

ERIE COUNTY
DEPARTMENT
OF
ENVIRONMENTAL SERVICES

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May 28, 2009

Mr. Eric Nygard
Ohio EPA DSWM
50 W. Town St. Suite 700
Columbus, Ohio 43215

RE: MERCURY VARIANCE APPLICATION FOR THE SAWMILL CREEK P.O.T.W. (PERMIT # 2PB00056*KD)

Dear Mr. Nygard:

Enclosed please find for Agency review the Mercury Variance Application for the Sawmill Creek P.O.T.W. located in Huron, OH. Based upon a review of past low-level mercury monitoring data utilizing Method 1631, Erie County cannot, on a consistent basis, meet the monthly mercury limit of 1.3 ng/L. As a result Erie County would like to request a permit modification under the general mercury variance for mercury (OAC 3745-33-07 (D)(10)(a)).

Please contact me, any time during your review process, if you have any questions or comments. Thank you.

Sincerely,
DEPARTMENT OF ENVIRONMENTAL SERVICES



Jack R. Meyers, P.E.
Sanitary Engineer

RLS/cah

cc: Robert L. Sennish, R.S., Environmental Specialist
David W. Miller, Coordinator
Gary A. Eckler, Wastewater Systems Superintendent
File

OHIO EPA - DSWM
2009 JUN - 1 AM 9:33

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Introduction:

Erie County owns and operates the Sawmill Creek Wastewater Treatment Plant located at 117 N. Rye Beach Rd. in Huron, Ohio and discharges treated wastewater to Lake Erie at Latitude 41N, 22', 28"; Longitude 82W, 32', 30". The Ohio EPA issued the Erie County Board of Commissioners a NPDES permit (2PB00056*KD). This permit was effective February 1, 2008 and expires on January 31, 2013.

The NPDES permit has required a monthly mercury discharge limit of 1.3 ng/L with a daily loading of 0.00773 Kg/d (0.0170 lbs/day) and monthly loading of 0.000006 Kg/d (0.000013 lbs/day) beginning on November 1, 2010. Until then Sawmill Creek POTW is required to monitor the plant influent and effluent quarterly for low-level mercury

The last 6 years (2002 through 2008) quarterly results have indicated the NPDES limit of 1.3 ng/L cannot be achieved on a consistent basis. However, Erie County is confident that monitoring results will not exceed an annual average mercury effluent concentration of 12 ng/L.

Erie County utilizes analytical method 1631, which is approximately 200 times more sensitive than the previous approved method (EPA method 245.1 and 245.2) and strictly adheres to method 1669 for sampling ambient waters for trace metals. The method detection level (MDL) used for this new method is 0.2 ng/L whereas the MDL for the EPA method 245 is 0.2 ug/L. The new quantification level using method 1631 is 1 ng/L and the quantification level for 245.1 or 245.2 was 1,000 ng/L.

Since quantification levels are so low at 1 ng/L, true compliance with the Water Quality Based Effluent Limitation (WQBEL) of 1.3 ng/L can be evaluated.

Ohio EPA has determined that the implementation of the general mercury variance is intended to prevent substantial and widespread social and economic impacts. The Ohio EPA has stated that the average cost to remove mercury below 12 ng/L through end of pipe treatment is in excess of ten million dollars for each pound of mercury removed per studies performed by Foster Wheeler Environmental Corporation, DRI, McGraw-Hill.

Mercury variance {OAC 3745-33-07 (D)(10)}

The general mercury variance presents Erie County the opportunity to not have to demonstrate widespread social and economic impact that would result from WQBEL compliance.

The variance is available because the Sawmill Creek Wastewater Treatment Plant has a 30-day average WQBEL and is, at this time, unable to meet it {OAC 3745-33-07 (D)(10)(a)}. The County can currently achieve an annual mercury effluent concentration of 12 ng/L. Erie County would like to request that the mercury variance be incorporated into the NPDES permit.

An antidegradation addendum (Appendix 2) and a permit modification application (Appendix 3) must also be completed and is attached to this variance request.

