

**Metropolitan Water Reclamation District of Greater Chicago  
Amended Petition for Variance (TLWQS) from Dissolved Oxygen Standards  
Response to Comments from Environmental Groups and USEPA**

**Response to Environmental Groups**

A variance<sup>1</sup> petition should be granted only if it meets the following criteria:

- ) It is clearly limited to violations of DO standards caused by combined sewer overflows (“CSOs”),

*RESPONSE: MWRD has amended its Petition for Variance from Dissolved Oxygen Standards to clarify that the variance would apply only to DO-related provisions applicable to CSO discharges governed by the Permits issued to its O’Brien, Stickney, and Calumet wastewater treatment plants, but not to the discharges from the Plants themselves.*

- ) It requires proper reports on the effects on DO levels of the completion of the Tunnel and Reservoir Project (“TARP”) that are based on adequate DO monitoring,

*RESPONSE: MWRD has amended the Petition to add DO monitoring at Church Street on the North Shore Channel, and to specify that the evaluation of feasible options to further increase DO levels will include consideration of non-TARP measures to such as green infrastructure to reduce CSO discharges and DO violations resulting from CSO discharges. In addition, the Petition now indicates that MWRD will include its reports in any future petition for a DO variance for CSO discharges in subsequent permit terms.*

- ) It contains a clear ending date for the life of the variance, and

*RESPONSE: MWRD has amended the Petition to specify that the ending date for the life of the variance will be five years from the date of EPA approval of the variance.*

- ) It complies with the new federal requirements for variances, adopted in August 2015 and codified at 40 CFR 131.14, so as to be approvable by USEPA.

*RESPONSE: MWRD has amended the Petition to address the requirements contained in 40 CFR 131.14.*

**Response to USEPA**

**A. Public Process**

Illinois should ensure that the public process requirements for water quality standards (WQS) be followed for this action. For clarity, this requirement includes, but is not limited to, having a hearing, providing notice of the hearing 45 days prior to the hearing, and providing relevant documents for review 30 days prior to the hearing. To the extent that Illinois or the Metropolitan

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<sup>1</sup> At the time that the USEPA and Environmental Group comments were submitted, the MWRD’s Petition was for a variance. Under the new rules issued by the Board, that Petition is now for a time-limited water quality standard (TLWQS), which will be subject to approval by USEPA as a variance under applicable Federal rules. For convenience and to lessen confusion, this document will continue to use the term “variance.”

Water Reclamation District (MWRD) has questions about the requirement, further details can be provided by U.S. Environmental Protection Agency staff.

*RESPONSE: MWRD has no objection to Illinois providing a hearing, notice of hearing, and review of documents prior to the hearing. However, those must be provided in a manner consistent with applicable state regulations governing variances. MWRD will cooperate with Illinois EPA to ensure that all federal and state public process requirements are fulfilled.*

B. Demonstrating Nonattainment

1. The combined sewer overflow (CSO) outfalls listed in the permit to which MWRD proposes that the variance apply include outfalls that occur outside of the Chicago Area Waterway System (CAWS). However, it appears that the justification provided by MWRD related to nonattainment applies only to the CAWS. As such, MWRD should remove the CSOs that discharge outside the CAWS from the variance petition or justify why the variance should extend to these additional CSO locations.

*RESPONSE: MWRD has included in the Amended Petition all CSO locations discharging upstream of or directly to the CAWS. The variance, however, is requested only for the receiving waters located within the CAWS. To the extent that any CSOs upstream of the CAWS might contribute to exceedances of the applicable dissolved oxygen standards within the CAWS, those locations should be included as well.*

2. If the analyses reported in Exhibit A are unable to be separated to discern CSO vs. non-CSO related dissolved oxygen (DO) impairments, the analyses do not appear to provide sufficient support that the CSO-discharge variance is necessary. Please clarify the data used in Exhibit A and explain how the analyses are relevant to the need for a CSO-related variance from applicable DO standards.

