

**Ann Arbor Wastewater Treatment Plant
Public Meeting: Facilities Renovation, Residual Handling and Odor
Control
March 14, 2006 7:00-8:30 PM**

Attendees

17 members of the public (representing 10 Ann Arbor and Ann Arbor Township households and 1 Ypsilanti household)
Ann Arbor Wastewater Treatment Staff; Earl Kenzie, Mike Amicangelo
Consultants: Paul Vogel, Greeley and Hansen; Joe Popeck, Greeley and Hansen, Francine Alexander, Alexander Resources

Welcome and Project Background

Earl Kenzie welcomed the group and reviewed the purpose and agenda of the meeting.

The Wastewater Treatment Plant (WWTP) is implementing the Facilities Master Plan recommendations and is in the process of developing a design for the demolition and reconstruction of the aging West Plant and upgrades to the East Plant. The purpose of this project is to upgrade, rehabilitate or replace aging facilities to meet future flow, loading and regulatory requirements.

The Residuals Handling project is implementing Sewage Residuals Management Plan recommendations to develop designs for new residuals handling facilities, which process the residual solids from the wastewater. As part of the Residuals Handling project, the city requested a complete odor control study for the entire plant, which is being conducted by Greeley and Hansen.

These design projects are scheduled to be completed in Fall 2007.

Earl explained that this meeting will focus on sharing the process and current findings of the odor control study and will gather input from the neighbors on their experiences with odors.

Earl also requested to all neighbors that they call the plant when they are experiencing odor issues. This will help the plant to better identify the source of odors, which will help with designs currently being developed for new equipment and facilities and also to manage anything in the plant's control to address the odors.

The phone number is 734-845-0781. This will connect you with the shift supervisor.

Odor Control Study

Please see the PowerPoint presentation for additional information shared during the presentation by Greeley and Hansen.

The purpose of the Odor Control Study is to;

- Prioritize plant-wide odor control measures
- Recommend odor control technologies
- Develop conceptual and detailed designs for odor control
- Develop capital and operating and maintenance costs for recommendations
- Mitigate the most predominant odor sources

At this time the following tasks have been completed in this study:

- Review existing data including previous odor control studies, facility odor information, odor complaints
- Perform odor sampling and testing
- Rank odor sources at the WWTP

Task still to be completed include:

- Prepare draft plant-wide odor control report
- Meet with neighbors to obtain input (today's meeting)
- Meet with plant staff to review plant-wide odor control alternatives
- Meet with neighbors to obtain input (future meeting)
- Prepare final plant-wide odor control report

Greeley and Hansen shared the progress to date in the study:

- Study has identified 18 sources of odor
- Sources have been ranked regarding potential to contribute to off site nuisance odors
 - 5 are high
 - 5 are moderate to high
 - 3 are moderate
 - 5 are low to moderate

Greeley and Hansen shared a picture of the full WWTP site and the location of the most likely odor sources. Greeley and Hansen reviewed the potential technologies available to mitigate odors such as chemical scrubbers, activated carbon and biological type filters or scrubbers.

Greeley and Hansen also reviewed environmental conditions that affect nuisance odors. Clear sunny days with mild, mixed winds will have the lowest odor issues. Cloud cover and low velocity winds will have the most negative odor impact for neighbors.

Public Questions and Feedback

- Q. Why are we unaware of odors for a large bulk of time during the week and then on weekends, the odors increase?
- A. The most likely explanation is that people are at home and doing outdoor activities more on weekends so odors are more noticeable. In addition, biosolids are typically not hauled weekends and storage volumes may increase.
- Q. We have lost many trees since the construction on Dixboro and Huron River Drive, Odors are now worse. Why?
- A. Trees can act as a barrier to odors and this change could increase odors near homes. Trees alone will not solve odor complaints, but they can have a mitigating effect.
- Q. I have kept a four-month diary of plant odors near my home. I have had visits to my home at the time of odors from Rick Bigham, in response to my calls. The odors we are experiencing seem to be related to the levels in the tanks. The smell is like a sewer. It is not sulfur.
- A. Yes, tank levels are an issue and sludge seems to be a regular source of the smell. The ability to remove biosolids from the WWTP is influenced by several factors: During the warm weather months, the weather and soil conditions can prevent land application of liquid biosolids as an agricultural supplement. During the winter, problems with aging plant equipment can impede the amount of biosolids that are dewatered and hauled for disposal in a landfill. Improvements planned under this project will increase our ability to remove biosolids from the WWTP.
- Q. Has Ann Arbor studied the European practices, as they have high density cities with wastewater plants right near homes, parks and public areas?
- A. Yes, we have. Europe uses land application as we do here. They also are very willing to invest environmentally. A wastewater plant can be odor free, but it is extremely costly. It is often much less expensive to control odors to a 90-95% level, which effectively removes all nuisance odors. To go the extra 5-10% sometimes doubles the expense and may not be seen as a good return on the investment by the community.
- Q. How sure are you that the source of the smells that we experience have been accurately identified by this study?
- A. These conversations help us verify the major sources because each process has distinctive odors associated with it. The majority of neighbors tonight are describing raw sewage odors and those odors are associated with the treatment processes, identified in the odor control study as 'high' relative to its impact on odor.
- Q. Why should we call when a call will not fix the odor? Once we smell something the problem is already there and cannot be addressed.
- A. Calling us helps us have more data on two things: It helps us assess whether a current operation is increasing odors in any way that can be managed differently within the existing operational constraints. It also provides data for the odor control study to help ensure that the right odor sources are being addressed in the designs being developed for new operations.

