Chloride and Sulfate Water Quality Values Implementation Plan

EGLE Response to Public Comments on the Draft Plan

The Department of Environment, Great Lakes, and Energy (EGLE) provided a 30-day public comment period on the Chloride and Sulfate Water Quality Values Implementation Plan (plan). This public comment period followed a review and comment period provided to members of a workgroup created to inform the development of the plan and consisting of external stakeholders representing a range of sectors involved in the reduction of chloride or sulfate (see page 11 of the plan for the list of stakeholders). EGLE received eight comment letters. All comments were reviewed as part of finalizing the plan. Similar comments were combined followed by the EGLE response.

EGLE appreciates the input and comments received as it provided an opportunity to have the plan reflect the experience and perspective from sectors that may need to reduce chloride or sulfate in the future. EGLE incorporated this experience and perspective into developing the next steps for implementation identified in the plan, including a monitoring period to allow for adequate characterization of sulfate or chloride levels in wastewater discharges, compliance schedules that align with stakeholder-suggested planning timeframes, options for long-term approaches to address elevated levels of chloride or sulfate (e.g. variances), and flexibility with best management practice (BMP) selection as part of winter salt application. EGLE will work with permittees on these next steps as part of the National Pollutant Discharge Elimination System (NPDES) permitting process.

EGLE is committed to using existing regulations to protect water quality. EGLE hopes that developing chloride and sulfate Water Quality Values (WQV) will encourage universities, the United States Environmental Protection Agency (USEPA), and others to develop cost-effective treatment technologies to advance the removal of dissolved solids.

1. **Can EGLE provide the public notice and EPA approval mentioned on the bottom of paragraph 1 under 3 of the plan? Was EPA's approval part of its overall review and approval of the water quality rule package developed in response to the federal Great Lakes Initiative?**

   EGLE Response: USEPA approval in August 2000 was for the overall review and approval of the rule package developed according to the Great Lakes Initiative. The changes to Part 4, Water Quality Standards (Part 4 Rules); and Part 8, Water Quality-Based Effluent Limit Development for Toxic Substances (Part 8 Rules), promulgated pursuant to Part 31, Water

Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), were developed using the Great Lakes Water Quality Advisory Committee of external stakeholders representing various manufacturing and industry interests, academia, municipalities, environmental groups, Tribal government, and local governments meeting over nine months, resulting in a rule package that was not only reviewed by that Advisory Committee, but offered for public comment (September 30 – November 29, 1996) and two public hearings (November 4, 1996). A copy of the Calendar Notice of those hearings and public comment period are attached (Attachment 1), as is the approval letter by the USEPA Regional Administrator Lyons to then Department of Environmental Quality Director Harding dated August 4, 2000 (Attachment 2; note the third page, which specifically identifies, among others, Rule 323.1057(2), (3), (4), and (5) and Tables 1, 2, 4, 7, and 8 as consistent with the Water Quality Guidance for the Great Lakes System).

2. **It is recommended to set water quality values (WQV) based on the specific body of water instead of a statewide value.**

   EGLE Response: Rule 323.1057(2)(r) (Rule 57) provides the ability to develop site-specific modifications for WQV if local environmental conditions warrant a different value. While the ability to develop site-specific modifications is an important component of Rule 57, it is an exception to the process rather than an approach to be applied to all waters individually. WQV developed under Rule 57 support various designated uses and apply to all waters in Michigan; therefore, the approach of developing specific values for each water body is not practical. The implementation of these WQV through the NPDES permitting process allows for waste stream volumes and characteristics to be considered with the assimilative capacity and potential mixing zones of the receiving water to protect the designated uses of the specific downstream waters.

3. **It was requested that the draft implementation plan clarify, specifically, when these WQV will be revisited or updated, instead of stating generally that updates will not be needed in the foreseeable future.**

   EGLE Response: While there is no explicit schedule for revisiting or updating the chloride or sulfate WQV, reviews and updates of WQV for toxic parameters are prioritized based on availability of new data and identified need and relevance to water quality programs. EGLE continues to believe that these WQV will not be revised for the foreseeable future.

