

## NOTICE OF ALBANY CITY COUNCIL MEETING

There will be a meeting of the City Council in and for the City of Albany, Stearns County, Minnesota at 6:30 o'clock in the evening on Wednesday, June 17, 2015, in the Council Room at 400 Railroad Avenue for the said City.

### AGENDA

1. Convene meeting
2. Pledge of Allegiance
3. Audit Bills
4. Act on regular Council minutes of the meeting held on June 3rd
5. Open Forum/Public comment
6. Perry Schmidt, CenterPoint Energy – present Energy Community Partnership Grant
7. Jeremy Mathiasen, City Engineer – Project updates
8. Joseph Mergen, Public Works Supervisor - present Mercury Minimization Plan for Wastewater Treatment Plant
9. Laurie Dingmann, Park Board and Community Education Liaison
10. John R. Harlander, Street Department and Albany Township Liaison
11. Tom Kasner, Fire Department, EDA Board, and Equipment
12. Ozzie Carbajal, Police Chief
13. John Greer, Police Department and Planning Commission  
-Planning Commission recommendation – Mother of Mercy Campus of Care for a Conditional Use Permit for a multi-family dwelling at 540 Church Avenue within an R2 Zone
14. Daron Gersch, Utility Department and Albany Golf Club
15. Tom Schneider, Clerk/Adm.  
-Albany Chamber of Commerce – Large Gathering Permit application for Heritage Day  
-Albany Chrysler Center – Large Gathering Permit application for annual Car Show
16. Mayor's announcements and letters
17. Announce next meeting date and adjourn

Tom Schneider  
Clerk/Adm.



City of Albany, Minnesota  
Mercury Minimization Plan  
June 2015

## Albany Wastewater Facility

34502 County Highway 41  
Albany, Minnesota 56307-9458

- Public Works Supervisor Joe Mergen
- Phone: (320) 980 2990
- [jmergen@albanytel.com](mailto:jmergen@albanytel.com)

- NPDES Permit Number: MN 0020575

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**Minnesota Pollution Control Agency**

520 Lafayette Road North  
St. Paul, MN 55155-4194

# Mercury Minimization Plan Guide **National Pollutant Discharge Elimination System**

## **(NPDES) Wastewater Program**

*Doc Type: Pollutant Minimization Plans*

This guide was created to assist you in completing your Mercury Minimization Plan (MMP). The guide provides detail on each of the five steps and suggested resources to complete the information. The attached Sector Worksheets can be used to record your plan and implementation of the activities to provide future mercury reductions

### **Facility Information**

Facility name The City of Albany Wastewater Treatment Plant Date: April 2015 Facility  
Address 34502 County Highway 41 City: Albany State: Minnesota Zip code: 56307  
Preparer name Todd Arlander, Stantec Preparer's telephone: 507 259 1855

### **Background**

Mercury is present in all municipal and many industrial wastewater discharges. Mercury is a powerful neurotoxin that affects human health and the environment. A naturally-occurring element, mercury does not breakdown into less harmful substances over time. Instead, mercury released into the environment accumulates in fish and animal tissues, a process known as bioaccumulation. Widespread mercury contamination has prompted the Minnesota Department of Health to issue fish consumption advisories throughout the state. Most of Minnesota's impaired waters are contaminated by mercury and other bio-accumulative toxins. The Minnesota Pollution Control Agency (MPCA) is carefully evaluating all mercury discharges in the state.

### **Provide a Facility Description Update**

The MPCA has a facility description from the most recent permit application. In order to review and process your MMP to make sure that it meets permit requirements, it would be helpful to:

1. Briefly describe any changes in your facility, collection system or operation process in the last five years, including changes in industrial, commercial or institutional users or their discharges in Table A.
2. **Albany is monitoring Influent and Effluent at the Wastewater Facility**

**Table A – Changes in your facility**

Change	No major changes that would affect mercury in wastewater				
Facility					
Collection System					
Operation Process					

*Albany has been monitoring for Mercury two times each year since 2012. Results varied, as you will see. We did not get results for dissolved mercury on Influent in October of 2013. Sampling for Albany takes place in May and October. These sampling dates work well because Albany receives Influent from the community every day, yet only discharges the Pond system two months of each year. (May and October)*

## Step 1: Measure Your Wastewater Treatment Facilities (WWTFs) Influent, Effluent, and Biosolids Mercury Concentrations

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### Compile influent and effluent mercury measurements taken at the WWTF

Some facilities may not have data at this time. If data has been collected in the past, provide a summary of mercury influent and effluent concentrations and biosolids monitoring data, using the most recent five years of monitoring data. Most operators can expect changes in mercury levels over time due to daily, seasonal or annual variations; as a result of changes in facility operations or contributions from business or domestic sources. Business sources include industrial, commercial and institutional users. Note any trends and describe in the MMP.