*RESPONSE: The data contained in Appendix A to the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition were intended to demonstrate that none of the reaches in the CAWS are consistently attaining the DO criteria associated with Aquatic Life Uses A and B. The link between CSO discharges and nonattainment of the DO criteria associated with Aquatic Life Uses A and B is discussed in more detail below, but was not the focus of Appendix A. However, the complaint filed by the United States on behalf of USEPA pertained only to CSO discharges, and specifically alleged that such discharges cause or contribute to violations of applicable water quality standards for dissolved oxygen. Consent Decree at page 4. MWRD's NPDES Permits prohibit CSO discharges from causing or contributing to violations of water quality standards, including those established in the R2008-09 CAWS rulemaking. Because CSO discharges have been alleged by EPA to be violating those NPDES Permit conditions, a variance is necessary for MWRD's CSO discharges while its CSO reduction efforts are underway.*

3. With regards to the citation to the testimony of Samuel G. Dennison concerning DO issues that was filed in the CAWS Use Attainability Analysis (UAA) rulemaking, please add information on which pages and what specific information in the testimony are relevant to the documentation of nonattainment. Also, additional details about how this testimony is relevant to the question of CSOs causing nonattainment should be added.

*RESPONSE: Dr. Dennison's testimony at pages 3-4 discusses the low level of DO attainment in the CAWS, in addition to his Attachment 3, which shows DO levels in the CAWS after an*

*example wet weather event in August 2006. He indicates that the effect on DO in the CAWS from combined sewer overflows can last for days following a storm event. Further, the complaint filed by the United States on behalf of USEPA pertained only to CSO discharges, and alleged that such discharges cause or contribute to violations of applicable water quality standards for dissolved oxygen. Consent Decree at page 4.*

4. As it related to CSOs, can you further explain under what circumstances the model predicts DO nonattainment and where specifically is it expected? If the analyses reported in this study are unable to be separated to discern CSO vs. non-CSO related DO impairments, it is questionable whether the study supports that the variance is necessary.

*RESPONSE: Dr. Dennison's testimony on page 4 indicates that CSOs do not impact all of the CAWS at the same time or in the same manner following rain events, as illustrated by his Attachment 3, which shows DO levels in the CAWS after an example wet weather event in August 2006. As Dr. Melching explains in his July 2008 Technical Memorandum (TM) (part of Exhibit I to the Amended Petition), the percentage of impervious area varies substantially throughout the CAWS watershed and the rainfall varies substantially throughout the CAWS watershed and among events. TM at page 3.*

*In his 2014 report concerning the impact of discretionary diversion on CAWS water quality (Appendix D to the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition), Dr. Melching notes that the CAWS receives substantial loadings from nearly 240 gravity CSOs and 3 CSO pumping stations. App. D at page 16. Because it is practically difficult to introduce all 240 CSOs in the modeled portion of the CAWS, Dr. Melching indicated that representative CSO locations were used. TM at page 4; App. D at page 24. In certain portions of the CAWS, Dr. Melching indicates that CSO flows dominate the stream flow and water quality in the channel; in other areas of the CAWS, the CSO flows are not as dominant. TM at page 4; App. D at pages 24, 26. Calibration of the model was specifically intended to capture low DO concentrations resulting from CSO discharges. TM at page 7; App. D at page 70. Dr. Melching noted that especially after large storms, low DO concentrations were observed for an extended period of time, including two critical time periods during the calibration period in which the proposed DO standards would not be met at almost all locations. TM at page 12.*