4. **EGLE should perform a Sources, Distribution, and Trends study to quantify chloride loadings throughout the State prior to the implementation of the chloride water quality value.**

   EGLE Response: EGLE included an analysis of statewide chloride and sulfate monitoring results from 2005-2014 in the plan. EGLE is hoping to work with universities on this topic

and has already submitted a research proposal to further understand chloride source contributions, distribution, and trends throughout the state.

5. **The chloride and sulfate WQV were added to Rule 323.1057, these limits will affect other permitting programs beyond the NPDES program discussed in the plan, such as groundwater discharge permitting under Rules 323.2201 to 323.2240, and there is no information available about enforcement or implementation for those other permitting programs.**

   EGLE Response: Establishing WQV for chloride and sulfate affect the NPDES Program and may in some instances impact the Groundwater Permitting Program when there is a direct vent to surface waters from a facility. Chloride requirements are already included in groundwater discharge permits to protect groundwater for drinking water purposes.

6. **The implementation plan contains no discussion of how Water Quality-Based Effluent limits (WQBELs) may be developed in cases where the receiving stream periodically exceeds the chloride final chronic value of 150 mg/L upstream of NPDES permit holders (for example, whether dischargers would be held to existing discharge quality or loadings until a Total Maximum Daily Load is developed).**

   EGLE Response: In accordance with Rule 323.1209 of the Part 8 Rules, the background concentration of chloride or sulfate is used in developing a final effluent limit. If the background concentration of chloride or sulfate already exceeds the Final Chronic Value or Final Acute Value, then the surface water cannot accept any more chloride or sulfate than what the WQS allows. In this case, the WQBEL included in the NPDES permit would be equal to the Final Chronic Value and/or Final Acute Value for chloride or sulfate as no mixing would be allowed since the surface water is already not meeting WQS.

7. **If a NPDES holder exhibits there is no reasonable potential after at least 50 samples in accordance with the Part 8 Rules, why does chloride and sulfate monitoring need to be continued in the next permit and apparently forever? Some companies believe chloride and sulfate should not go in the next permit and could be tested for in the permit application process as are most other pollutants.**

   EGLE Response: The need for chloride or sulfate monitoring or an effluent limit is evaluated with each permit reissuance. In Section 4.2 of the plan, fourth paragraph, monitoring will continue in the reissued NPDES permit at a frequency of no greater than monthly for the full term of the permit unless adequate information is available to determine that a lesser monitoring frequency or no monitoring is warranted. EGLE will also consider inclusion of monitoring as part of the NPDES permit application process.

8. **The Plan lacks specificity for how affected food processors should demonstrate controllability for chlorides and sulfates to determine whether they must meet the new WQV.**

EGLE Response: The controllability demonstration is a demonstration for Total Dissolved Solids (TDS) controllability and is separate from the review of chloride and sulfate. Evaluating the potential to discharge chloride or sulfate does not trigger a change in the controllability determination based on a previously submitted TDS controllability demonstration. When NPDES permits are reissued, facilities will be required to characterize the wastewater discharge and EGLE will determine if there is a reasonable potential for chloride and sulfate to be discharged.

9. **Under Section 4.1 TDS of the plan, Rule 51 standards are stricter than the chloride and sulfate standards which contribute to TDS. Multiple manufacturers will never be able to meet them. EGLE is allowing municipal WWTP NPDES Permits a waiver to consider them uncontrollable. By the same token, multiple private companies hope they might be afforded the same exemption. If not, they wonder how they might qualify for the exemption process to be considered uncontrollable. A similar waiver should be considered for certain industrial dischargers (such as existing dischargers with high chloride/sulfate influent from natural sources).**

   EGLE Response: A wastewater treatment plant (WWTP) may be considered non-controllable for TDS; however, chloride and sulfate will be evaluated as part of the NPDES permit reissuance process based on the WQV developed pursuant to Rule57. EGLE commits to review TDS determinations on controllability from industrial sources. EGLE has stated that costs will be considered as part of the TDS requirements, and in such cases, source reductions or other corrections in accordance with a minimization program may prove acceptable.

10. **The options laid out in the plan are simply unachievable for some facilities because of the lack of regulatory certainty with any variance option and the impact of the other options on our cost competitiveness.**

    EGLE Response: EGLE recognizes a variance for chloride or sulfate submitted in accordance with Rule 323.1103 of the Part 4 Rules may need to be requested. The variance compliance option was included in the plan as the Part 4 Rules allow for a variance and it is EGLE's intention that this option be available to all NPDES permittees as needed. Currently many facilities, including WWTP and industrial facilities, are covered under the statewide variance for mercury. The mercury variance has been in place for several years and has been a successful variance for many permittees due to source reduction that have led to reductions in effluent concentrations.

