride, magnesium chloride, calcium magnesium acetate, potassium acetate, potassium chloride, abrasives, urea, organics)

5. Estimate of the amount of chloride salt usage on in the past year and over the term of the TLWQS

6. Estimates of relative amounts applied and relative percent coverage achieved by the following types of deicing agents: dry, wet, liquid

7. Application practices used (cleared using pre-wetted salt; cleared using anti-icing)

8. Application rates (pounds/lane mile or gallons/lane mile) by deicing agent type and storm event (e.g. 1-inch storm event; long duration freezing rain event)

9. Description of how application rates varied for different types of weather and how they have changed over the term of the TLWQS.

10. Whether the use of liquids was increased, and dry chloride salt application rates were reduced

11. Callouts

    a. Summary of snowfall data

    b. Number of callouts

    c. Quantity and type of precipitation during the callout

    d. Application rate for each type of deicing agent during the callout

    e. Quantity of chloride salt used for each callout

Training

12. Annual training that was completed for the entire workforce that applied chloride-based deicing salts

13. Identification of additional training that is necessary

14. Explanation of why discharger was unable to complete the training identified in the previous annual report

Deicing and Snow Removal Equipment

15. Types and numbers of snow and/or ice removal equipment used (e.g., snow plows as well as mechanically controlled spreaders and computer-/sensor-controlled spreaders for dry solids, pre-wetted solids, or liquids)

16. Description of equipment washing as well as wash water collection and disposal or reuse for making brine

Salt Storage

17. Number of chloride salt storage areas

18. Number of chloride salt storage areas in fully enclosed structures

19. Number of chloride salt storage areas on an impervious pad

20. Number of chloride salt storage areas without a fully enclosed storage structure or impervious storage pad

21. Information on salt storage methods used to ensure good housekeeping policies are implemented (e.g., cleaned-up salt piles)

Purchases

22. Identification of necessary capital purchases and expenditures over the next three years to reduce de-icing chloride salt applications, focused on increased use of liquids and reducing chloride salt application rates as well as cleaning up salt piles. (e.g., new storage structures; new or retrofitted salt spreading

equipment necessary to allow for pre-wetting and proper rates of application)

23. Explanation of why discharger was unable to make all capital purchases and expenditures identified in the previous annual report.

Environmental Monitoring Data

24. Any changes to a facility's NPDES treatment technologies

25. NPDES effluent data, if any, for chloride discharges

26. Summary of relevant, available instream chloride monitoring data for local waterway (which may reference data gathered by State or Federal agencies or other parties)

Projections

27. Proposed steps for the coming year

28. Description of how the dischargers will implement an adaptive, iterative management approach based on reviewing annual reports to adjust salt application practices to achieve further chloride reductions in the coming year

d. <u>Chloride Workgroups</u>

i. The dischargers covered by this TLWQS must participate in a chloride workgroup whose main goals are working toward the reduction of chloride in the receiving stream and gathering information for the reevaluation.

ii. The dischargers must participate in the workgroup(s) associated with the watershed in which the discharge is located.

iii. Workgroups must convene at least semi-annually and continue meeting throughout the term of the TLWQS.

iv. By the deadlines listed in Table 4, the workgroup must submit a Status Report to IEPA and make the report publicly available. The Status Report

must compile and analyze the individual discharger Annual Reports into an watershed-wide report and include the following:

1. Chlorides monitoring data

2. Workgroup's outreach strategy, including efforts to include other dischargers under the TLWQS, and outreach and training for nonpoint sources

3. New BMPs and treatment technologies to reduce chloride loading to the environment

4. Impediments faced by dischargers under the TLWWS that prevent them from completing the training and making all capital purchases necessary to implement the required BMPs

5. Possible solutions to impediments listed in (4)(d)(4)

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)

7. Results of criteria measurement and compliance demonstration with the highest attainable condition under Item 5

v. Workgroups must prepare outreach and educational materials to create awareness about the environmental impacts of chlorides. Workgroups must share these materials with other users of road salt in their local area, including residents, road salt applicators, elected officials, and businesses. Outreach and education materials may include various forms of social media, incentives for chloride reduction, support for community-based training of commercial road salt spreaders, training for residents and other entities that apply road salt, and funding or other support to implement chloride BMPs in communities where new equipment is not affordable.