CERTIFICATION STATEMENT

As an authorized representative for Erie County, I am applying to the Director of Ohio EPA for coverage under the mercury variance from the 30-day average water quality-based mercury limit in the above-referenced NPDES permit. I hereby certify that I intend to be subject to the mercury variance terms and conditions of paragraph (d)(10) of rule 3745-33-07 under chapter 3745-33 of the Ohio Administrative Code. To the best of my knowledge, my NPDES-permitted discharge from outfall 2PB00056-001 is currently able to achieve, or I project it can achieve, an annual average mercury effluent concentration of twelve ng/l prior to the expiration date of our renewed permit.

JRM

Jack R. Meyers, P.E., Sanitary Engineer

5/28/09

Date

STATE OF OHIO)
) SS:
COUNTY OF ERIE)

BEFORE THE UNDERSIGNED, a Notary Public in and for said County and State, personally appeared the above-named, Jack R. Meyers, P.E., who acknowledged that he did sign the foregoing instrument, and that the same is his free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and official seal at HURON, Ohio, the 28 day of May, 2009.



CHERYL A. HOLBROOK
Notary Public, State of Ohio

Commission Expires My Commission Expires May 12, 2012

Cheryl A. Holbrook
Notary Public

Description of Mercury Reduction or Elimination Efforts Taken to Date

The Erie County D.O.E.S. is currently investigating how wastewater treatment chemicals purchased by the department may be, or may not be, contributing excess mercury to the wastewater as part of the treatment process. Erie County D.O.E.S. will determine if the chlorine (sodium hypochlorite) or caustic soda are produced in an electrolytic cell with a liquid mercury cathode.

If the chlorine, caustic soda, ferrous chloride, or any other treatment chemical is contributing mercury to the wastewater all reasonable efforts will be made to locate another chemical supplier that can certify low mercury levels in their product.

Erie County has reviewed and continues to review reduction strategies and case studies regarding mercury minimization strategies.

The Erie County Solid Waste District and local fire department's conduct a continual mercury thermometer exchanges for Erie County residents. In May of 2005, 25.35 pounds mercury was collected and in March 2006 approximately 10 pounds of mercury was collected.

The Erie County Solid Waste District publication Recycler is published three times per year and includes periodic mercury management practices. The Erie County Waste Reduction Program Facilitator contributes a weekly waste reduction article in the Huron Hometown News that will contain periodic mercury management practices. In addition, mercury handling and recycling information is included on the Erie County Solid Waste District web site.

The Erie County Solid Waste District conducts periodic household hazardous waste collection events and provides collection sites throughout Erie County for wet cell and dry cell battery recycling. The recycled batteries are sent to battery recyclers that break them down and recover heavy metals, acids, and other components.

Erie County D.O.E.S. will conscientiously review all chemicals utilized or chemicals considered for use at the Sawmill Creek Wastewater Treatment Plant for potentially excessive mercury content.

Erie County has also begun sampling upstream and downstream of known sources of mercury contributors in the Sawmill Creek sewershed and sampling of chemicals used in the wastewater treatment processes at the Sawmill Creek P.O.T.W. with method 245.1. Dental offices located in the Sawmill Creek sewershed were sent a mercury/mercury amalgam-handling questionnaire and literature regarding dental practice Best Management Practices (BMP's).

The results of the aforementioned mercury reduction efforts will be summarized in the first pollutant minimization plan (PMP) annual report scheduled to be submitted by March 2011.