    An NPDES permittee may request renewal of a variance in accordance with Rule 323.1103. As part of the variance renewal request, the NPDES permittee shall again demonstrate that attaining the chloride and/or sulfate WQS is not feasible based on the rule requirements and include information concerning compliance with the conditions incorporated into the

permit as part of the original variance. See Appendix C of the plan for more details on the variance development and approval process.

11. **Other states have developed streamlined variance processes for chloride. For example, the Minnesota Pollution Control Agency has proposed a streamlined variance process offering a 15-year relief period from Minnesota's chloride limit. Wisconsin DNR has developed variance templates and guidance documents to assist permittees in preparing applications. EGLE should develop a streamlined variance process. The variance should apply for 15 years or more in order to provide long-term assurance for manufacturers.**

    EGLE Response: Minnesota Pollution Control Agency (MPCA) is currently proposing a variance term of 15 years for municipal facilities that meet certain criteria. The MPCA Streamlined Chloride Variance Action Tree states that all reduction activities must be completed as soon as possible. A variance may be renewed as part of NPDES permit reissuance. EGLE understands this will be a need for some permittees, as is the case with the mercury variance. EGLE has developed additional information on the variance development and approval process in Appendix C of the plan.

12. **It is recommended that EGLE consider a water quality and NPDES permitting approach that would explicitly "grandfather" certain classes of industrial sources of Total Dissolved Solids (TDS), specifically, chloride and sulfate.**

    EGLE is strongly encouraged to recognize both the limitations inherent in certain manufacturing facilities—as well as the extremely limited amount of chloride certain sectors discharge in the State.

    While we appreciate the ability to submit a variance, we believe that EGLE should formally recognize that for certain operations that special consideration will be provided for operations that do not change the chemical composition of groundwater and are merely dewatering as an operational requirement.

    EGLE has recognized structural constraints historically faced by Industry, designating facilities as "uncontrollable" dischargers of Total Dissolved Solids (TDS) under Rule 51. Similarly, it is imperative that EGLE continue to recognize these limitations while implementing the chloride rules by providing regulatory relief through an exemption.

    Reference is made to PA Code Title 25, Chapter 95, §95.10 where the Pennsylvania Department of Environmental Protection addressed existing and new and expanding discharges of TDS. Section 95.10(a) specifically exempts certain classes of existing discharges of TDS from the §95.10 TDS treatment requirements. It is recommended that EGLE consider a similar approach and, where local in-stream TDS, chloride and sulfate water quality criteria are currently exceeded, provide, where warranted, criteria exceptions in the Michigan water quality standards for those receiving stream segments.

EGLE Response: If a final effluent limit for chloride or sulfate is required, the variance compliance option included in the plan allows for the site-specific consideration of the significance of the source, economic considerations, and technical and treatability considerations. The review of the potential to discharge chloride and sulfate as part of NPDES permit reissuance does not trigger a change in the controllability determination based on the TDS controllability demonstration. Regulation for TDS will continue to be in accordance with Rule 323.1051, Dissolved Solids in the Part 4 Rules. A TDS Controllability demonstration will continue to be required for all NPDES permittees, except WWTP, when existing or new use effluent quality is expected to exceed Rule 323.1051.

13. **The expense to install and operate/maintain treatment may impact cost competitiveness within the food industry. Other states have evaluated control technology and determined to be economically infeasible.**

    EGLE Response: The Part 4 and Part 8 Rules allow for a period of monitoring, determination of the appropriate limit if required, compliance schedules, and potential variances to be used over permit reissuances that were discussed in the stakeholder meetings. The variance process allows for site-specific considerations, including the cost of treatment. The variance rule, Rule 103(2)(f) of the Part 4 Rules, provides a reason that can be used if adequately demonstrated and reads, "Controls more stringent than treatment technology requirements in the Clean Water Act of 1972, as amended, 33 U.S.C. 301(b) and 306 would result in unreasonable economic effects on the discharger and affected communities."