vi. Workgroups must coordinate with IEPA to identify communities located in the TLWQS watersheds who have Municipal Separate Storm Sewer System (MS4) permits. Workgroups must reach out to the MS4 communities to remind them of the general permit special condition requiring participation in a watershed chloride workgroup and provide information on participating in their workgroup. Additionally, workgroups must provide MS4 communities with their education materials.

vii. Workgroups must coordinate with IEPA to identify different nonpoint source categories beginning in year seven of the TLWQS term. Workgroups must work with IEPA to prioritize and implement education outreach efforts for nonpoint sources based on their road salting practices and proximity to surface waters.

viii. Workgroups must identify all sampling points and sampling frequency in a sampling plan to demonstrate compliance with the highest attainable condition as delineated in Item 5.

e. <u>Criteria Measurement and Compliance Demonstration</u>

i. The interim summer criterion for the months of May through November is 500 mg/L.

ii. The interim winter criterion for the months of December through April is 280 mg/L. Compliance is to be assessed as an average of the measurements during the months of December through April at the end of the first five-year term, using a 4-year seasonal average for the first re- evaluation period, and then every year thereafter.

iii. Measurements for the interim summer and winter criterion for CAWS must be based on instream water quality sampling at Lockport Forebay on the CSSC (RM 290.9) upstream of the confluence with the Des Plaines River.

iv. Measurements for the interim summer and winter criteria for LDPR must be based on instream water quality sampling at the USGS

gage 05539670 at the Des Plaines River at Oil Tanking (Site LPRCW_03) at River Mile 275.8 in Channahon, IL.

v. Measurements for the interim summer and winter criteria for General Use Waters must be based on instream water quality sampling or modeling at the edge of the permitted mixing zone.

vi. Measurements for the interim summer and winter criteria for CSSC must be based on instream water quality sampling in the CSSC near the confluence of the CSSC with LDPR.

f. <u>Re-evaluation</u>

i. By the deadlines listed in Table 4, dischargers under this TLWQS or the chloride workgroups must submit a proposed re-evaluation under 35 Ill. Adm. Code 104.580, which assesses the highest attainable condition using all existing and readily available information.

ii. To ensure that there is enough data collected to perform the re-evaluation, data collection in the receiving stream that was used in the support of this chloride TLWQS must continue.

iii. Chloride workgroups must evaluate if the chloride sampling plan and data collection needs to be expanded.

iv. At each re-evaluation, dischargers covered under this TLWQS shall evaluate each required BMP, analyze its effectiveness, and provide a recommendation about whether it should be continued as is, modified to improve its effectiveness, or eliminated. The dischargers covered under this TLWQS shall consider any new or innovative technology that could improve water quality if implemented and identify all such technologies.

g. <u>Time-Limited Water Quality Standard Term</u>

i. The term of the TLWQS expires 15 years after USEPA approval.

ii. During the 15-year term, a re-evaluation of the Highest Attainable Condition must be submitted to the Board and subsequently to USEPA six months before the end of each five-year TLWQS period. The discharges in Table 2 must participate in the group that conducts and submits this re- evaluation.

iii. If the 280 mg/L interim criterion is not attained at the end of the first five years, then the dischargers covered by this TLWQS must evaluate the feasibility of implementing additional measures beyond those identified in Tables 3 and 4 to reduce ambient chloride levels in the Watershed. The Agency is directed to modify or issue NPDES Permits for each discharger covered by this TLWQS that incorporate the conditions of this TLWQS, the Best Management Practices in Table 3, and the implementation schedule in Table 4.

