

## Division of Surface Water

### Response to Comments

July 11, 2011

**Project: Elyria Wastewater Treatment Plant NPDES Permit Modification  
Ohio EPA Permit #: 3PD00034\*LD**

#### Agency Contacts for this Project

Division Contact: Gary Stuhlfauth, (614) 644-2026, [gary.stuhlfauth@epa.ohio.gov](mailto:gary.stuhlfauth@epa.ohio.gov)  
Public Involvement Coordinator: Kristopher Weiss, (614) 644-2160,  
[kristopher.weiss@epa.ohio.gov](mailto:kristopher.weiss@epa.ohio.gov)

Ohio EPA held a public hearing on May 12, 2011 regarding a modification to the NPDES permit for the Elyria wastewater treatment plant, which would grant a general variance for mercury and an individual variance for total dissolved solids. This document summarizes the comments and questions received at the public hearing and during the associated comment period, which ended on May 19, 2011.

Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format.

The people and organizations that submitted comments are indicated by superscripts as follows:

- a) Charles G. Brown, National Counsel, Consumers for Dental Choice
- b) Kevin Brubaker, Deputy Safety Service Director, City of Elyria
- c) Terry Korzan, Superintendent, Elyria Wastewater Pollution Control
- d) Mark Shaw, MacDonald, Illig, Jones & Britton LLP, for BASF Corp.
- e) Ronald G. Smith, Plant Manager, 3M Elyria

Statements in Support of Variances for Mercury and Total Dissolved Solids

**Statement <sup>b</sup>:** *(In entirety)* I would like to highly encourage the Ohio EPA and the US EPA to grant the City of Elyria the mercury and total dissolved solids (TDS) variances as requested. The economic impact on Elyria would be severe if any of the companies were forced to leave or not be able to expand operations. One company in particular is in process of a \$50 million expansion and several others are looking to expand. These companies are vital to Elyria as they provide local jobs and income tax revenue. They are also supported by other small businesses in Elyria that provide local jobs and tax revenue. (Mr. Brubaker provided similar testimony at the May 12 public hearing.)

**Statement <sup>d</sup>:** BASF Corp. formally expresses support for the mercury and TDS variances. It is not technically feasible for the City to meet either the 1.3 ng/l monthly average limit for mercury or the 1551 mg/l monthly average limit for total dissolved solids. The variances are a significant step to ensure the continued viability of several large manufacturers in Elyria, including BASF.

**Statement <sup>e</sup>:** 3M Co. supports the City's request for a variance to the TDS water quality standard. 3M's facility would be adversely impacted by the TDS limit in the current permit. The variance is important to the continued success of 3M Elyria and other industrial users.

Mercury Variance

**Comment 1<sup>a</sup>:** Consumers for Dental Choice urges Ohio EPA to reject this NPDES permit modification for the Elyria wastewater plant. Instead of granting variances that allow discharges of mercury greater than 1.3 ng/l, the organization recommends the following cost-effective alternatives: 1) Ohio EPA can have cities require that dentists install amalgam separators; 2) Ohio EPA can require that cities post notices in dental offices to warn patients about the environmental consequences of using mercury amalgam; and 3) Ohio EPA can have cities issue statements urging the use of mercury-free alternatives to amalgam.

**Response:** Data show that the Elyria wastewater treatment plant is not able to comply with the 1.3 ng/l water quality based effluent limit for mercury. The City submitted an acceptable application for mercury

variance coverage, which included a plan of study for a mercury pollutant minimization program. The PMP will build on the City's existing mercury reduction program. As part of that program, the City has a new ordinance that requires dental offices to install amalgam separators if they are unable to achieve a target mercury concentration in their discharge.

This is consistent with Ohio EPA's current approach to reducing mercury in the discharges from municipal wastewater plants. The decision on whether to require the installation of amalgam separators at dental offices is local.

Even if Ohio began the process of adopting legislation requiring amalgam separators and the other suggested measures today, it could take years to adopt and implement. Meanwhile, we are faced with the situation where most municipal wastewater plants in the Lake Erie basin are unable to comply with a permit limit of 1.3 ng/l. End-of-pipe treatment capable of reducing mercury to that level is cost prohibitive, and source reduction is the most viable option.