Sawmill Creek POTW Influent/Effluent Mercury Concentrations

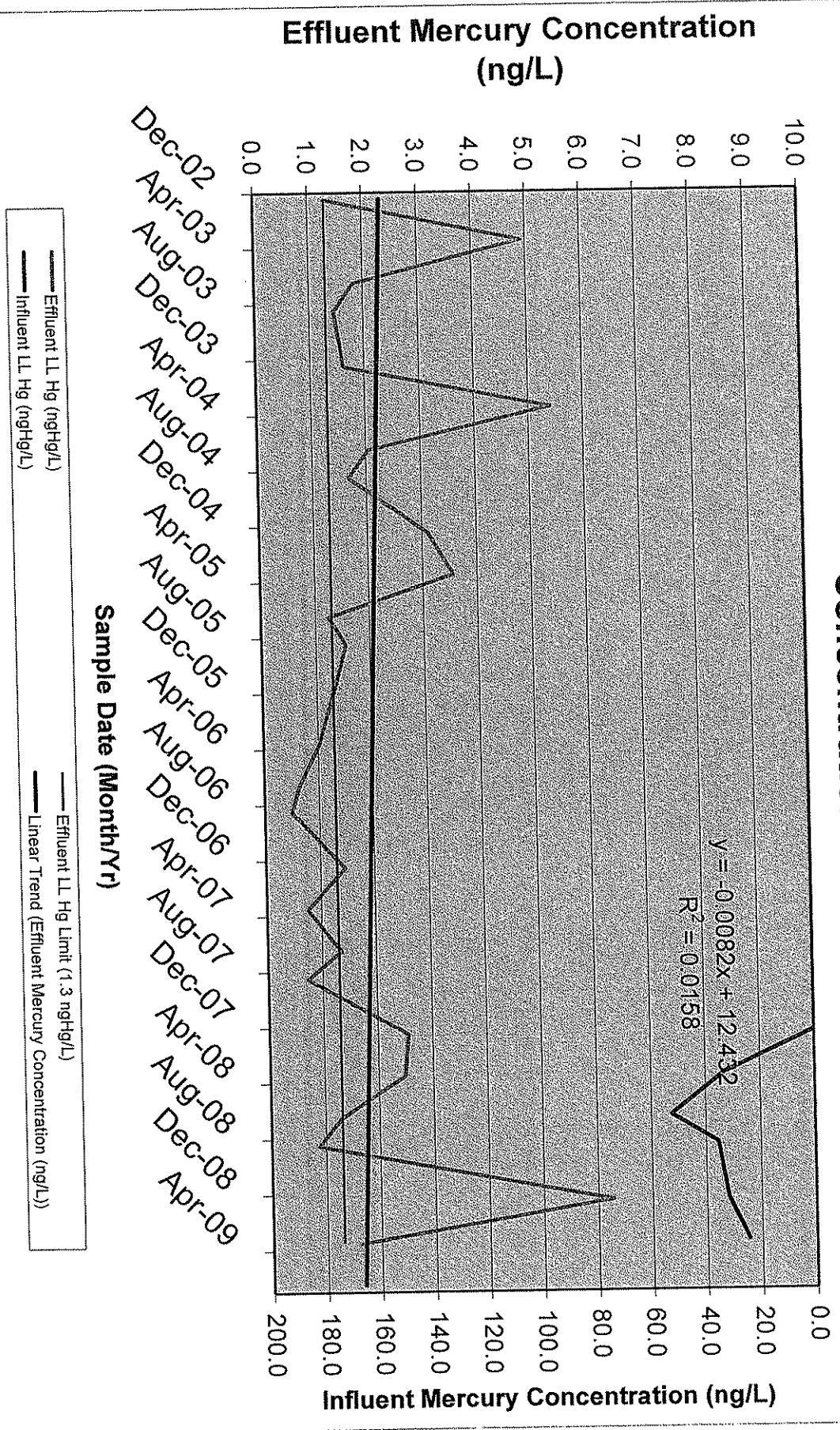


Table # 2
Current Influent and Effluent Mercury Concentrations and PEQ Result

<i>Date</i>	<i>Influent [Hg] (ng/L)</i>	<i>Affluent [Hg] (ng/L)</i>
Dec-02	**	1.32
Mar-03	**	4.91
Jun-03	**	1.82
Aug-03	**	1.45
Dec-03	**	1.61
Mar-04	**	5.40
Jun-04	**	2.04
Aug-04	**	1.67
Dec-04	**	3.11
Mar-05	**	3.56
Jun-05	**	1.25
Aug-05	**	1.55
Dec-05	**	1.26
Mar-06	**	1.03
Jun-06	**	0.64
Aug-06	**	0.50
Dec-06	**	1.45
Mar-07	**	0.75
Jun-07	**	1.35
Aug-07	**	0.72
Dec-07	**	2.55
Mar-08	32.9	2.48
Jun-08	52.8	1.29
Aug-08	35.6	0.87
Dec-08	32	6.27
Mar-09	24.9	1.63
Jun-09		
Aug-09		
Dec-09		

(**) indicates that the monitoring for influent mercury was not required

Average	2.02
95th Percentile (Avg PEQ)	4.708

Parameter name: Mercury, Total (Low Level)

Reporting code: 50092 (3/10/2004-3/3/2009)

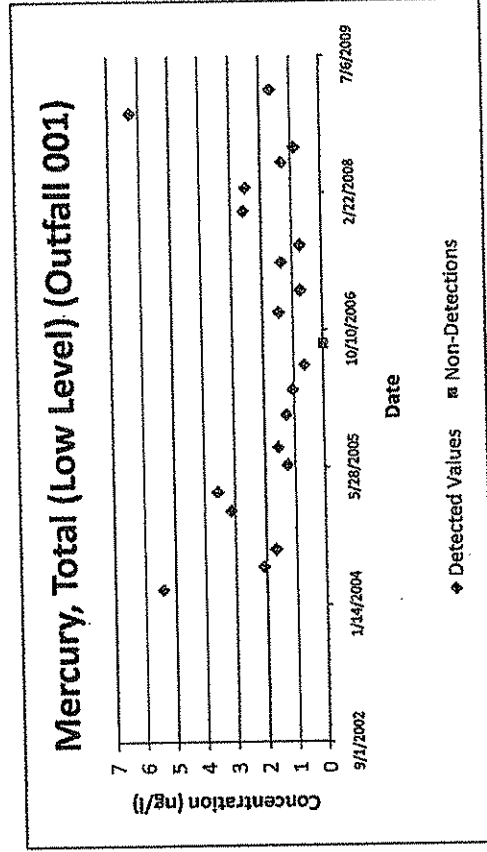
Units of measure: ng/l

# of Obs.	# of Obs. > MDL	# of Obs. excluded	Min. Value	Max. Value	MaxChk Value	PEQ Method	R ² Value	PEQ average	PEQ max
21	20	0	0.64	6.27	9.0567	B	0.97474	4.1828	7.0259

Permit number: 2PB00056

Outfall number: 001

Date	Reported Value	Exclude	Enter
3/10/2004	5.4		
6/1/2004	2.07		
8/3/2004	1.67		
12/22/2004	3.11		
3/1/2005	3.56		
6/6/2005	1.25		
8/9/2005	1.55		
12/5/2005	1.26		
3/7/2006	1.03		
6/5/2006	0.64		
8/22/2006	AA		.5
12/13/2006	1.45		
3/5/2007	0.73		
6/13/2007	1.35		
8/15/2007	0.72		
12/18/2007	2.55		
3/12/2008	2.48		
6/11/2008	1.29		
8/5/2008	0.868		
12/10/2008	6.27		
3/3/2009	1.63		



Annual Report Components

1. The PMP annual Report will include a summary of known and potential sources of mercury. The summary of known and potential sources of mercury will include targeted groups of individual sectors covered by the plan and any newly identified sources resulting from system monitoring or other evaluations.
2. A summary of all actions taken to meet the effluent limits for mercury.
3. Minimization program monitoring results for the year including raw influent and final effluent quarterly monitoring results, biosolids monitoring, and collection system monitoring of potential sources of mercury. This section will also include data tabulation and graphical representation.
4. Any PMP/Plan-of-study (POS) updates.