Dated: September 23, 2019

Respectfully submitted,

Metropolitan Water Reclamation District of Greater Chicago

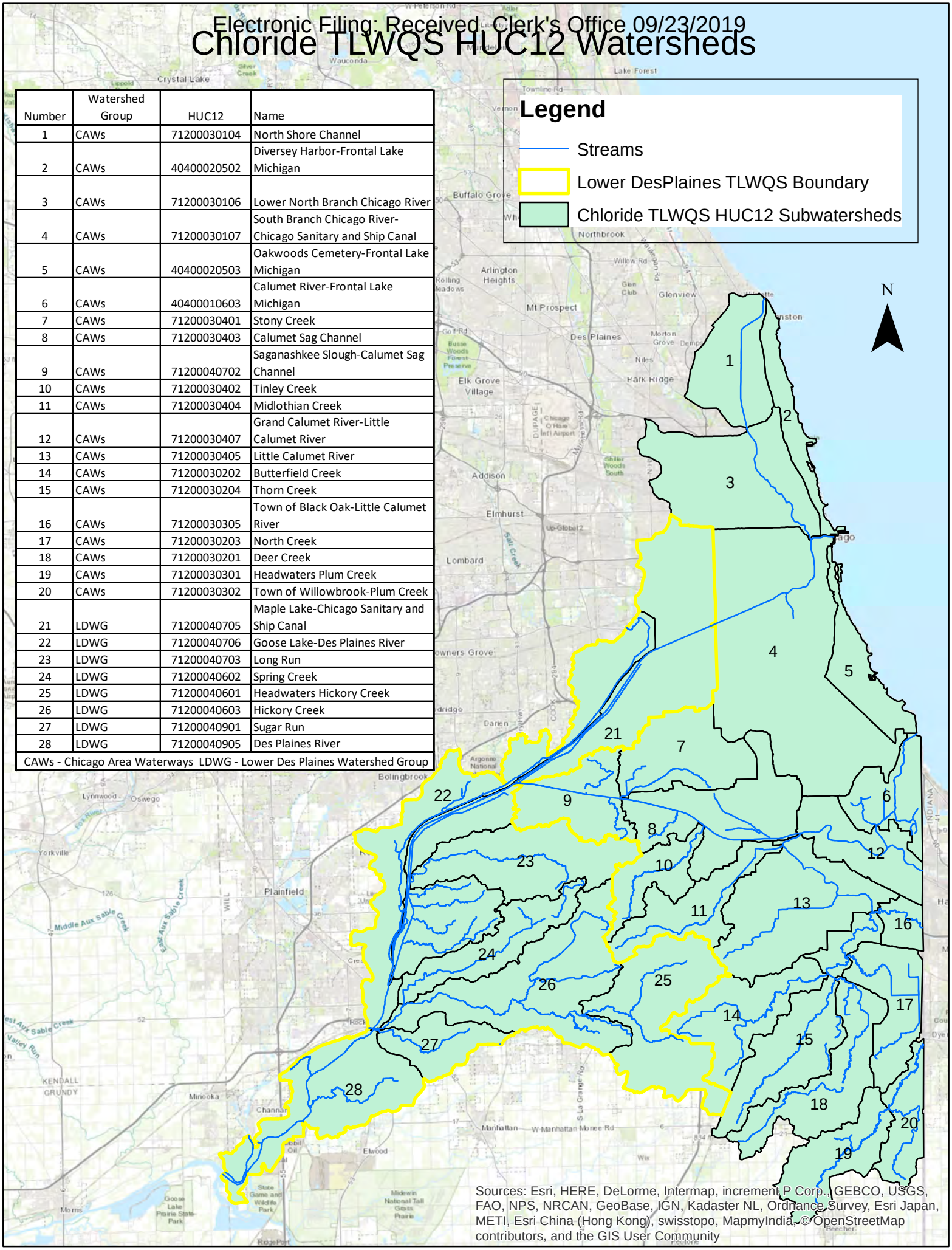
/s/ Fredric P. Andes
One of its Attorneys

Fredric P. Andes
BARNES & THORNBURG
One North Wacker Drive
Suite 4400
Chicago, IL 60606-2833
P: (312) 214-8310
F: (312) 759-5646
Fredric.Andes@btlaw.com