*Finally, Appendix B to the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition includes DO data from selected locations in the CAWS during August and September 2014. These data show how a series of wet weather events affected DO levels in the North Shore Channel, the North Branch Chicago River, the South Branch Chicago River, the Chicago Sanitary and Ship Canal, the Little Calumet River, and the Cal-Sag Channel. MWRD believes that both the model and subsequent wet weather data support the conclusion that CSO discharges in the CAWS cause or contribute to nonattainment of the DO criteria associated with Aquatic Life Uses A and B. Further, the complaint filed by the United States on behalf of USEPA pertained only to CSO discharges, and specifically alleged that such discharges cause or contribute to violations of applicable water quality standards for dissolved oxygen. Consent Decree at page 4.*

5. With regards to Exhibit B, has information been provided for locations downstream of each of the CSOs to be covered in the variance? The analysis for the variance must ensure a CSO-by-CSO justification that the discharge should be covered.

*RESPONSE: Appendix B to the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition was intended to provide data representative of the various reaches of the CAWS. As Dr. Melching noted, there are approximately 240 CSO locations in the CAWS (TM at page 4), 37 of which are included in the MWRD Amended Petition. A map of the MWRD CSO locations is provided as Exhibit B to the Amended Petition. It is virtually impossible to isolate the effects of a single CSO discharge point on a flowing system continually affected by upstream conditions and hundreds of CSOs. As a result, it is not necessary or reasonable to provide a CSO-by-CSO justification to conclude that CSO discharges in the CAWS cause or contribute to nonattainment of the DO criteria associated with Aquatic Life Uses A and B.*

6. Supporting information is needed regarding the data contained in the graphs presented in Exhibit B. For example, how were wet weather times determined (meteorological data and/or CSO records)? What were the antecedent conditions prior to the time depicted on the graphs? Can the graphs be modified so that it is clearer when the rain started and ended? A detailed description, including but not limited to the issues above, should be provided to explain the data in the graph and MWRD’s interpretation of the results.

*RESPONSE: The specific times of wet weather events were determined using the District’s rain gage system. Rain data history is available on the District’s website at the following address: [www.mwrd.org/irj/portal/anonymouse?NavigationTarget=navurl://1d80aad92435a904f82379663ea4903e](http://www.mwrd.org/irj/portal/anonymouse?NavigationTarget=navurl://1d80aad92435a904f82379663ea4903e). However, the exact timing of a particular rain event is not necessarily a critical factor; wet weather affects the system in different places in different ways, and also can drive extremely low DO concentrations for days following an event. The table below provides rain data from the August 21-26, 2014 period covered by the graphs contained in Appendix B.*

<b>MWRD Rain Gage Basin Averages</b>					
<b>Date</b>	<b>North</b>	<b>Central</b>	<b>South</b>	<b>Start Time</b>	<b>End Time</b>
21-Aug	0.69”	0.83”	1.76”	4:55 AM	6:00 PM
22-Aug	0.88”	1.07”	2.46”	12:00 AM	5:50 AM
23-Aug	0.82”	0.62”	0.73”	12:20 PM	6:50 PM
25-Aug	0.49”	0.32”	0.75”	12:30 PM	6:40 PM
26-Aug	0.29”	0.00”	0.10”	Minimal; not recorded	

7. Further, is continual DO monitoring ongoing at each of the locations presented in Exhibit B such that an evaluation of nonattainment can be made for each of these locations in the future?

*RESPONSE: Yes.*

8. Is there any specific analysis as to whether the DO conditions predicted by the model and related testimony included as Exhibit C is caused by CSOs? If so, this analysis should be specifically referenced with page numbers and relevant supporting information necessary to interpret the results. As it relates to CSOs, can you further explain under what circumstances the model predicts DO nonattainment and where specifically it is expected? If the analyses reported in this study are unable to be separated to discern CSO vs. non-CSO related DO impairments, the study may not provide sufficient support that the variance is necessary.

*RESPONSE: Dr. Melching discusses and presents data concerning CSO discharges under current conditions. app.D at pages 83-84, 86, and 89. In terms of oxygen demand, Dr. Melching notes that CSO discharges contribute between 45 and 50% of the total BOD loading*

to the CAWS. App. D at pages 145-146. CSO reductions are also expected to directly affect SOD rates. App. D at pages 146-148.