### Working your data into a MMP

*Influent Mercury was calculated by averaging the mercury concentrations for the year and multiplying the concentration by the total flow to the Ponds. Results are presented in Milligrams per year and in Grams per year.*

*Effluent mercury was calculated using mercury concentrations of each of two discharges, multiplied by actual Pond discharge. Results are in milligrams and in grams of mercury in WWTF Pond effluent.*

### Mass load

Determining mass loading estimates from individual sources to a WWTF will help decide where to best remove the most mercury from the influent to most effectively reduce the discharger's effluent concentrations. The more mass influent removed, the more likely effluent will respond accordingly.

Usually WWTF operators use concentration (nanograms per liter or ng/L) to describe mercury levels. To calculate mass load in the table, multiply the concentration and the flow (million gallons per day or MGD) by 3.785—a conversion factor.

For WWTFs with industrial, commercial, and institutional users, mass load will be useful for goal setting later in this guide.

$$\text{Mass load (mg/day)} = \text{Flow (MGD)} \times \text{Concentration (ng/L)} \times 3.785$$

**Record data in Table C, or submit your own spreadsheets.**

Table C – WWTF calendar month average influent and effluent data

Albany	Mercury					
	Year 2012					
	Influent			Effluent		
	Flow (MGD)	Conc. (ng/L)	Mass (mg/day) (mg)	Flow Million Gallons	Conc. ng/L	Mass mg discharged
Jan	0.266					
Feb	0.273					
Mar	0.283					
Apr	0.271					
May	0.406	14.2	21.82	35.186	2.57	341.82
Jun	0.401					
Jul	0.311					
Aug	0.29					
Sep	0.271					
Oct	0.25	88.5	83.74	46.447	1.73	303.74
Nov	0.265					
Dec	0.212					
Annual Average	0.292		52.71			
Annual Totals	106.58		19,239	81.63		645.55
Mercury Total (grams)			19.24 G			0.646 G

Albany	Mercury					
	Year 2013					
	Influent			Effluent		
	Flow (MGD)	Conc. (ng/L)	Mass (mg/day) (mg)	Flow Million Gallons	Conc. ng/L	Mass mg discharged
Jan	0.234					
Feb	0.241					
Mar	0.253					
Apr	0.331					
May	0.387	20.7	30.28	62.067	5.12	1201.22
Jun	0.428					
Jul	0.303					
Aug	0.288					
Sep	0.247					
Oct	0.262	65.9	65.35	36.832	0.964	134.21
Nov	0.25					
Dec	0.255					
Annual Average	0.29		47.82		3.042	
Annual Totals	105.85		17,454	98.90		1335.43
Mercury Total (grams)			17.45 G			1.335 G

Albany Mercury						
Year 2014						
Influent				Effluent		
	Flow (MGD)	Conc. (ng/L)	Mass (mg/day) (mg)	Flow Million Gallons	Conc. ng/L	Mass mg discharged
Jan	0.22					
Feb	0.256					
Mar	0.294					
Apr	0.414					
May	0.537	33.3	67.59	71	2.6	697.79
Jun	0.69					
Jul	0.32					
Aug	0.29					
Sep	0.32					
Oct	0.29	27	29.60	88	0.6	199.58
Nov	0.27					
Dec	0.27					
Annual Average	0.348		48.59			
Annual Totals	127.02		17,737	159		897.37
Mercury Total (grams)			17.74 G			0.9 G

**Table D – Flow/Load Information**  
**2012**

Summary Data			Formula		Grams
Annual influent flow	106.58	MG/yr	Annual average influent flow (MGD) x 365	Influent	19.24
Annual effluent flow*	81.63	MG/yr	Annual average effluent flow (MGD) x 365 (if available)	Effluent	0.646
Mercury percent removal	97	%			

mg = milligrams  
mg/yr = milligrams per year  
ng/L = nograms per Lister  
MGD = million gallons per day