14. **Even if food processors are determined to be uncontrollable sources, the Plan does not describe what if any measures they will be expected to implement to reduce discharges and/or continue monitoring for chlorides and sulfates given their new WQV. The Plan would be more helpful to permittees by adding detail on compliance both for controllable and uncontrollable discharges to help them comply.**

    EGLE Response: If monitoring or continued monitoring for chloride or sulfate is required in the NPDES permit, the permittee will be expected to report the monitoring results as part of monthly Discharge Monitoring Reports. The plan includes a variety of compliance options should a chloride or sulfate final effluent limit be required after adequate monitoring, including submittal of a variance when a permittee is unable to achieve compliance with a final chloride or sulfate effluent limit. Using a holistic approach to optimize internal process improvements and reduce sources before evaluating final waste stream treatment options was also discussed during stakeholder meetings. EGLE developed a Treatment Memo that identifies a variety of treatment technologies to consider for removal of chloride or sulfate in waste streams (Appendix B).

15. **End-of-pipe treatments are difficult and costly because they are applied following a biological process that uses suspended biomass for organic matter consumption. The pretreatment between the biological process and TDS treatment process is expensive,**

adding complexity and cost to the broader treatment system that is not reflected in EGLE's memo.

It would be beneficial for EGLE to retain an independent, third party engineering company to prepare the treatment options memo and re-examine the costs to determine a more realistic cost estimate for stakeholders such as food processors.

EGLE's review of treatment technologies in Appendix B of the draft document list several technologies that are not effective for removal of chloride, with reverse osmosis essentially being the only technology suitable for wastewater flow rates of any substantive magnitude.

The treatment costs listed in Appendix B appear to be significantly lower than actual installation and operation and maintenance costs that would be necessary for installation of a reverse osmosis system and management of the reject stream.

EGLE Response: The Treatment Memo in Appendix B is offered as a starting point only and is designed to assist EGLE staff through reviews of treatment options and applicable flowrates that may provide treatment of certain waste streams. EGLE will gather information as part of implementing the chloride and sulfate WQV. This information will be considered as part of the periodic review of the Treatment Memo. Detailed information is needed from the permittee that describes the proposed site-specific treatment processes necessary to comply with any effluent limit. As mentioned, this might include filtration or reverse osmosis following biological treatment that would be necessary before treatment to remove dissolved solids/chloride. If the variance option is pursued, then excessive costs can and will be considered as it relates to the specific facility.

16. **Multiple treatment technologies would need to be applied in combination to reduce TDS in wastewater. The MPCA has stated that reverse osmosis is the only available method to remove chloride from wastewater but notes that RO "creates a waste stream that cannot be discharged with wastewater as it could impair the water intended to be protected."**

    EGLE Response: Treatment technologies were discussed as part of the stakeholder meetings. Workgroup members representing industry shared their challenges and successes with addressing chloride and sulfate in wastewater discharges. A workgroup member provided information on treating specific industrial waste streams using reverse osmosis. Using a holistic approach to optimize internal process improvements and source reductions before evaluating final waste stream treatment options was also discussed during workgroup meetings.

17. **Treatment systems consume large land footprints that often are unavailable.**

    EGLE Response: During a workgroup meeting, members were asked to provide the expected planning timeframes to install treatment, including addressing site limitations.

The average timeframe provided was 5 years, with one sector identifying up to 10 years. These planning timeframes align with the proposed process for evaluating chloride and sulfate as part of NPDES permit reissuance, including a period of monitoring to adequately characterize the discharge of chloride or sulfate and compliance schedules if an effluent limit is needed.

18. **The Plan needs to more specifically describe the compliance requirements for wastewater treatment facilities, especially since they are already required to monitor Whole Effluent Toxicity under Rule 323.1219, and how that requirement will interact with the new requirements for chlorides and sulfates. Additionally, treatment, source reduction, and control measures are not one-size-fits-all; the Plan should consider ranges of options for larger and smaller facilities, with varying capacities to spread the costs of compliance among ratepayers.**

    EGLE Response: The NPDES permit conditions for Whole Effluent Toxicity (WET) monitoring serve as a safeguard against synergistic effects that may come from the blended conditions in waste streams. Where there are WET requirements, they are in addition to (not in lieu of) parameter-specific monitoring and limitations for the various constituents of a waste stream; this may include chloride, sulfate, any number of metals, or other toxic parameters. The need for monitoring and limits for both individual parameters and WET will continue to be evaluated as they have in past permits.