Chloride TLWQS HUC12 Watersheds

Number	Watershed Group	HUC12	Name
1	CAWs	71200030104	North Shore Channel
2	CAWs	40400020502	Diversey Harbor-Frontal Lake Michigan
3	CAWs	71200030106	Lower North Branch Chicago River
4	CAWs	71200030107	South Branch Chicago River-Chicago Sanitary and Ship Canal
5	CAWs	40400020503	Oakwoods Cemetery-Frontal Lake Michigan
6	CAWs	40400010603	Calumet River-Frontal Lake Michigan
7	CAWs	71200030401	Stony Creek
8	CAWs	71200030403	Calumet Sag Channel
9	CAWs	71200040702	Saganashkee Slough-Calumet Sag Channel
10	CAWs	71200030402	Tinley Creek
11	CAWs	71200030404	Midlothian Creek
12	CAWs	71200030407	Grand Calumet River-Little Calumet River
13	CAWs	71200030405	Little Calumet River
14	CAWs	71200030202	Butterfield Creek
15	CAWs	71200030204	Thorn Creek
16	CAWs	71200030305	Town of Black Oak-Little Calumet River
17	CAWs	71200030203	North Creek
18	CAWs	71200030201	Deer Creek
19	CAWs	71200030301	Headwaters Plum Creek
20	CAWs	71200030302	Town of Willowbrook-Plum Creek
21	LDWG	71200040705	Maple Lake-Chicago Sanitary and Ship Canal
22	LDWG	71200040706	Goose Lake-Des Plaines River
23	LDWG	71200040703	Long Run
24	LDWG	71200040602	Spring Creek
25	LDWG	71200040601	Headwaters Hickory Creek
26	LDWG	71200040603	Hickory Creek
27	LDWG	71200040901	Sugar Run
28	LDWG	71200040905	Des Plaines River

CAWs - Chicago Area Waterways LDWG - Lower Des Plaines Watershed Group



Waterway	12-Digit HUC	IEPA Segment Codes	Aquatic Life Use Designation	Generally Applicable Water Quality Standard 35 Ill. Adm. Code
North Shore Channel	071200030104	HCCA-02 HCCA-04	CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
North Branch Chicago River	071200030106	HCC-02 HCC-08	CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
Chicago River	071200030107	HCB-01	General Use	302.208(g) 500 mg/L Chloride Year Round
South Branch Chicago River	071200030107	HC-01	CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
Chicago Sanitary and Ship Canal	071200030107, 071200040705	GI-03 GI-06 GI-02	CAWS and Brandon Road Pool ALU B	303.449 500 mg/L Chloride May-Nov. 990 mg/L Acute, Dec-April 620 mg/L Chronic, Dec-April
Cal-Sag Channel	071200030403, 071200040702	H-02 H-01	CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
Little Calumet River North	071200030407	HA-05 HA-04	CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
				302.407(g)(3)

Grand Calumet River	071200030407	HAB-41	CAWS ALU A	500 mg/L Chloride Year Round
Calumet River	040400010603	HAA-01	CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
Lake Calumet Connecting Channel	040400010603		CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
Lake Calumet	040400010603	IL_RHO	CAWS ALU A	302.407(g)(3) 500 mg/L Chloride Year Round
Lower Des Plaines River - LDPR				
Des Plaines River from Kankakee to Will County Line	071200040705 071200040706	IL_G-03 IL_G-11 IL_G-12 IL_G-23 IL_G-24 IL_G-39	General Use	302.208(g) 500 mg/L Chloride Year Round
Hickory Creek	071200040601 071200040603	IL_GG-04 IL_GG-06 IL_GG-22	General Use	302.208(g) 500 mg/L Chloride Year Round
Union Ditch	071200040601	IL_GG-FN-A1 IL_GG-FN-C1	General Use	302.208(g) 500 mg/L Chloride Year Round
Spring Creek	071200040602	IL_GGA-02	General Use	302.208(g) 500 mg/L Chloride Year Round
Marley Creek	071200040603	IL_GGB-01	General Use	302.208(g) 500 mg/L Chloride Year Round
				302.208(g)

East Branch Marley Creek	071200040603	NA	General Use	500 mg/L Chloride Year Round

ATTACHMENT TO PETITIONERS' RESPONSES
TO BOARD QUESTIONS RE QUESTION 20:
PROPOSED REVISIONS TO BOARD'S PROPOSED ORDER
LANGUAGE FOR CHLORIDE WATERSHED TLWQS

In lieu of the applicable water quality standards for chloride and total dissolved solids for the waterways listed in Table 1 for the dischargers listed in Table 2 and the watershed depicted in Figure 1; the Board grants a Time Limited Water Quality Standard (TLWQS) for chloride subject to the following conditions.

Additional dischargers not listed in Table 2, wishing to be considered eligible under this TLWQS for chloride, must meet the Eligibility Criteria listed below and receive approval from IEPA.