2013

Summary Data			Formula		Grams
Annual influent flow	105.85	MG/yr	Annual average influent flow (MGD) x 365	Influent	17.45
Annual effluent flow*	98.9	MG/yr	Annual average effluent flow (MGD) x 365 (if available)	Effluent	1.34
Mercury percent removal	92	%			

mg = milligrams                      ng/L = nograms per Lister  
 mg/yr = milligrams per year      MGD = million gallons per day

2014

Summary Data			Formula		Grams
Annual influent flow	127.02	MG/yr	Annual average influent flow (MGD) x 365	Influent	17.74
Annual effluent flow*	159	MG/yr	Annual average effluent flow (MGD) x 365 (if available)	Effluent	0.9
Mercury percent removal	95	%			

mg = milligrams                      ng/L = nograms per Lister  
 mg/yr = milligrams per year      MGD = million gallons per day

The examples below show how potential inputs would result in answers for the table on the preceding page. Insert your plant's input numbers to determine answers.

**Influent example**

4.0 MGD x 365 days/year x 120 ng/L influent mercury concentration x 3.785 = 663,132 mg/yr or 663.1 grams/year (divide by 1000 to divert to grams)

**Effluent example**

3.9 MGD x 365 days/year x effluent mercury concentration 4 ng/L x 3.785 = 22,552 mg/yr or 22.6 grams/year (divide by 1000 to convert to grams.)

## **Step 2: Evaluate the Mercury Reduction Potential of Your Users**

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Many sources of mercury discharge into your wastewater treatment plant. As appropriate for your facility, you should consider dental clinics, hospitals, medical clinics, nursing homes, schools, and industries with potential for mercury contributions. You may need to consult with other municipal staff to identify all possible contributing industrial, commercial and institutional sources, especially small operations.

*According to USEPA information, typical WWTF influent mercury concentrations range from 50 to 500 ng/L. Samples over the past three years indicate Albany influent is averaging 41.6 ng/L, suggesting that there are very limited opportunities for users to reduce mercury discharges. General customer education is considered the best action this time as a means of keeping mercury discharges low.*

## **Step 3: Evaluate Your WWTF's Mercury Reduction Potential**

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*Over the past three years, Albany effluent has averaged 2.3 ng/L. USEPA has written that the mercury concentration of typical municipal WWTF effluent ranges from 1 to 20 ng/L. The excellent performance of the Albany wastewater pond system suggests that limited opportunity exists for significant increase in mercury removal. One explanation for the low effluent mercury concentrations is the extensive use of chemical addition for removal of phosphorus. Prior to each discharge, pond operators inject alum to precipitate phosphorus. In addition to phosphorus, the precipitation reaction also removes suspended solids to which mercury has adsorbed.*

## **Step 4: Summarize mercury reduction activities implemented during the last five years.**

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### **Prevention first**

Mercury can be reduced at the source by eliminating or minimizing it through product substitution or other means. You may not be able to reduce mercury to needed levels by implementing only one approach. You may need to work with a variety of businesses and WWTF processes. Your community and the businesses that discharge to your facility may have already completed some activities to reduce mercury. This section summarizes past mercury reduction activities.

*Albany's Mercury reduction is aided and facilitated at the Pond Facility, as the City adds chemicals to remove Phosphorus. The Chemical addition yields an average Mercury removal rate at 94% over the last three years (only three years) of testing.*

*Cost of Purchased Chemicals for Phosphorus Removal:*

<b>Year</b>	<b>Chemical Cost</b>
2008	\$44,977
2009	\$43,250
2010	\$57,285
2011	\$135,388
2012	\$54,897
2013	\$91,137
2014	\$77,564

*Removing phosphorus to low levels will also remove additional mercury. These purchased chemicals are Albany's investment in improved Mercury reduction.*

*Albany will continue to monitor mercury, as directed by Permit requirements.*

## **Step 5: Create an Implementation Plan for Mercury management and reduction measures for the next five years.**

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### **Selected Mercury reduction strategies**

1. *Albany will continue to add chemical for removal of total phosphorus, which leads to improved mercury as a side benefit.*
2. *Every other year, Albany will educate residential and non-residential customers on methods for reducing the use of mercury containing products and on ways to safely dispose of products that contain mercury. The education effort will consist of one of the following:*
  - a. *Customer newsletter insert.*
  - b. *City website notice.*
3. *An example newsletter item is included in Attachment A.*

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## Certification

### Submission of MMP

Signature of officer or authorized agent:

\_\_\_\_\_ Date: \_\_\_\_\_  
Submission of MMP

Send the MMP to:

Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, MN 55155  
Attn: WQ Submittals Center

## Attachment A

### EXAMPLE



#### **Attention Residents and Businesses in Albany:**

The City of Albany is obligated to the Minnesota Pollution Control Agency (MPCA) to attempt to minimize the wastewater treatment plant output of elemental Mercury.