    EGLE agrees that the example treatment technologies, source reductions, and control measures are not a 'one-size-fits-all' approach. Workgroup members shared experiences with modifying internal processes and selecting appropriate treatment to meet the facility-specific needs. The plan serves as a starting point to identify options while also providing flexibility to permittees.

19. **As proposed, the implementation plan does not consider the background chloride or sulfate levels that naturally exists in groundwater. It is very common for quarries to implement dewatering operations in order to access the material. During the dewatering process, there are no added chemicals introduced.**

    During aggregate mining, millions of gallons of water are removed from the site on a daily basis. The capital outlay to process this amount of water would be in excess of tens of millions of dollars. If we are required to treat water that contains natural sulfates and chlorides, the impacts to the aggregate mining industry would be detrimental.

    EGLE Response: EGLE recognizes that quarry operations dewater to mine the material and that generally no chemicals are added to the dewatering water prior to discharge to a surface water. The concentrations of chloride and sulfate that are present in the dewatering water may not be the same as the background concentrations present in the surface water. In many cases, the concentrations of chloride and sulfate in the dewatering water may be much higher than the background concentrations of the surface water.

The potential to discharge chloride or sulfate as part of the dewatering water is evaluated during NPDES permit reissuance. EGLE establishes the final effluent limits in an NPDES permit prior to discharge so that WQS and treatment technology requirements can be achieved when discharged into a surface water. The plan includes a variety of compliance options should an effluent limit be required after adequate monitoring, including the submittal of a potential variance when a permittee is unable to achieve compliance with a final effluent limit.

20. **EGLE should notify all food processors and industrial dischargers that rely on a WWTP for wastewater discharge of the proposed changes. Current users should be alerted that they will be targeted if their chloride and sulfate discharge cause the WWTP effluent to reach the new compliance limits.**

    EGLE Response: EGLE is planning a messaging strategy that will include notification to WWTPs through emails and the Michigan Water Environment Association. EGLE will work through the evaluation process with the initial step of monitoring at WWTPs during the next reissued permit. This monitoring will provide the WWTP and EGLE the effluent data to evaluate if any effluent limit will be applicable in the future. The next step will likely be a compliance schedule if an effluent limit is needed. These steps and the current NPDES permit language for Industrial Pretreatment Programs will help notify indirect dischargers to the WWTP.

21. **The implementation plan does not acknowledge that redirecting smaller volume industrial discharges to a POTW may prove to be a viable option if faced with costly treatment for continued direct discharge. In fact, the implementation plan suggests to WWTPs that high chloride indirect dischargers be investigated for possible chloride reductions. Such guidance may unnecessarily "squeeze" an industry, where indirect discharge may be prudent from an environmental perspective.**

    EGLE Response: All possible remedies to meet the WQS should be considered. If there is a local WWTP that can accept smaller volume wastewater discharges and still meet local limits and protect the WWTP discharge (not allow pass through), then this suggestion will work. EGLE commits to working with NPDES permittees on all possible solutions.

22. **The implementation plan does not acknowledge that dilution with excess intake water may likely be the most cost-effective compliance option for some dischargers, as there is no prohibition on using dilution water to achieve water quality based effluent limits.**

    EGLE Response: EGLE agrees that dilution with excess intake water may be one option to provide additional dilution for chloride and sulfate prior to discharge. There currently are NPDES permitted facilities that use this approach. EGLE updated the plan to include this activity as an option.

23. The chloride and sulfate water quality values will create constraints on Michigan manufacturing in the future. There will be fewer options for wastewater discharge, thereby limiting new manufacturing in the State. The regulations discourage business investment and will have a long-term negative impact on Michigan's economy. An economic impact study must be completed to quantify the current and future costs of the State.