Dr. Melching indicates that an evaluation of the performance of the Thornton Reservoir using U.S. Army Corps of Engineers models found that 95.7% of the gravity CSOs flowing into the Calumet River system in the DUFLOW model domain and 96.8% of the CSOs from the 125<sup>th</sup> Street Pumping Stations are captured by the Thornton Reservoir. App. D at page 91. Even with only 4.3% of gravity CSOs and 3.2% of CSOs from the 125<sup>th</sup> Street Pumping Stations remaining to the Calumet River system, Dr. Melching concludes that additional measures (such as more discretionary diversion) may be necessary to improve DO concentrations in the CAWS. App. D at page 91. He clearly associates the short term heavy pollutant loading resulting from a CSO event with low DO concentrations following a CSO event, indicating that the overall percentage of time with modelled DO concentrations equaling or exceeding the DO standards would be lower for wetter years. App. D at page 155. MWRD thus believes that Exhibit C supports the conclusion that CSOs cause or contribute to nonattainment of the DO criteria associated with Aquatic Life Uses A and B.

C. Justification of 40 CFR 131.10(g)

1. Are there reports, analyses, and/or anecdotal evidence to further explain your assertions that flood and infrastructure damages would occur if CSO outfalls were immediately eliminated? If so, further description of the societal and/or economic damages from these sources of information should be added.

*RESPONSE: MWRD's TARP Status Report as of December 31, 2017 (Appendix E to the Supplemental Information) demonstrates the value in flood damage reduction from early stages of TARP implementation. For example, the Gloria Alitto Majewski Reservoir, completed in 1998 as part of TARP Phase II with 0.35 billion gallons of storage, has to date yielded over \$401 million in flood damage reduction benefits to the three communities it serves. Att. 1 at page 1. The first stage of the Thornton Reservoir, completed in 2003, has so far captured 37 billion gallons of flood water. Att. 1 at page 2. When completed, the Thornton Composite Reservoir, with 4.8 billion gallons of storage, is anticipated to provide \$40 million per year in benefits; the McCook reservoir, with 10 billion gallons of storage, will provide \$143 million per year in benefits. Att. 1 at page 2. Historic MWRD CSO discharges have been as follows:*

<b>Year</b>	<b>Estimated Volume</b>
2011	61,710 MG
2012	12,038 MG
2013	69,455 MG
2014	42,036 MG
2015	22,045 MG
2016	20,869 MG
2017	44,518 MG

*If those CSOs are immediately eliminated, before completion of the remaining TARP projects, flows will have nowhere to go, necessarily causing extensive flooding of streams and streets, sewage backups in buildings and homes, and potential damage and overflows throughout the combined sewer system. The extent of the potential damage to public infrastructure and other public and private property would substantially exceed the annual value of the benefits*

*anticipated from the remaining phases of TARP projects. In addition to widespread property damage, the potential adverse health effects of having diluted sewage backing up into so many buildings and homes include risks of electrocution, disease, and mold. This information has been added to the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition as well.*

2. Please add the specific page numbers and/or sections of the Consent Decree with regards to the schedule for completion of the Tunnel and Reservoir Plan (TARP) and the assessment of its effectiveness in the section on human caused conditions.

*RESPONSE: MWRD has amended the Petition to include the schedule for completion of remaining TARP projects and the assessment of the effectiveness of the Calumet TARP System. The post-construction monitoring plan for the Calumet TARP System was approved by USEPA on October 7, 2016, and provides for two calendar years of monitoring, with a final report to be submitted by June 30, 2019. Because the Petition is being amended, the District has added a reference to the section rather than page of the Amended Petition in the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition section on human caused conditions. The assessment of the effectiveness of the Mainstream/Lower Des Plaines TARP System will be governed by a post construction monitoring plan to be submitted to the agencies in 2019, so have not been included in the Amended Petition.*

3. MWRD states, “During the 5 years that the currently requested variance will be in effect, TARP will not be complete, so it cannot remedy the DO noncompliances caused by CSO discharges.” However, this statement should be clarified to account for the fact (as stated below) that the Calumet portion of the plan will be completed during the term of the variance. This is important as the analysis must ensure a CSO-by-CSO justification that the discharge should be covered by the variance.