Our Wastewater Plant puts forth a good effort to reduce Mercury as we add chemical treatment to the Ponds before discharge. This treatment really reduces the solids in the wastewater, and along with those solids; reduces Mercury.

Albany's next effort focuses on helping our residents and area businesses to recycle all mercury containing products.

Elemental mercury is generally present by accident: for example- breaking of mercury thermometers, blood pressure equipment, or fluorescent lights. Dental mercury that is not trapped at the Dentist office may be present. Breaking of mercury based thermostats may introduce this to our environment.

**Our goal is reduction.** The Treatment Plant staff has been monitoring wastewater concentrations of these elements for some years, now. Everyone's help is needed to accomplish as much reduction as possible. Your action will help our environment, and possibly reduce future costs for our municipal system, and each of you who support it through user fees.

Mercury:

1. Replace equipment if you can.
2. Recycle- take mercury based equipment, light bulbs, unused chemicals, and mercury thermometers, to the **Stearns County Household Hazardous Waste Facility** in Waite Park.

**Residents:** Take all your mercury containing items: Fluorescent Lights of all types, mercury thermometers, thermostats, other items- **At No Charge** – to the Facility.

3601 5<sup>th</sup> Street South  
Waite Park, Minnesota 56387

**Businesses:** May bring fluorescent lights to the collection center for a small (\$0.50- \$0.75 ea.) fee.

Albany Recycling Center will accept fluorescent lights from residents at a small cost of \$0.65-\$0.75 each for bulbs four feet long and smaller.

34646 225<sup>th</sup> Avenue  
Albany, Minnesota 56307

Please help us attain cleaner water through: replacement (mercury containing items), reduction, and recycling.

Thanks from the staff of the City of Albany.

NOTICE OF PUBLIC HEARING  
CITY OF ALBANY  
PLANNING COMMISSION

There will be a Planning Commission meeting in and for the City of Albany, Stearns County, Minnesota, at 6:30 o'clock in the evening on **Monday, June 15, 2015**, in the Council room at 400 Railroad Avenue for the said City for the following:

- The public hearing will be held on a request by Mother of Mercy Campus of Care, 230 Church Avenue, Albany, MN, for a Conditional Use Permit for a multi-family dwelling unit at 540 Church Avenue within an R2 Zone.

Anyone wishing to comment will be heard at the public hearing and written comments may be forwarded to the office of the City Clerk/Administrator before the time of the public hearing.

Tom Schneider  
Clerk/Adm.

Published in the Albany Enterprise, on this 27th day of May, 2015.

**CITY OF ALBANY  
DEVELOPMENT APPLICATION**

Date of Complete Application (office use only) \_\_\_\_\_

*Rec'd 5/18/15 rms*

**Application Fee Per Submittal:**

*For explanation of what application fee covers, see page 3 in Development Application*

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Conditional Use Permit (\$300) _____ | <input type="checkbox"/> Ordinance Amendment (\$300) _____ |
| <input type="checkbox"/> Zoning Amendment (\$300) _____                  | <input type="checkbox"/> Interim Use Permit (\$300) _____  |
| <input type="checkbox"/> Variance (\$300) _____                          |  |

**Other:**

- Preliminary and Final Plat (Escrow + \$300 + \$10/lot)
- Planned Unit Development/Amendment (Escrow + \$300)
- Minor Amendment (Escrow + \$300)
- Rezoning (Escrow + \$300)
- Comprehensive Plan Amendment (Escrow + \$300)

\*If an Ordinance publication is required, the fee will be deducted from your escrow account.

Form to be typed or printed in ink. If space provided is insufficient, use additional sheets, keeping information to the proper item number.