EGLE Response: Michigan has trailed the other USEPA Region 5 states in the development of WQV for chloride and sulfate. Workgroup members representing industry shared their experiences reducing chloride and Michigan has continued to connect with other states leading in the area of chloride reductions (i.e., Minnesota and Wisconsin). When siting a new manufacturing facility expected to have levels of chloride or sulfate requiring an effluent limitation, it will be important to consider the opportunity for mixing within a receiving water or potential for a WWTP to accept the discharge. The final discharge considerations should also be coupled with optimizing internal processes. The plan includes a variety of compliance options should an effluent limit be required after adequate monitoring, including the submittal of a variance when a permittee is unable to achieve compliance with a final effluent limit.

24. The Plan does not sufficiently address technology, staffing, costs, or time for food processors, wastewater treatment plants, County Road Commissions, and other affected permittees to increase monitoring, treat where necessary, implement pollutant mitigation plans if a source is determined to be uncontrollable, and implement Best Management Plans for reduction of chlorides and sulfates.

EGLE Response: During a workgroup meeting, members were asked to provide the expected timeframes from planning to operation of treatment for chloride or sulfate. The average timeframe provided was 5 years, with one sector identifying up to 10 years. These planning timeframes align with the proposed process for evaluating chloride and sulfate as part of NPDES permit reissuance, including a period of monitoring to adequately characterize the discharge of chloride or sulfate, compliance schedule, and potential for a variance from a final effluent limit. NPDES Municipal Separate Storm Sewer System (MS4) permittees will be required to develop a chloride reduction strategy as part of permit reissuance starting in 2023. The intent is to allow MS4 permittees flexibility when identifying BMPs that can be implemented during the permit term.

25. While the plan provides a BMP overview including practices like pre-wetting, anti-icing, equipment calibration, and newer technology, it does not provide sufficient detail to assist County Road Commissions with implementing these plans. It additionally does not discuss implementation of alternate materials for road de-icing, such as byproducts from sugar beet processing, which can reduce chloride runoff by using a product already produced by the processing of agricultural products in Michigan.

EGLE Response: Representatives from the County Road Association of Michigan and Michigan Department of Transportation participated in the workgroup meetings. Only county road agencies under an NPDES MS4 permit will be required to develop a chloride reduction strategy at this time. EGLE understands the varying budgets associated with differing road oversight/jurisdiction for the county road agencies covered by MS4 permits. BMPs included in the plan are intended to be a starting point for developing a chloride optimization/reduction strategy. The plan was designed to incorporate flexibility as requested by road agencies.

The use of alternate materials for deicing needs to be considered on an individual basis. Deicing products derived from agricultural by-products have the potential to adversely affect water quality if allowed to enter surface waters. These products often contain high levels of organic materials that exert a high biochemical oxygen demand when broken down by microorganisms in an aquatic environment. This process can result in reduced instream levels of dissolved oxygen, which is necessary for the survival of aquatic life.

Attachment 1

CALENDAR

September 30, 1996

THE WASTEWATER REPORTING RULES.
R 299.9001-R 299.9002 Definitions; R 299.9003 Register of critical materials; R 299.9004 Wastewater reports; contents and forms; R 299.9005 Wastewater reports; filing and confidentiality.

THE WASTEWATER DISCHARGE PERMIT RULES.
R 323.2138 Terms and conditions of permits; consistency with water quality standards.
R 323.2142 Terms and conditions of permits; other limitations and requirements.

The public meeting will be held in the Administrative Hearing Room, 3rd Floor, Knapps Office Centre, Lansing, Michigan. Information Contact: ***Michael F. Masterson,*** Surface Water Quality Division, 517-335-4200.

OCTOBER 31, 1996

DEADLINE FOR PUBLIC COMMENT REGARDING THE PROPOSED REMEDIAL ACTION AT THE CASS STREET AREA EDWARDSBURG SITE OF ENVIRONMENTAL CONTAMINATION, EDWARDSBURG, CASS COUNTY. Written comments are being accepted on the proposed remedial action plan for the contaminated soils portion of the site. The proposed action involves the use of soil vapor extraction technology to remove chlorinated solvents from the soil in the area of the former dry cleaning shop on Cass Street. Written comments on the plan should be sent to: David Heywood, Plainwell District, Environmental Response Division, Michigan Department of Environmental Quality, 1342 SR-89, W, Suite B, Plainwell, MI 49080-1915. Information Contact: ***David Heywood,*** Environmental Response Division, 616-692-2689.

NOVEMBER 4, 1996
1:00 - 5:00 p.m. and
7:00 - 10:00 p.m.