*RESPONSE: The Thornton Composite Reservoir for the Calumet TARP System was placed into operation by December 31, 2015, and will commence full operation no later than December 31, 2016. MWRD will assess the effectiveness of the Calumet TARP System and submit a post construction monitoring report by June 30, 2019.*

*Dr. Melching indicated that an evaluation of the performance of the Thornton Reservoir using U.S. Army Corps of Engineers models found that 95.7% of the gravity CSOs flowing into the Calumet River system in the DUFLOW model domain and 96.8% of the CSOs from the 125<sup>th</sup> Street Pumping Stations are captured by the Thornton Reservoir. app. D at page 91. Even with only 4.3% of gravity CSOs and 3.2% of CSOs from the 125<sup>th</sup> Street Pumping Stations remaining to the Calumet River system, Dr. Melching concludes that additional measures (such as more discretionary diversion) may be necessary to improve DO concentrations in the CAWS. App. D at page 91.*

*Based on these results, MWRD believes that it is necessary to obtain a five-year variance from the DO criteria associated with Aquatic Life Uses A and B. And as noted above, it is virtually impossible to isolate the effects of a single CSO discharge point on a flowing system continually affected by upstream conditions and hundreds of CSOs. As a result, MWRD does not agree that it is necessary or reasonable to require a CSO-by-CSO justification to conclude that CSO discharges in the CAWS currently cause or contribute to nonattainment of the DO criteria associated with Aquatic Life Uses A and B, and will continue to do so for at least five years.*

4. MWRD states that strategies for attaining the DO criteria described by Drs. Zenz and Melching “would not allow for remedying the noncompliances within the term of the variance.” However, these results should be reassessed for the Calumet Region in the 2018 report to Illinois EPA identifying feasible alternatives. Further, such analyses and conclusions should be made on a CSO-by-CSO basis. While there may be some CSOs causing DO issues, it may be that this is not the case for all CSOs. Analyses regarding highest attainable use and nonattainment in the future should, therefore, consider CSOs and their effects individually to the extent possible.

*RESPONSE: It does not appear from the available data that the current nonattainment of the DO criteria associated with Aquatic Life Uses A and B will be remedied within the five-year term of the variance. However, if the final report to be submitted June 30, 2019 demonstrates that the DO criteria are attained and the variance is no longer necessary for the Calumet Region, MWRD will support appropriate Permit modifications.*

D. Ensuring highest attainable condition is met

1. The terms of the post-TARP completion studies that will occur and the report that will be prepared should be spelled out with some specificity in the variance itself. The terms should address the CSO and water quality monitoring and modelling that will occur as well as the engineering analyses that will be performed in determining (a) whether more needs to be done to ensure attainment and (b) what alternatives will be evaluated for addressing continued DO nonattainment, if indeed more needs to be done. As described below, the results of this study will help inform any future request for new variances that MWRD might consider seeking, in the event that there continue to be CSOs that are causing or contributing to nonattainment of DO criteria following completion of TARP.

*RESPONSE: MWRD believes that the Consent Decree adequately specifies the substance of post construction monitoring efforts and the contents of the post construction monitoring reports, and sets forth a clear process for development of alternatives in the event that the agencies determine that additional measures are necessary. Consent Decree para. 36. Further, the alternatives, if any, that will be evaluated cannot reasonably be determined until the post-construction monitoring period has been completed.*

2. Can MWRD explain which terms of the Consent Decree and/or permits related to DO were included as proposed conditions of the variance? Were each of the DO related terms incorporated here? If not, why not?