1. Eligibility Criteria

a) *A discharger must be located in the Chicago Area Waterway System (CAWS) or Lower Des Plaines River (LDPR) watersheds as identified by the Board pursuant to Section 104.565(d)(2)(A)(i).*

b) *The discharger must belong to one of the classes identified by the Board pursuant to 35 Ill. Adm Code 104.540.*

c) *The discharger, if a significant new source of chloride, must offset at least their additional loading before receiving coverage under the TLWQS.*

d) *The discharger must have joined and will be participating in either the CAWS chlorides workgroup or the LDPR chlorides workgroup.*

e) *The discharger is committed to implementing a pollutant minimization program which includes all the Best Management Practices (BMP) identified by the Board's order granting the TLWQS.*

f) *The discharger is committed to implementing any required BMP not currently being implemented within 12 months.*

g) *The discharger must commit to participating in the re-evaluation proposal pursuant 35 Ill. Adm. Code Section 104.580.*

h) *The discharger must submit the following information to the Illinois EPA:*

1) *the location of the discharger's activity and the location of the points of its discharge;*

2) *identification of discharger's NPDES permits;*

3) *identification and description of any process, activity, or source that contributes to a violation of the chlorides water quality standard, including the material used in that process or activity;*

4) *a description and copy of all Pollutant Minimization Plans that are currently being implemented or were implemented in the past; and*

5) *identification of any other BMPs being implemented to reduce chloride in the discharge that are not identified by the Board's order granting the TLWQS.*

i) *Within 90 days, IEPA must notify the discharger whether it is approved to be covered under this TLWQS.*

2. Best Management Practices

a) *The dischargers covered by this TLWQS must implement the Best Management Practices identified in Table 3 according to the Implementation Schedule in Table 4.*

3. Individual Dischargers Covered by this TLWQS

a) *By the deadline listed in Table 4, dischargers must each prepare a Pollutant Minimization Program 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.*

b) *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. Dischargers must make the report publicly available (which may be done through inclusion of the report on the workgroup's web site) and include the following:*

BMPs

1) *List of the BMPs being used and to what extent*

2) *Analysis of BMPs that the discharger has implemented over the term of the TLWQS, including a discussion of the effectiveness and environmental impact of the BMPs, and any hinderances or any unexpected achievements or setbacks*

3) *Analysis of any alternative treatments or new technology that could be implemented by the discharger to reduce chloride loadings to the waterways*

Deicing Agents Used

4) *Types of deicing agents used and whether they are used as dry, pre-wetted, or liquid (e.g., sodium chloride rock salt, calcium chloride, magnesium chloride, calcium magnesium acetate, potassium acetate, potassium chloride, abrasives, urea, organics)*

5) *Estimate of the amount of chloride salt usage on in the past year and over the term of the TLWQS*

6) *Estimates of relative amounts applied and relative percent coverage achieved by the following types of deicing agents: dry, wet, liquid*

7) *Application practices used (cleared using pre-wetted salt; cleared using anti-icing)*

8) *Application rates (pounds/lane mile or gallons/lane mile) by deicing agent type and storm event (e.g. 1-inch storm event; long duration freezing rain event)*

9) *Description of how application rates varied for different types of weather and how they have changed over the term of the TLWQS.*

10) *Whether the use of liquids was increased, and dry chloride salt application rates were reduced*

11) *Callouts*

a) Summary of snowfall data

b) Number of callouts

c) Quantity and type of precipitation during the callout

d) Application rate for each type of deicing agent during the callout

e) Quantity of chloride salt used for each callout

Training

12) *Annual training that was completed for the entire workforce that applied chloride-based deicing salts*

13) *Identification of additional training that is necessary*

14) *Explanation of why discharger was unable to complete the training identified in the previous annual report*

Deicing and Snow Removal Equipment

15) *Types and numbers of snow and/or ice removal equipment used (e.g., snow plows as well as mechanically controlled spreaders and computer-/sensor-controlled spreaders for dry solids, pre-wetted solids, or liquids)*

16) *Description of equipment washing as well as wash water collection and disposal or reuse for making brine*

Salt Storage

17) *Number of chloride salt storage areas*

18) *Number of chloride salt storage areas in fully enclosed structures*

19) *Number of chloride salt storage areas on an impervious pad*

20) *Number of chloride salt storage areas without a fully enclosed storage structure or impervious storage pad*