This is where a temporary variance to water quality standards is useful. It limits mercury discharges at current levels, and requires communities to implement mercury-reduction programs – the ultimate goal being to meet water quality standards, which remain in place. Once granted, variances must be renewed each permit cycle. This allows for new treatment technologies, successful reduction practices or new regulatory requirements to be considered in the NPDES permitting process.

Ohio EPA has also partnered with the Ohio Dental Association to develop and implement a program to recognize dental offices that operate in an environmentally responsible manner – including following the American Dental Association's BMPs for amalgam, which include use of amalgam separators.

We are going to issue the Elyria NPDES permit modification - including granting mercury variance coverage.

**Comment 2<sup>c</sup>:**

**Part II, Item DD, General Mercury Variance, requires the City to submit its annual PMP report on or before Oct. 15 of each year. Considering the likely effective date of this modification, the City will not have enough information to prepare a good report in October 2011. Should this be changed to requiring the PMP submittal one year from the modification effective date and annually thereafter?**

**Response:** Oct. 15 coincides with the date your annual pretreatment program report is due. Because mercury reduction is probably a part of your pretreatment program, the reports should be prepared together. However, considering the short time between issuing the modification and Oct. 15 and the other NPDES-related activities that the City will be involved with, we will revise this item so that the first annual PMP report will be due in October 2012.

**Comment 3<sup>c</sup>:** **Part II, Item FF requires the City to submit information for renewing the mercury variance along with its upcoming NPDES permit renewal application. This application is due in December 2011. Considering the likely effective date of this modification, the City will have little new data to include in the request to renew the variance. Wouldn't it be better to require the City to apply to renew the variance during the following NPDES permit renewal , which would come in 2016?**

**Response:** It is not possible to delay the variance renewal as you requested. Variances are part of the NPDES permit process, and when the NPDES permit expires, the variance also expires unless you've submitted timely renewal applications for your permit and for the variance. Item FF in Part II of the permit outlines the information the City must submit if it wants to renew mercury variance coverage. Considering the City's ongoing mercury reduction work, much of this information can come from updating your October 2009 application. The key part is the mercury reduction strategies and activities that you will implement under the renewed permit

**Comment 4<sup>d</sup>:** **BASF shares the City's concern about the short time from when the NPDES modification will be issued and when the City must submit information to support renewal of the mercury variance. It will be difficult for the City to effectively complete this work in such a short time. There also will be little change in available mercury data or in reduction/elimination strategies from what the City has already submitted to Ohio EPA. This creates additional work burdens for the City and Ohio EPA. It also continues the uncertainty for the City and the industrial users regarding the ultimate duration of the variance.**

**Response:** Please see the response to Comment 3, above.

#### Total Dissolved Solids Variance

**Comment 4<sup>c</sup>:** **Part II, Item II of the permit requires the City to submit information for renewing the TDS variance along with its upcoming NPDES permit renewal application. This application**

**is due in December 2011. Considering the likely effective date of this modification, the City will have little new data to include in the request to renew the variance. Wouldn't it be better to require the City to apply to renew the variance during the following NPDES permit renewal, which would come in 2016?**

**Response:**

For the same reasons given above for the mercury variance, the City must apply to renew the TDS variance along with the upcoming renewal of its NPDES permit. However, because the TDS variance is an individual variance, which requires demonstration of substantial financial impacts to the City and its industrial users and of widespread adverse impacts to the community and surrounding area, the information that must be submitted, as outlined in Part II, Item II of the permit, is more extensive. (Please see the response to Comment 5, below.)

**Comment 5<sup>d</sup>:**

**BASF shares the City's concern about the short time from when the NPDES modification will be issued to when the City must submit information to support renewal of the TDS variance. Specific concerns include:**

- **The City will not be able to submit upstream and downstream TDS data for the most recent 12 months;**
- **The time is inadequate for the industrial users to evaluate the technical and economic feasibility of modifying their facilities to reduce TDS to a level that would allow the Elyria wastewater plant to meet water quality standards.**
- **The time is inadequate for the industrial users to complete the economic evaluations to demonstrate substantial financial impact and for the City to demonstrate widespread adverse impacts.**
- **The City and industrial users will be focused on local limit issues in the months immediately following issuance of the modification.**
- **During this same time, the City will have to be working on its NPDES permit renewal application.**