*RESPONSE: The terms of the Consent Decree are related to DO in that they were agreed upon by the parties to address allegations that CSO discharges were causing or contributing to violations of applicable water quality standards, including for dissolved oxygen. Consent Decree at page 4. In addition, completion of the Thornton Composite Reservoir and the McCook Reservoir are anticipated to substantially reduce nonattainment of the DO criteria associated with Aquatic Life Uses A and B. For each Permit included in the Amended Petition, MWRD has referenced the Consent Decree and provided the schedule for completion of the relevant TARP projects.*

3. How did MWRD determine that the specific terms of the variance with regards to operation of existing aeration stations is consistent with the highest attainable use of the waters? Might enhanced operation of the stations better represent the highest attainable condition?

*RESPONSE: The specific terms of the variance with regards to operation of the existing aeration stations optimizes system operation in accordance with the recommendations contained in Dr. Melching's 2014 report concerning the impact of discretionary diversion on CAWS water quality (Appendix D to the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition). As a result, MWRD believes that the variance terms represent the highest attainable condition.*

4. Have DO monitoring stations adequately covered the segments to which the CSOs are discharging? Are CSOs proposed to be covered by the variance discharging to the upper North Shore Channel or other areas of the system that are not monitored? To the extent that not all relevant segments are monitored, MWRD should evaluate the feasibility of supplementing its monitoring to better measure the highest attainable condition.

*RESPONSE: MWRD believes that DO monitoring stations have adequately covered segments to which the CSOs included in the Amended Petition are discharging.*

5. The proposed variance condition stating that no other DO-related requirements other than those specifically listed in the variance shall be incorporated into the permit should be removed from the proposed variance.

*RESPONSE: MWRD has amended the Petition to clarify that these conditions are intended to apply only to CSO discharges. MWRD believes that the conditions are appropriate as amended.*

6. MWRD states that the existing aeration stations at Devon and Webster will be operated in operable periods during the months of April through October. How were the months of April through October determined? Does this encompass the entirety of the time when CSO-related DO violations are documented? If not, what is its basis to show that this represents the "highest attainable condition" during the term of the variance?

*RESPONSE: MWRD has revised the Petition to indicate that the aeration stations will be operated in operable periods, not restricted to the months of April through October.*

7. MWRD also talks about the operation scheme for SEPA stations 1 and 2. Is the operation of the SEPA stations consistent with current permit and/or consent decree requirements? If not, please explain.

*RESPONSE: The Consent Decree does not contain requirements specific to operation of the SEPA stations. MWRD believes that operation of the SEPA stations is consistent with Special Condition 12 of its Calumet Permit, which requires that operation be provided at all times the SEPA stations are operable to achieve compliance with the minimum acceptable DO concentration.*

8. Further, MWRD states that "Operation of those stations will not be required during any particular time period if it is not needed in order for the CAWS to meet the new DO water quality standards." How would this be determined? How would MWRD ensure that nonattainment is prevented in periods during and immediately after CSO events? Would continuous operation have water quality benefits that justify continual operation of the stations?

*RESPONSE: MWRD optimizes operation of its SEPA stations to prevent nonattainment to the maximum extent practical, consistent with Dr. Melching's optimization recommendations,*

*whereby continuous real time DO monitors are utilized to automatically trigger the appropriate number of pumps to counteract low DO. A map of the DO monitoring stations is included as Exhibit F to the Supplemental Information document. MWRD does not believe that continual operation of the SEPA stations is necessary.*

9. MWRD should include in its annual reports an identification of the days in which CSOs proposed to be covered by the variance were discharging and analyze how long the effect of the CSOs are apparent in the system.