21) *Information on salt storage methods used to ensure good housekeeping policies are implemented (e.g., cleaned-up salt piles)*

Purchases

22) *Identification of necessary capital purchases and expenditures over the next three years to reduce de-icing chloride salt applications, focused on increased use of liquids and reducing chloride salt application rates as well as cleaning up salt piles. (e.g., new storage structures; new or retrofitted salt spreading equipment necessary to allow for pre-wetting and proper rates of application)*

23) *Explanation of why discharger was unable to make all capital purchases and expenditures identified in the previous annual report.*

Environmental Monitoring Data

24) *Any changes to a facility's NPDES treatment technologies*

25) *NPDES effluent data, if any, for chloride discharges*

26) *Summary of relevant, available instream chloride monitoring data for local waterway (which may reference data gathered by State or Federal agencies or other parties)*

Projections

27) *Proposed steps for the coming year*

28) *Description of how the dischargers will implement an adaptive, iterative management approach based on reviewing annual reports to adjust salt application practices to achieve further chloride reductions in the coming year*

4. Chloride Workgroups

a) *The dischargers covered by this TLWQS must participate in a chloride workgroup whose main goals are working toward the reduction of chloride in the receiving stream and gathering information for the reevaluation.*

b) *The dischargers must participate in the workgroup(s) associated with the watershed in which the discharge is located.*

~~c) Workgroups must convene at least semi-annually and continue meeting throughout the term of the TLWQS.~~

~~d)~~c) *By the deadlines listed in Table 4, the workgroup must submit a Status Report to IEPA and make the report publicly available (which may be done through inclusion of the report on the workgroup's web site). The Status Report must compile and analyze the individual discharger Annual Reports into an watershed-wide report and include the following:*

1) *Chlorides monitoring data*

~~2) Workgroup's outreach strategy, including efforts to include other dischargers under the TLWQS, and outreach and training for nonpoint sources~~

~~3)~~2) *New BMPs and treatment technologies to reduce chloride loading to the environment*

~~4)~~3) *Impediments faced by dischargers under the TLWQ~~W~~S that prevent them from completing the training and making all capital purchases necessary to implement the required BMPs*

~~5)~~4) *Possible solutions to impediments listed in (4)(~~d~~c)(~~4~~3)*

~~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)~~

~~7)~~5) *Results of criteria measurement and compliance demonstration with the highest attainable condition under Item 5*

~~e) Workgroups must prepare outreach and educational materials to create awareness about the environmental impacts of chlorides. Workgroups must share these materials with other users of road salt in their local area, including residents, road salt applicators, elected officials, and businesses. Outreach and education materials may include various forms of social media, incentives for chloride reduction, support for community-based training of commercial road salt spreaders, training for residents and other entities that apply road salt, and funding or other support to implement chloride BMPs in communities where new equipment is not affordable.~~

~~f) Workgroups must coordinate with IEPA to identify communities located in the TLWQS watersheds who have Municipal Separate Storm Sewer System (MS4) permits. Workgroups must reach out to the MS4 communities to remind them of the general permit special condition requiring participation in a watershed chloride workgroup and provide information on participating in their workgroup. Additionally, workgroups must provide MS4 communities with their education materials.~~

~~g) Workgroups must coordinate with IEPA to identify different nonpoint source categories beginning in year seven of the TLWQS term. Workgroups must work with IEPA to prioritize and implement education outreach efforts for nonpoint sources based on their road salting practices and proximity to surface waters.~~

~~h)~~d) *Workgroups must identify all sampling points and sampling frequency in a sampling plan to demonstrate compliance with the highest attainable condition as delineated in Item 5.*

5. Criteria Measurement and Compliance Demonstration

~~a) The interim summer criterion for the months of May through November is 500 mg/L.~~

~~b)~~a) *The interim winter criterion for the months of December through April is 280 mg/L. Compliance is to be assessed as an average of the measurements during the months of December through April at the end of the first five-year term, using a 4-year seasonal average for the first re- evaluation period, and then every five years thereafter.*