Sawmill Creek Wastewater Treatment Plant Plan-of-Study

1. ***Current Effluent [Hg] /graph w/trendline.***

Please refer to Figure 1 for a graph comprised of the last 6 years of effluent data using method 1631. Table 2 includes results of low-level mercury results on a quarterly basis from March 2002 to June 2009. This table also includes an average of all final effluent data points. The PEQ is the 95th percentile of the aforementioned data. The average PEQ calculation followed the Modeling Guidance 1 Document, Method B, Calculating PEQ. The Ohio EPA calculated the average PEQ for the Sawmill Creek POTW. The OEPA generated average PEQ is 4.18 ngHg/l.

2. ***Preliminary identification of sources***

Preliminary identification of sources will be conducted based on information obtained from literature and regulatory agencies. Based on the generic list of possible sources (Table 1), Erie County D.O.E.S. will prepare a list of possible contributors discharging to the Sawmill Creek POTW sewershed.

A local survey will be conducted for known mercury sources (hospitals, doctors, dentists, veterinarian offices, schools, industry, and laboratories). The survey/questionnaire will request information as to possible mercury contribution from potential sources at each entity. Initial sewer system sampling utilizing EPA Method 245.1 for quantifiable levels of mercury should also provide information regarding mercury discharges from entities, which are expected to contribute excess amounts of mercury to the Sawmill Creek Sewershed.

Table 1
Documented Sources of Mercury

The following is a list of mercury contributors that are common to many communities. The list should be helpful for developing a mercury reduction and elimination program.

Common mercury contributors

Hospitals Breakage of mercury containing equipment, laboratory reagents, mercuric oxide batteries.

Concentrations: **0.3 ppb – 5.4 ppb ***

Dentists Dental amalgam. (Some of this mercury may be transformed into bioavailable form during wastewater treatment. Majority will concentrate in sludge.)

Concentrations: **.01 – 0.3 grams/dentist/day ***

Sewer Cleaning Mercury collects in sewer line sediments. Sewer cleaning flushes sediments to the wastewater treatment plant.

Residential Wastewater Mercury ingested deposited in human waste.

Concentrations: **.01 ppb average ***

Septic Haulers

Concentrations: **62 ppb average.** For sanitary sewer district approximately 1.6% of influent mercury was calculated to be from septage. *

Unique mercury contributors

Contributors that may be specific to a particular community.

Industrial laundries Chemicals used in cleaning process such as bleach and caustic soda, dirt cleaned from clothing. Imported clothing may contain mercury in dyes and preservatives.

Concentrations: **.07 ppb ***

Laboratories Mercury containing equipment and reagents.

Concentrations: **0.7 ppb ***

Veterinary clinics Mercury containing devices and reagents.

Table 1 Continued

<u>Printing Industry</u>	Inks and special paper coatings.
<u>Pottery and Arts</u>	Mercury contained in pigments in art materials.
Concentrations:	0.31 ppb. Individual glazes had concentrations up to 41 ppb. *
<u>Automobile Service</u>	Mercury in oil and dirt.
<u>Painting / Paint stripping</u>	The use of mercury in latex paint has been banned since 1990. Latex paint manufactured prior to that date could contain mercury. Stripping of old paint from houses may result in introduction of mercury into sewers. Storage of old paint.
Concentrations:	250 – 125,000 ppb in old latex paint. (pre 1990) *
<u>Scrap Dealers</u>	Vehicles and domestic appliances containing mercury such as gauges and light fixtures.
<u>Landfill leachate</u>	Leachate will vary greatly dependent upon the type of waste at the landfill.
Concentrations:	Municipal solid waste facility 0.7 – 2.0 ppb *
<u>Pollution control devices</u>	Wet scrubbers at industrial facilities where there is no pretreatment for the scrubber water before being discharged to the sewer.
Concentrations:	200 ppb prior to treatment, 20 ppb after treatment. *

** All data provided here was obtained from a literature review and investigations conducted by the Western Lake Superior Sanitary District (WLSSD), and is intended to provide an example of the potential mercury levels that may be found in wastewater.*