PUBLIC HEARINGS ON PROPOSED MODIFICATIONS TO THE PART 4 WATER QUALITY STANDARDS, AND NEW PART 12 RULES (ORR #95-036). These hearings will be held to solicit comments on proposed rules developed to address the requirements of the Water Quality Guidance for the Great Lakes System; Final Rule, published March 23, 1995 in the Federal Register. The proposed Part 4 Water Quality Standards consist of water quality criteria for 29 pollutants, detailed methodologies to develop criteria for aquatic life, wildlife and human health; an antidegradation policy and procedures; and mixing zone provisions. The proposed Part 12 rules, titled "Water Quality-Based Effluent Limit Development for Toxic Substances," are implementation procedures for developing effluent limits for toxic substances in point source discharges to ensure that the requirements of the Part 4 rules are met. The hearings to take comment on these modifications will be held at the Best Western Midway Hotel/Hoffman House, Symposium Auditorium, 7711 W. Saginaw Highway, Lansing, Michigan 48917. Written statements mailed by November 29, 1996, will be introduced into the hearing record. Statements can be mailed to Brenda Sayles, Surface Water Quality Division, Michigan Department of Environmental Quality, Box 30273, Lansing, MI 48909. Information Contact: ***Brenda Sayles,*** 517-335-4198.

NOVEMBER 7, 1996
1:30 p.m.

PUBLIC HEARING REGARDING NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, AS AMENDED (NREPA), ARTICLE II: POLLUTION CONTROL, CHAPTER 1: POINT SOURCE POLLUTION CONTROL, PART 31, WATER RESOURCES PROTECTION AND PART 41, SEWERAGE SYSTEMS. The Surface Water Quality Division will be holding a public hearing on proposed rule amendments

Attachment 2

file GLI
x-ref Great Lakes

AUG 04 2000

R-19J

Russell J. Harding, Director
Michigan Department of Environmental
Quality
Hollister Building
P.O. Box 30473
Lansing, MI 48909-7973

Dear Mr. Harding:

I am pleased to inform you that Administrator Carol M. Browner has signed a Federal Register notice announcing the United States Environmental Protection Agency's ("U.S. EPA") conclusion that, with only one exception pertaining to whole effluent toxicity, the State of Michigan has adopted water quality standards, antidegradation policies and implementation procedures consistent with the hundreds of provisions in the Water Quality Guidance for the Great Lakes System at 40 CFR Part 132 (the "Guidance").

The Federal Register notice, which is included with this letter, specifies the provisions of Michigan's regulations that U.S. EPA has disapproved and the provisions of the Guidance that shall apply to discharges within the Great Lakes System in the State of Michigan. I also have included a document which specifies the specific State provisions that U.S. EPA has approved in taking action on the State's Great Lakes Guidance submission as well as a fully executed copy of the Addendum to the Michigan Department of Environmental Quality's (MDEQ) Memorandum of Agreement with U.S. EPA regarding the State's National Pollutant Discharge Elimination System program.

This represents a major milestone in the long process that began back in 1989 when U.S. EPA and the Great Lakes States began what at that time was a voluntary effort to ensure that consistent water quality standards, antidegradation policies and implementation procedures would be applied throughout the Great Lakes System. The MDEQ deserves tremendous credit for its

work throughout this process. We look forward to continuing working with you and the other Great Lakes States on ensuring that human health and the environment are protected throughout the Great Lakes System.

Sincerely,

/s/ original signed by
Francis X. Lyons
Francis X. Lyons
Regional Administrator

Enclosures

cc: David A. Hamilton, MDEQ

JUL 31 2000

Michigan Provisions Approved as Being Consistent With the Guidance

R. 323.1043(a),(d),(h)-(p), (s),(w),(ff),(gg), (ii),(kk),(ll),(pp),(rr),(ss); R. 323.1044(b),(d),(e),(q),(x), (aa),(bb); R. 323.1057(2),(3),(4),(5) and Tables 1, 2, 4, 7, 8; R. 323.1082(2),(5)-(7); R.323.1090; R. 323.1098; R. 323.1103; R. 1203(a),(b),(l),(t),(z),(bb); R. 1205(c),(l),(x); R. 323.1207; R. 323.1209(4); R. 323.1211; R. 323.1213; R. 323.1217; and R. 323.1219(1),(3) and (5) - (7).