1. \_\_\_\_\_  
Legal Description
  
2. 540 Church Avenue  
Street Address of Property Involved
  
3. Dean McDevitt 845-2195  
Fee Owner of Property (This name will be used on legal documents) Telephone No.
  
4. 230 Church Ave., Po Box 676, Albany, MN 56307 845-7092  
Address of Fee Owner Fax No.
  
5. Dean McDevitt 230 Church Ave., Po Box 676 Albany, MN 845-2195  
Applicant Name Address Telephone No.
  
6. n/a  
Name of Architect/Engineer Telephone No.
  
7. n/a  
Address of Architect/Engineer Fax No.



8. \_\_\_\_\_  
Name of Plat – (if applicable) No. of Lots

9. State proposed use and a description of project proposed or variance requested. See handouts for additional information.

*Request multi-family housing status for the purpose of accomodating healthcare staff from outside locations. Home is zoned as R-2. The purchase of house is conditional on obtaining this permit from City of Albany.*

The undersigned applicant hereby acknowledges:

receipt of a copy of the applicable List of Required Submissions.

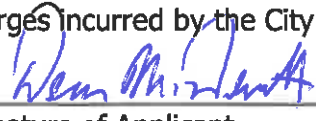
that all required documents have been submitted with this application except:

\_\_\_\_\_  
\_\_\_\_\_

APPLICATIONS ARE NOT COMPLETE UNTIL ALL REQUIRED SUBMITTAL DOCUMENTS HAVE BEEN RECEIVED.


Acknowledgment and Signature:

The undersigned applicant hereby represents upon all of the penalties of the law, for the purpose of inducing the City of Albany take action herein requested, that all statements herein are true and that all work herein mentioned will be done in accordance with the Ordinance of the City of Albany, and the laws of the State of Minnesota, and that the undersigned applicant will pay all fees and charges incurred by the City for the examination and review of this petition.

\* 

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Signature of Property Owner

  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

**Application Fees and Refunds**

Planning application fees cover the following costs: meeting room time, copies, minutes, public hearing, recording documents, and legal notices. The escrow deposit will be utilized for the cost of staff review time, consultants, meetings with applicants, neighborhood meetings, preparation of staff reports, and preparation of legal documents, review and editing of Planning Commission minutes, staff reports and legal documents.

Refunds of application fee will be one-half of the fee and any remaining escrow if the application is withdrawn prior to publication of the public hearing notice. After publication, no refunds will be given. Escrow accounts will be refunded after the Certificate of Occupancy is issued for the project. This would be for the building shell in the case of a multi-tenant retail or industrial project with separate tenant finish permits, all of the units in a residential subdivision or the entire building in the case of a multi-family or single-tenant commercial/industrial development.

**AMENDMENT TO ZONING ORDINANCE 80  
SECTION 80.05 GENERAL REQUIREMENTS**

The City Council for the City of Albany, HEREBY ORDAINS as follows:

1. That Section 80.05, Subd. 3(a)(3) (Yards, Open Space and Off Street Parking), of the Albany City Code is hereby amended to read as follows:

“3. In side and rear yards: laundry drying equipment, garden arbors, and trellises, nonpermanent sheds, ~~(less than 120 square feet) and~~ playhouses or other accessory buildings of 120 square feet or less, decks forty-eight (48) square feet or less and air conditioning or heating equipment, provided they are at a distance of five feet (5’) from the lot line.”

2. That Section 80.05, Subd. 7(a) (Detached Accessory Buildings) of the Albany City Code is hereby amended to read as follows:

“a) No detached garage, accessory building or use shall be permitted in any required front yard and no detached accessory ~~building structures (except accessory buildings of 120 square feet or less)~~ shall be erected within ten feet (10’) of any principal building. All accessory buildings and decks shall conform to setbacks which are imposed within the respective zoning district, except as set forth in Subd. 3 of this Section.”

3. That Section 80.05, Subd. 7(d) (Detached Accessory Buildings) of the Albany City Code is hereby amended to read as follows:

“d) No building or zoning permit is required for an accessory building one hundred and twenty (120) square feet or less, however such structures shall comply with the applicable setbacks. No building or zoning permit is required for a deck forty eight (48) square feet or less;”

This amendment shall become effective upon adoption and publication.

This Ordinance was approved by the majority of the City Council of Albany on this \_\_\_\_\_ day of June, 2015.

\_\_\_\_\_  
Daron Gersch, Mayor

\_\_\_\_\_  
Tom Schneider, Clerk/Administrator

(SEAL)