*RESPONSE: MWRD will include CSO discharge beginning and ending dates in its annual reports, and will analyze the effect of such discharges on the system in its final report at the end of the variance period.*

#### E. Term of the variance

1. MWRD should explain why 5 years is necessary for each of the CSOs covered by the variance, including a separate discussion of the Calumet system as explained below. It is possible that the variance term should be different for the different permits/CSOs based upon the pertinent facts for each.

*RESPONSE: Please see the response to Comments C.3 and C.4, above.*

2. 40 CFR 131.14(b)(2)(i)(A) requires a demonstration “that attaining the designated use and criterion is not feasible throughout the term of the WQS variance.” It appears that MWRD has adequately demonstrated for the Calumet CSOs that it will not be possible to know whether it is feasible to attain the DO criterion until June 2019, and so a variance until that time may be warranted. EPA believes that it would be consistent with 40 CFR 131.14(b)(2)(i)(A) to limit the term of the variance for the Calumet CSOs so that it expires on December 31, 2018. That way, if the study and report show that Calumet CSO discharges have been eliminated – and therefore that it was indeed feasible to attain the criterion by December 31, 2018 – the variance will no longer be in effect. If the study and report show that CSOs are continuing, then a new variance can be sought, based upon the information MWRD has generated regarding the feasibility of implementing additional measures necessary to attain the criteria.

*RESPONSE: Please see the response to Comments C.3 and C.4, above. If CSOs are no longer causing or contributing to exceedances of DO water quality standards, or if MWRD’s receiving waters are determined to be attaining applicable water quality standards such that a variance is no longer required, MWRD will support NPDES Permit modifications.*

3. Consistent with 131.14(b)(1)(iv), “The term of the WQS variance, expressed as an interval of time from the date of EPA approval or a specific date. The date the variance is included in the permit is not a “specific date” and therefore, the term of the variance should be modified to be consistent with 131.14.

*RESPONSE: MWRD has amended the Petition to specify that the ending date for the life of the variance will be five years from the date of EPA approval of the variance.*

#### F. Compliance with Technology-based Requirements

1. EPA recommends that the paragraph be modified in the following way: “For CSO discharges, the technology-based requirements that apply under Sections 301(b) and 306 of the CWA are, at

a minimum, the Nine Minimum Controls (NMC), as specified in the CSO Policy. (<http://water.epa.gov/polwaste/npdes/cso/upload/owm0111.pdf>.) The permitting authority is required to include all such technology-based requirements in permits for discharges from CSOs, which IEPA has done. MWRD is already required to meet all such requirements, including the NMC, under the terms of the O'Brien, Stickney and Calumet permits. Moreover, the Consent Decree between MWRD, USEPA and IEPA specifies additional NMC-related requirements, in addition to specifying requirements related to completion and operation of TARP."

*RESPONSE: MWRD has modified this paragraph in the Supplemental Information Concerning MWRD Dissolved Oxygen Amended Variance Petition accordingly.*

2. MWRD states, "None of those requirements will result in attainment of the DO criteria – certainly not within the time period of the requested variance." EPA recommends that this sentence be deleted or that MWRD clarify that the requirements of the Consent Decree and NMC will improve DO conditions in the waterways through elimination of CSO discharges through time as this is the basis for MWRD's demonstration of the highest attainable condition as required by the variance. However, MWRD could clarify that complete implementation will take longer than the term of the variance.

*RESPONSE: MWRD will clarify that complete implementation will take longer than the term of the variance. However, based on the evidence in the UAA rulemaking record, MWRD believes that there is no reasonable expectation of complete attainment of the DO criteria associated with Aquatic Life Uses A and B.*

#### G. EPA Review

EPA will conduct its review of any variance adopted by the Illinois Pollution Control Board in accordance with the requirements of the Clean Water Act and implementing regulations, including 40 CFR 131.14. To the extent that MWRD has questions or concerns about this review, future discussions can detail this process more thoroughly.

*RESPONSE: MWRD understands that USEPA will review the variance as adopted in accordance with applicable law.*