Addendum
to the
National Pollutant Discharge Elimination System
Memorandum of Agreement
Between the
State of Michigan
and the
United States Environmental Protection Agency, Region 5
Concerning Michigan's Great Lakes Water Quality Standards
and Implementation Procedures

The federal Water Quality Guidance for the Great Lakes System (federal guidance), 40 CFR Part 132, contains the minimum water quality standards, antidegradation policies, and implementation procedures for the Great Lakes system to protect human health, aquatic life, and wildlife. The Great Lakes states and tribes were required to adopt provisions consistent with (as protective as) the federal guidance for their waters within the Great Lakes system. The Michigan Department of Environmental Quality adopted Great Lakes system water quality standards and implementation procedures on June 16, 1997, and these rules became effective on July 29, 1997.

The United States Environmental Protection Agency Region 5 (EPA) and the Michigan Department of Environmental Quality (MDEQ) enter into this Addendum to their National Pollutant Discharge Elimination System (NPDES) Memorandum of Agreement to ensure that Michigan's rules concerning Great Lakes system water quality standards and implementation procedures are implemented in developing NPDES permits in a manner consistent with the federal guidance. If the MDEQ rules are modified to clarify the intent of the rules consistent with the interpretations listed below, EPA and MDEQ shall modify this MOA as necessary.

I. Mixing Zones for Intermittent Streams

Michigan's rules at R 323.1082 contain provisions governing mixing zones. One sentence in R 323.1082(1) provides that "[a] watercourse or portions of a water course that without 1 or more point source discharges, would have no flow except during periods of surface runoff may be considered a mixing zone for a point source discharge." MDEQ will not utilize this specific sentence to consider any watercourse or portion of any watercourse to be a mixing zone unless Michigan has obtained EPA approval of a site-specific modification to aquatic life criteria for that water course or portion of a watercourse demonstrating that the existing and expected aquatic life in the water course will be adequately protected in the absence of chronic aquatic life criteria. This Addendum to this MOA only addresses MDEQ's ability to allow mixing zones pursuant to the specific sentence set forth above and, with the exception of ammonia, applies only to substances addressed by R 323.1057. Nothing in this Addendum to this MOA affects or limits MDEQ's ability to allow mixing zones in accordance with any other provision of R 323.1082.

II. Water Quality-Based Effluent Limitations Below the Level of Quantification - Pollutant Minimization Plan Monitoring

Michigan's rules at R 323.1213(l)(d)(i) and (ii) provide that pollutant minimization plans included in permits that contain water quality based effluent limitations below the level of quantification must include a requirement for "periodic" monitoring of potential sources of the pollutant for which the WQBEL has been imposed and "periodic" influent monitoring for that pollutant. MDEQ always will require semi-annual monitoring of potential sources of those pollutants and quarterly monitoring for the pollutant in the influent of the wastewater treatment system pursuant to R 323.1213(l)(d)(i) and (ii), unless information generated by a pollutant minimization plan supports a determination that some other monitoring frequency is appropriate.

III. Water Quality-Based Effluent Limitations Below the Level of Quantification - Alternatives to Pollutant Minimization Plans

Michigan's rules at R 323.1213(d) provide that, where there is a WQBEL below the level of quantification, "[t]he permit shall contain a special condition requiring the permittee to develop and conduct a pollutant minimization program (PMP) . . . unless the permittee can demonstrate to the department that an alternative technique is available to assess compliance with the WQBEL." If Michigan approves an alternative technique as a basis for not requiring a permittee to develop and conduct a PMP, Michigan will require in the permit that the permittee use that technique to assess compliance with the WQBEL

IV. Interim limits for compliance schedules.

Michigan's rules at R 323.1217(2) provide that permits that contain compliance schedules which go beyond the effective date of the permit must "set forth interim requirements and dates for achievement of the requirements, as appropriate." Whenever MDEQ issues a permit that allows for a compliance schedule that goes beyond the term of the permit, an interim permit limit effective upon the expiration date of the permit shall be included in the permit.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

By: _____

Russell J. Harding
Director

Date: 5/26/00

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

By: _____

Francis X. Lyons
Regional Administrator

Date: 7/28/00