**The time allowed for completing this work is simply inadequate.**

**Response:** The Agency agrees that the time for submitting an application for renewal of the TDS variance is too short for the City to submit a "substantially complete" application as it is currently required by Part II, Item II of the draft modification. Additional time is necessary for the industrial users to evaluate the technical and economic feasibility of modifying their facilities to reduce TDS to a level that would allow the Elyria wastewater plant to meet water

quality standards and to complete the analysis required to demonstrate substantial financial impacts. Additional time is also necessary for the City to complete the analysis demonstrating widespread adverse impacts.

To address this, we will revise Part II, Item II as follows to provide the City and its industrial users additional time to complete the required evaluations:

## II. Renewal of Total Dissolved Solids Variance

For renewal of the TDS variance authorized in this permit, the permittee shall include the following information with the submittal of the subsequent NPDES permit renewal application:

1. A statement requesting the renewal of the TDS variance.
2. Influent and effluent TDS data for the most recent 12 months and all upstream and downstream TDS data that the permittee has collected as required by this NPDES permit.
3. A progress report on requiring industrial users who are known sources of TDS to evaluate the technical and economic feasibility of modifying their manufacturing and/or treatment systems to reduce the TDS in their discharges to a level that would allow the Elyria wastewater treatment plant to meet water quality standards.
4. A schedule for developing and submitting the information required by Item GG.1.b, above, as well as any other information required under OAC 3745-33-07(D)(3)(a)(vi) to Ohio EPA no later than 12 months from the effective date of this modification.

**Comment 6<sup>e</sup>:** **It is 3M's understanding that, after the City submits its timely NPDES permit renewal application, all permit terms and conditions in the city's permit, including the TDS variance, automatically continue in effect after the City's current NPDES expiration date. Is this correct?**

**Response:** As long as the City submits an NPDES permit renewal application and a substantially complete application for renewal of the TDS

variance at least 180 days prior to the expiration date of the NPDES permit, the terms and conditions of the NPDES permit, including the TDS variance, remain in effect beyond the expiration date of the current permit. See OAC 3745-33-04(C) and 3745-33-07(D)(2).

**Comment 7<sup>e</sup>:** **3M requests that the reopener provision in Part II, Item HH be deleted because Ohio EPA can modify a permit under Part III, Item 18.**

**Response:** The reopener clause in Part II, Item HH is one of the minimum permit conditions required when the Director grants a variance. See OAC 3745-33-07(D)(6). It will remain in the permit

**Comment 8<sup>e</sup>:** **Part III, Item 32 should be deleted because it does not appear to be needed for Elyria's NPDES permit.**

**Response:** This provision is part of the general conditions that are included in all permits.

#### Local Industrial User Limits

**Comment 9<sup>d</sup>:** **Item AA.1 in the schedule of compliance gives the City only one month to evaluate and, if necessary, revise its local limits for TDS and selenium. One month is not sufficient time to properly address this. Since the last time that the City developed local limits, there have been numerous changes that would affect the development process. BASF previously has requested that the City consider several alternatives in developing the selenium local limit for its facility. BASF requests that at the permit allow at least three months to complete this process**

**Response:** We will revise the schedule to allow three months to complete the technical justification as requested.

**Comment 10<sup>c</sup>:** **Water quality values for cobalt, lithium and manganese, which the City received from Ohio EPA should be added to Part II, Item CC.3. The City has to use these values in local limit calculations.**

**Response:** Even though the pretreatment program requirements in Part II, Item CC of the permit were not opened as part of the modification, we will add the water quality values as requested by the City. This change would be allowed as a minor modification of the permit.

**Comment 11<sup>c</sup>:**      **The water quality value for molybdenum in Part II, Item CC.3 should be corrected. The correct value, 13,160 ug/l, was received from Ohio EPA.**

**Response:**            We will make this correction, which would be allowed as a minor modification of the permit.

NPDES Permit, Miscellaneous

**Comment 12<sup>c</sup>:**      **In Part II, Item AA, the text should state permit 3PD00034\*LD, not \*JD.**

**Response:**            We will make this correction, which would be allowed as a minor modification of the permit.

**End of Response to Comments**