~~c)~~b) *Measurements for the interim ~~summer and~~ winter criterion for CAWS must be based on instream water quality sampling at Lockport Forebay on the CSSC (RM 290.9) upstream of the confluence with the Des Plaines River.*

~~d)~~c) *Measurements for the interim ~~summer and~~ winter ~~criteria~~criterion for LDPR must be based on instream water quality ~~sampling~~monitoring at the USGS gage 05539670 ~~at the Des Plaines River at Oil Tanking (Site LPRCW_03) at River Mile 275.8~~ in Channahon, IL.*

~~e) Measurements for the interim summer and winter criteria for General Use Waters must be based on instream water quality sampling or modeling at the edge of the permitted mixing zone.~~

~~f) Measurements for the interim summer and winter criteria for CSSC must be based on instream water quality sampling in the CSSC near the confluence of the CSSC with LDPR.~~

6. Re-evaluation

a) *By the deadlines listed in Table 4, dischargers under this TLWQS or the chloride workgroups must submit a proposed re-evaluation under 35 Ill. Adm. Code 104.580, which assesses the highest attainable condition using all existing and readily available information.*

b) *To ensure that there is enough data collected to perform the re-evaluation, the chloride workgroups must conduct sufficient data collection in the receiving stream ~~that was used in the support of this chloride TLWQS must continue~~.*

c) *Chloride workgroups must evaluate if the chloride sampling plan and data collection needs to be expanded or otherwise modified.*

d) *At each re-evaluation, dischargers covered under this TLWQS or the chloride workgroups shall evaluate each required BMP, analyze its effectiveness, and provide a recommendation about whether it should be continued as is, modified to improve its effectiveness, or eliminated. The dischargers covered under this TLWQS or the chloride workgroups shall consider any new or innovative technology that could improve water quality if implemented and identify all such technologies.*

7. Time-Limited Water Quality Standard Term

a) *The term of the TLWQS expires 15 years after USEPA approval.*

b) *During the 15-year term, a re-evaluation of the Highest Attainable Condition must be submitted to the Board and subsequently to USEPA six months before the end of each five-year TLWQS period. The discharges in Table 2 must participate in the group that conducts and submits this re- evaluation.*

c) *If the 280 mg/L interim criterion is not attained at the end of the first five years, then the dischargers covered by this TLWQS must evaluate the feasibility of implementing additional measures beyond those identified in Tables 3 and 4 to reduce ambient chloride levels in the Watershed. The Agency is directed to modify or issue NPDES Permits for each discharger covered by this TLWQS that incorporate the conditions of this TLWQS, the Best Management Practices in Table 3, and the implementation schedule in Table 4.*

CERTIFICATE OF SERVICE

The undersigned attorney certified, under the penalties of perjury pursuant to 735 ILCS 5/1-109, that he caused a copy of the foregoing **Responses of Metropolitan Water Reclamation District of Greater Chicago to Board's Questions to Petitioners in Order of July 24, 2019** to be served via electronic mail (from Fredric.Andes@btlaw.com) the 23rd day of September, 2019 to the individuals listed on the attached service list.

/s/ Fred P. Andes
Fredric P. Andes

SERVICE LIST

Bradley P. Halloran, Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center, Suite 11-500
100 W. Randolph Street
Chicago, IL 60601

Don Brown, Clerk of the Board
Illinois Pollution Control Board
James R. Thompson Center, Suite 11-500
100 W. Randolph Street
Chicago, IL 60601

PCB 2016-014@
Sara Terranova
IEPA
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

PCB 2016-014@
Christopher J. Cummings
Christopher J. Cummings, P.C.
2014 Hickory Road
Suite 205
Homewood, IL 60430

PCB 2016-014@
Stefanie N. Diers
IEPA
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

PCB 2016-014@
Albert Ettinger
Law Firm of Albert Ettinger
53 W. Jackson
Suite 1664
Chicago, IL 60604

PCB 2016-015@
Dennis Walsh
Klein, Thorpe & Jenkins
15010 S. Ravinia Avenue
Suite 17
Orland Park, IL 60477

PCB 2016-015@
E. Kenneth Friker
Klein, Thorpe & Jenkins
15010 S. Ravinia Avenue
Suite 17
Orland Park, IL 60477

PCB 2016-016@
David J. Freeman
Robbins, Schwartz, Nicholas,
Lifton & Taylor, Ltd
631 E. Boughton Road
Suite 200
Bolingbrook, IL 60440