3. Description of Current Plans to Reduce or Eliminate Known Sources of Mercury.

As presented in previous sections; information obtained from literature review, and regulatory agencies when combined with a collection system-monitoring plan will be used to help identify entities which are contributing elevated levels of mercury to the Sawmill Creek sewershed. When site-specific questionnaires/surveys are completed a contact list will be developed. The list will contain which entities to contact for implementation of source elimination, reduction, or pollution prevention/BMP's strategies to reduce mercury discharges. The Wisconsin Mercury Source Book has published strategies/BMP's to reduce or eliminate mercury from wastewater discharges for a wide variety of business sectors and can be viewed and/or downloaded from the USEPA website at www.epa.gov/glnpo/bndocs/hgsbook/. Erie County will provide information from this publication to entities in individual sectors needing to implement reduction and/or elimination strategies/BMP's for mercury. Visiting the above referenced website and others documented in Appendix (I) will be encouraged.

When an entity is found to be discharging elevated levels of mercury to the Sawmill Creek sewershed, and the use of BMP's are not effective or have not been implemented at all, pretreatment of the wastewater prior to discharge will be initiated using technically evaluated discharge local limits. BMP's implemented by POTW's to prevent pass through and treatment interference are considered enforceable as local limits under 40 CFR 403.5 (d) as indicated in USEPA, Region 5, Mercury Pollutant Minimization Program Guidance, November 2004, page 11, and under Erie County Pretreatment Regulations (Resolution #92-17). Appendix (5) contains an amendment (Resolution No. 07-112) to the resolution #92-17 passed by the Board of Erie County Commissioners on March 1, 2007 regarding BMP's as an option to numerical local limits.

4. Identification of Other Potential Sources of Mercury

Other potential sources of mercury are mercury arc lamps, fluorescent lights, old microwaves, thermostats, thermometers, spent alkaline batteries, mercurochrome (antiseptic), switches, gas-pilot appliances, latex paint, cosmetics, fireworks, vaccines, turf products, and maritime paint. Mishandling and improper disposal can contribute to mercury levels in the wastewater collection system. The issue of the Ohio EPA, Compliance and Prevention Quarterly, 2005 reported that the Ohio EPA is interested in pursuing legislation aimed at reducing the amount of mercury released to the environment from consumer goods www.epa.state.oh.us/ocapp/pz/mercury-pbt/mercur.pdf. Presently, House Bill 443 was made law on January 4, 2007. The law has the mercury product regulations created initially in House Bill 583 and Senate Bill 323, establishing sales bans for certain mercury products. Public and private schools through high school shall not purchase mercury, mercury compounds or mercury-measuring devices for classroom use as of April 6, 2007. Mercury thermometers and mercury-containing novelty items will not be sold in Ohio as of October 6, 2007. The sales of novelty items that have mercury cell button batteries are banned in 2011. Mercury thermostats will not be sold or installed as of April 6, 2008. There are

A fact sheet is available at
http://www.epa.state.oh.us/ocapp/p2/mercury_pbt/fact115.pdf.

OEPA has also implemented a Mercury Switch Removal Program for Auto Recyclers www.epa.state.oh.us/elus.html that pays money for each mercury-containing automobile switch removed and properly recycled.

Erie County collection system maintenance personnel will monitor for evidence of any of the above-mentioned solid waste during routine maintenance cleaning. Additionally, sampling personnel will also monitor for evidence of mercury containing solid waste in the collection system. Sampling personnel may also be compelled to consider sampling sewer sediments if no other source can be identified by monitoring activities in a particular area of the collection system.

Public education regarding mercury containing consumer goods will be documented in "The Recycler" newsletter and on the Erie County Solid Waste District Website.

Continued collection system monitoring will be used to identify other potential mercury sources. The goal of continued collection system monitoring will be to establish smaller areas of the system that are contributing elevated levels of mercury. EPA Method 245.1 will be used to monitor the collection system for quantifiable levels of mercury. Quantifiable levels of mercury will be investigated to determine the source. If influent levels of mercury are not decreasing with time then Erie County will begin to utilize Method 1631 as the analytical method to evaluate collection system mercury levels.