Q. I suggest shaping a scorecard for success on odor control. Have measures that are publicized and tested as improvements are made to ensure that odors are controlled.

A. Post installation testing and performance measures are required by the contract documents for odor control equipment that is installed at the plant. After this work is performed, it will be shared with the community.

Q. What is the commitment of the city to have outcomes that will be satisfactory to the neighbors, to the citizens?

A. These capital improvement projects (CIP) have been budgeted, approved by City Council and will happen. The odor control processes and equipment will be included in the capital improvement projects. Decisions on what odor control mechanisms to use will be based on effectiveness of odor control as well as costs. Neighbors will be informed of these recommendations before they are finalized.

Q. How much flexibility is there in the CIP budget? If odor control costs are higher than budgeted, what options does the plant have to improve the funding?

A. Right now, the Residual Handling Project is budgeted for \$36 million and the Facilities Renovations Project is budgeted for \$64 million. If the detailed designs tells us that we need more money than this to be effective, we would need to approach City Council with the reasoning and the budget to request approval for what is needed.

Q. What impact will the actual demolition and construction process have on odors?

A. We do not expect any increase in nuisance odors during this process. We will have both noise, light and odor requirements in the contract of the company doing the demolition and construction. With the new construction, we will see improved truck flow through the plant and we expect a reduced volume of truck traffic with the new residuals handling processes being designed right now.

Q. Will plant renovations expand the capacity of the plant?

A. No. The plant has capacity of 29.5 million gallons per day (MGD). Currently the plant is processing 18-19 MGD. The Master Planning process included a review of projected populations and flows and this capacity is adequate for the coming years. It is also unlikely that this site could handle a larger plant.

Q. Does the plant test the water it discharges to the river? ('effluent')

A. Yes the plant has daily testing and monthly reports are sent to the Michigan Department of Environmental Quality. (MDEQ) The plant effluent quality typically exceeds the requirements set forth in the MDEQ permit.

Q. In the past we used to hear a high pitched whine that was part of the incinerator. Will that return with the new processes planned?

A. We are glad to say no. We discontinued that about 5 years ago and incineration is not planned for this plant.

Q. What is the timing for these proposed plant improvements? When will this effort be complete?

A. Currently scheduled for 2010. The design stage will take another 18 months. The bidding process and construction stage will be approximately 3 years.

Citizen Comments:

Citizens were asked if this study was aligned with their experiences with odors and to offer any additional feedback to the WWTP staff and consultants.

- All citizens noted that the nuisance smells in their areas are one of 'an outhouse', 'raw sewage' or 'a sewer'. No one mentioned smells of sulfur.
- Some homes are hit much harder than others, based on topography and other issues.
- A member of the public expressed that the Parker Mill walking area was unbearable this past Sunday (a nine on a ten scale of intolerable)
- On Dixboro Road, neighbors noted that evening hours are worse and moist air makes odor worse. Having guests over makes it worse!
- One Towsley address experiences odor issues at all times of day and night, during all types of weather. The biggest correlation here seems to be the levels in the WWTP process tankage.
- One comment suggested that the smells have been much worse in the past 3 years. This person lacks confidence in government follow through and the City of Ann Arbor's willingness and ability to do anything about this.
- Others shared that the staff at the WWTP, especially Rick Bigham and Earl Kenzie have been extremely responsive and professional in the help they have been offering the neighbors to address the odor issues.
- A member of the public expressed concern that the elimination of the traffic light at Huron River Drive and Dixboro is a problem. Sludge hauling contractors do not obey the stop sign. Plant staff indicated that they will discuss this with the sludge hauling contractor.

Next Steps

A website will be available for residents to see ongoing updates on the projects underway at the plant and to post documents of interest to the public.

The odor control study will continue and residents will be invited back to hear the findings within the next few months. A resident suggested that at upcoming meetings, it would be helpful to see the recommended odor mitigation processes along with projected costs listed. This individual wants to be assured that these costs are planned and funded in the renovations.

Meeting Feedback

6 meeting participants left written feedback requested on 3 issues as follows:

1. This meeting offered me helpful information about the projects and odor control study underway at the plant.

Strongly disagree	disagree	neutral	agree	strongly agree
				6

2. This meeting offered me the opportunity to share my ideas and concerns and suggestions.

Strongly disagree	disagree	neutral	agree	strongly agree
			1	5

3. Information I would like to know more about includes:

- Success stories from other communities.