PCB 2016-016@
Peter Murphy
11800 S. 75th Avenue
Suite 101
Palos Heights, IL 60463

PCB 2016-017@
Dennis Walsh
Klein, Thorpe & Jenkins
15010 S. Ravinia Avenue
Suite 17
Orland Park, IL 60477

PCB 2016-018@
Katherine D. Hodge
Heplerbroom, LLC
4340 Acer Grove Drive
Springfield, IL 62711

PCB 2016-020@
Dennis Walsh
Tressler, LLP
233 S. Wacker Drive
22nd Floor
Chicago, IL 60606

PCB 2016-021@
Amber M. Samuelson
Rosenthal, Murphey, Coblentz
& Donahue
30 N. LaSalle Street, Suite 1624
Chicago, IL 60602

PCB 2016-021@
Peter D. Coblentz
Rosenthal, Murphey, Coblentz
& Donahue
30 N. LaSalle Street, Suite 1624
Chicago, IL 60602

PCB 2016-022@
John P. Antonopoulos
Antonopoulos & Virtel, PC
15419 127th Street
Suite 100
Lemont, IL 60439

PCB 2016-023@
Katherine D. Hodge
Heplerbroom, LLC
4340 Acer Grove Drive
Springfield, IL 62711

PCB 2016-023@
Joshua Houser
Heplerbroom, LLC
4340 Acer Grove Drive
Springfield, IL 62711

PCB 2016-025@
David Stoneback, Director
City of Evanston
555 Lincoln St.
Evanston, IL 60201

PCB 2016-025@
Mario Treto
Corporation Counsel
City of Evanston Law Department
2100 Ridge Road
Evanston, IL 60201

PCB 2016-025@
Lindsey Ott
City of Evanston
555 Lincoln St.
Evanston, IL 60201

PCB 2016-026@
James G. McCarthy
Village of Skokie
5127 Oakton Street
Skokie, IL 60077

PCB 2016-026@
Melanie Pettway
Village of Skokie
5127 Oakton Street
Skokie, IL 60077

PCB 2016-026@
Michael M. Lorge
Village of Skokie
5127 Oakton Street
Skokie, IL 60077

PCB 2016-027@
Matthew D. Dougherty
Special Assistant Attorney General
Illinois Dept. of Transportation
2300 S. Dirksen Parkway
Springfield, IL 62764

PCB 2016-029@
Margaret T. Conway
Metropolitan Water Reclamation
District
100 E. Erie Street
Chicago, IL 60611

PCB 2016-029@
Fredric P. Andes
Barnes & Thornburg
1 N. Wacker Drive
Suite 4400
Chicago, IL 60606

PCB 2016-030@
Amber M. Samuelson
Rosenthal, Murphey, Coblentz
& Donahue
30 N. LaSalle Street, Suite 1624
Chicago, IL 60602

PCB 2016-030@
Peter D. Coblentz
Rosenthal, Murphey Coblentz
& Donahue
30 N. LaSalle Street, Suite 1624
Chicago, IL 60602

PCB 2016-031@
Andrew N. Fiske
Holland & Knight LLC
131 S. Dearborn Street
30th floor
Chicago, IL 60603

PCB 2016-031@
Hart M. Passman
Holland & Knight LLC
131 S. Dearborn Street
30th Floor
Chicago, IL 60603

PCB 2016-031@
Steven M. Elrod
Holland & Knight LLC
131 S. Dearborn Street
30th Floor
Chicago, IL 60603

PCB 2016-033@
Richard Rinchich
Director of Public Works
City of Oak Forest
15440 S. Central Avenue
Oak Forest, IL 60452

PCB 2016-033@
Dennis G. Walsh
Klein, Thorpe & Jenkins, Ltd.
20 N. Wacker Drive
Suite 1660
Chicago, IL 60606

PCB 2016-033@
Erin K. Lavery
Klein, Thorpe & Jenkins, Ltd.
20 N. Wacker Drive
Suite 1660
Chicago, IL 60606

PCB 2016-033@
Scott F. Uhler
Klein, Thorpe & Jenkins, Ltd.
20 N. Wacker Drive
Suite 1660
Chicago, IL 60606