5. ***Proposed Schedule for Evaluating Sources***

2010 January – December

- Develop system-monitoring plan utilizing method 254.1 and/or 1631 to conduct initial screening at large lift stations and proceed upstream to potential sources of mercury.
- Sample upstream and downstream of known mercury contributors.
- Continue to investigate potential sources of mercury at Sawmill Creek POTW.
- Continue the monitoring of mercury as indicated by NPDES Permit.

2011 January – December

- Prioritize identified mercury sources and prepare questionnaires and other information that will be used for site visits and public information.
- Continue sewer system monitoring.
- Compile and organize data.
- Continue the monitoring of mercury indicated by NPDES Permit.

2012 January – December

- Evaluate sewer system monitoring data and determine if additional monitoring is necessary.
- Identify any other potential sources.
- Continue the monitoring of mercury indicated by NPDES Permit.

2013 January – December

- Conduct additional sewer system monitoring, if necessary.
- Continue conducting site visits of known and potential mercury sources and encourage BMP implementation
- Continue the monitoring of mercury indicated by NPDES Permit.

2014 January – December

- Conduct additional sewer system monitoring, if necessary.
- Complete all site visits and compile lists of all known sources.
- Conduct interviews of sewer maintenance personnel and review inspection/maintenance records to determine possible sources of mercury containing solid waste found in the sewer system.
- Compile and organize data.
- Continue the monitoring of mercury indicated by NPDES Permit.

2015 January – December

- Conduct additional sewer system monitoring, if necessary.
- Identify, if possible, any additional potential mercury sources.
- Continue the monitoring of mercury indicated by NPDES Permit.
- Complete site visits to potential mercury sources.

2015 January – December (Cont'd)

- Compile and organize data.
 - Evaluate sewer system data.
 - Review and revise PMP & POS.
6. ***Proposed Schedule for Identifying and Evaluating Potential Reduction, Elimination and Prevention Methods.***

2010 January - December

- Conduct site visits to dental offices. Distribute the following: a copy of New Hampshire Dental, and ADA BMP's for Amalgam Waste, 2005. USEPA website for Wisconsin Mercury Source Book, and mercury amalgam separator information.
- Encourage implementation of control strategies.
- Conduct mercury monitoring required by NPDES permit.
- Begin work with Erie County Solid Waste District for information regarding Household Hazardous Waste collection events, or any other activities that may be designed to collect mercury containing solid wastes.
- Participate in Erie County Solid Waste District events to properly manage mercury containing solid wastes. Participate in public education activities.
- Provide mercury reduction practices information at community events (i.e. County Fair, etc.)
- Submit annual PMP report by March 1, 2011.

2011 January - December

- Continue site visits of known sources of mercury. Distribute available guidance documents/BMP's for appropriate sector. USEPA website address for Wisconsin Mercury Source Book and Ohio EPA mercury reduction website.
- Continue activities for mercury reduction strategies with Erie County Solid Waste District.
- Conduct monitoring required by NPDES permit.
- Submit annual PMP report my March 1, 2012.

2012 January – December and Annually

- Continue visits to other potential sources. Distribute available guidance documents/BMP's and recommend a mercury spill kit for entities that have instruments or products that contain elemental mercury.
- Submit annual PMP report my March 1, 2013 and annually thereafter.
- Encourage implementation of control strategies.
- Determine if implemented BMP's have been successful as indicated by Huron Basin POTW influent and effluent mercury concentrations and/or upstream and downstream mercury levels of known mercury sources, and begin consideration of pretreatment options.
- Contact known sources to obtain information on any mercury reduction measures that have been implemented.
- Document and compile information.
- Conduct monitoring required by NPDES permit.
- Continue annual contacts with known sources of mercury to determine if any reduction measures/BMP's have been implemented. Document and compile information on measures implemented

POS Summary

A POS is requested by Ohio EPA to increase the probability that the WQBEL of 1.3 ng/L will actually be achieved by pollution prevention.

The POS consists of identifying known mercury sources to the wastestream by reviewing published information or by sewer system sampling. The POS includes provisions to provide guidance and information on pollution prevention strategies to reduce or eliminate the discharge of mercury contaminated wastewater to the Huron Basin POTW sewershed.

Annual PMP reports will be submitted to track the progress of the POS.

The success of the Erie County Department of Environmental Services POS will be indicated by the incremental reduction of the mercury discharged to the sewer system to the point where the WQBEL of 1.3 ng/L will be consistently met.

Basis for Non-Compliance with WQBEL Explanation OAC-3745-33-07 (D)(10)(a)(i)

Referring to Table (2) the Sawmill Creek POTW has not, on a consistent basis, met the WQBEL of 1.3 ng/L. Up until the renewal permit issued in February of 2008, low-level mercury was required to be monitored only and no mercury pollutant minimization techniques were being utilized for the Sawmill Creek sewershed. Referring to Figure 1, the linear trend analysis for final effluent mercury levels indicate that, without a mercury control program implemented, the final effluent mercury concentration is trending lower. Once pollution minimization techniques are implemented and monitored for success, as indicated in this PMP/POS, a more meaningful explanation for WQBEL non-compliance can be developed.

The last four sampling events (March 2008, June 2008, December 2008, and March 2009) included influent low level mercury sampling and analysis. Referring to Table 3 the removal efficiency is consistent with other POTW experiences (City of Delphos, OH Mercury PMP). The tendency is that there is a direct relationship with influent mercury concentration and removal efficiency. As the influent concentration decreases the removal efficiency also decreases. This relationship, although there are only three data points from the Sawmill Creek POTW, experienced by other treatment facilities indicates that the WQBEL may not be able to be achieved on a consistent basis without costly end-of-pipe controls. This relationship will be tracked for the duration of this permit modification to determine if, in fact, the direct relationship between the influent concentration of mercury and mercury removal efficiency is a valid case for WQBEL non-compliance.

Erie County's goal is to move toward the WQBEL and ultimately meet it on a consistent basis. Therefore, based upon final effluent mercury data and the absence of a mercury pollutant minimization program, Erie County believes that there are no measures, other than end-of-pipe controls to meet the WQBEL of 1.3 ng/L.

Erie County requests a general mercury variance be issued for the WQBEL of 1.3 ng Hg/L indicated in the NPDES permit (2PB00056*KD) issued for the Sawmill Creek POTW. Erie County believes that monitoring results are representative and valid.

Table # 3
Current Influent and Effluent Mercury Concentrations and Removal Efficiencies

<i>Date</i>	<i>Influent [Hg] (ng/L)</i>	<i>Effluent [Hg] (ng/L)</i>	<i>[Hg] Removal Efficiency (%)</i>
Dec-02	**	1.32	
Mar-03	**	4.91	
Jun-03	**	1.82	
Aug-03	**	1.45	
Dec-03	**	1.61	
Mar-04	**	5.40	
Jun-04	**	2.04	
Aug-04	**	1.67	
Dec-04	**	3.11	
Mar-05	**	3.56	
Jun-05	**	1.25	
Aug-05	**	1.55	
Dec-05	**	1.26	
Mar-06	**	1.03	
Jun-06	**	0.64	
Aug-06	**	0.50	
Dec-06	**	1.45	#VALUE!
Mar-07	**	0.75	#VALUE!
Jun-07	**	1.35	#VALUE!
Aug-07	**	0.72	#VALUE!
Dec-07	**	2.55	#VALUE!
Mar-08	32.9	2.48	92.5%
Jun-08	58	1.29	97.8%
Aug-08	35.6	0.87	97.6%
Dec-08	32	6.27	80.4%
Mar-09	24.9	1.63	93.5%
Jun-09			
Aug-09			
Dec-09			

(**) indicates that the monitoring for influent mercury was not required