

Board of Public Utilities

Regular Meeting Minutes

Monday, February 27, 2012
4:00 p.m., DPW Conference Room, 1199 8th Avenue



City of South Haven

1. Call to Order by Stickland at 4:00 p.m.

2. Roll Call

Present: Berry, Burr, Olson, Rose (ex-officio), Stein (ex-officio), Stickland
Absent: Henry, Overhiser (ex-officio)

Also present: Conklin, Mulac, Halberstadt, Hochstedler

Motion by Olson, second by Berry to excuse Henry. All in favor. Motion carried.

3. Approval of Agenda

Motion by Olson, second by Berry to approve the agenda as revised.

After Item #5 go to Item #13, then Item #10, then Item #12.

All in favor. Motion carried.

4. Approval of Minutes – November 28, 2011

Motion by Berry, second by Olson to approve the November 28, 2011 minutes with the following corrections:

- o Add page number and item number to the additions to the October 31, 2011 minutes, as noted in the November 28, 2011 minutes, Item #4.

All in favor. Motion carried.

5. Interested Citizens in the Audience Will be Heard on Items Not on the Agenda

Mark Clayton, Covert. Clayton stated that he owns two rentals and got a bill with a large amount. Clayton explained that the house was occupied by two renters, man and woman. The woman moved out and had the water turned off because it was in her name. The man was there about four more weeks, during which Clayton was going through the eviction process, but the renter left before the court date.

Clayton's wife called Utility Billing and said she wanted the water bill put in their name and was told it automatically goes back into their name, because they are the landlords.

Clayton explained several times that his wife paid all the water bills, but they were not aware that the \$18.00 was for stand-by fees, not water usage. Lane feels this is unfair; the tampering fee of \$250 because he and his wife did not do the tampering, and the \$18 standby fee when there was no water usage.

Huff said the water on the account was a cut off on March 1; the order was filled. Huff explained when water is cut off by request it is just turned off by the valve in the meter pit. Hochstedler explained there was usage noted when city staff was out checking meters.

Stickland said the reason you pay the \$18 per month is for the infrastructure and the organization behind it, so when the customer want water it is available. Lane said he understands that, but it is different with other utilities, for example if you have the gas shut off, you don't get a gas bill. If you have the electric shut off, you don't have an electric bill. Lane does not think it is fair because in Covert Township they pay for the water tap on their taxes.

Stein explained that it is divided up between everyone. The part-time residents are paying it every month to help subsidize the water system that had to be installed for them, but are also subsidizing it for the full-time residents. Clayton said he did not live there, the renter did the tampering, so he feels it unfair. Stickland noted that the Board has made that the rule. Lane said the woman in utilities told him someone tampered with the meter and Lane is responsible to pay for it.

Olson said he agrees with Lane.

Rose asked what evidence there is that tampering occurred to which Huff said there was usage after the requested cut-off was done.

Berry requested lenience.

Motion by Berry, second by Olson to waive the penalty. All in favor. Motion carried.

Burr noted that on our policy we should differentiate between a meter that has been sealed and it is tampered with or one that is just turned off. Huff suggested when the valve is turned off always lock it and take a picture. This provides more evidence that it has been tampered with.

REPORTS

6. Cost of Energy from Indiana-Michigan Power Company (AEP)

- A. 2012 Billings – All Charges
- B. 2011 Billings – All Charges

7. Financial Reports

- A. Water Fund CuFt Comparisons
- B. Water Fund Financial Statement
- C. Sewer Fund Financial Statement

- D. Electric Fund KWH Comparisons
- E. Electric Fund Financial Statement
- F. 2011 Audit Reconciliation

8. Water Filtration Plant Construction Project

- A. Fishbeck, Thompson, Carr & Huber Monthly Status Report 40
- B. Fishbeck, Thompson, Carr & Huber Monthly Status Report 41

9. Unresolved Issues Report

UNFINISHED BUSINESS

10. Board will be presented the Waste Water Treatment Plant Evaluation/Master Plan Supplemental Evaluation letter report prepared by Hubbell, Roth & Clark, Inc.

Dennis Benoit; Hubbell, Roth & Clark, Inc. Benoit stated that about a year ago the Board and he had talked about the Master Plan itself; studied the plant mainly in 2010 and last year analyzed the data from the survey of the plant. Benoit noted that the wet weather flows came up somewhat in parallel; what impact would there be if we got all of those flows out of the system, would it make a difference to the plant? After reviewing the data, Benoit noted that the problems are mostly due to the age and condition of the plant. The peak hour flow is related a lot to how many inflow sources you have (how leaky is the system?) The highest projection is 9.9 to get it to the pump station. Could we plug up some of those leaks and lower that? Benoit noted "That is what you (the City) are having Abonmarche looking at as well as looking further on various trunk lines to find the major leaks to plug them off."

Benoit asked, "If you were able to take that original flow peak projection of 9.9; could that be reduced significantly." Benoit noted that the City has paid for studies over the past ten to twenty years and trying to identify where the peak flows are in the system. Benoit explained that this analysis is making the assumption of removing that 21% of your peak Infiltration and Inflow. If that much flow has been identified that could be taken out, what cost impact would that have on these various processes?

Benoit noted the raw wastewater pumping, raw waste water screening, grit removal and settling and stated that it might be a good idea to combine several flows and build one pump station at the plant location. Primarily, we recognize one less pump could be put in, resulting in a 3-pump system instead of a 4-pump system. We are not proposing a huge rebuild of the upfront screening channels; it is the building that needs to be rebuilt because it is corroded and in pretty bad condition.

Benoit noted that the Grit Removal System will pretty stay the same. Settling is very physical and related very closely to how much flow is coming into the plant. If you can get a lot of Infiltration and Inflow out of the system, settling will see a lot of impact.

Benoit stated that things that do not have a big impact are bio secondary treatment, bio solids handling and disposal and other plant improvements. Bio treatment will remain the same and as will the handling. Solids will be about the same even if you get rid of extra rainwater.

Benoit noted that reducing the peak flow on a given day may have a bigger impact than the average daily excess flow of 2.0 MGD (Million Gallons per Day). 24 hour Average wet weather flow could drop from 6.75 to 4.75 MGD.

Benoit spoke to the sensitivity of each process:

- Raw Wastewater Pumping and Raw Wastewater Screening. The cost impact is fairly insignificant.
- Grit removal: does not anticipate any improvement. Did see that downsizing the tank and only adding one new tank might be possible if we can reduce the flow.
- Size of blowers and other equip would not be impacted.
- Disinfection – minimal Building and Site Improvement – no cost impact Solids Handling Improvements – no cost impact.

Benoit noted that the bottom line is on phase 1, 2 and 3 improvements. The Priority One project totaled about \$7,380,000 but with infiltration & Inflow reduction could be taken down to \$6,650,000. A breakdown was provided in the Power Point presentation.

Benoit stated that Priority 2 & 3 projects are all fairly much the same with the exception that we might be able to downsize the whole capacity of the aeration tanks if we can reduce the infiltration & inflow.

Benoit said if you look at these two items there are some impacts; noted a 10% cost relief with pursuit of Infiltration & Inflow to influence plant performance. Benoit said there is an S-2 grant program with the Department of Environmental Quality; the plant improvements in parallel with the collection system improvements; the flow dependent items may have to wait until the results of the Infiltration & Inflow study are a little more defined.

Stickland asked what the S-2 grant covers. Benoit noted the S-2 is only for engineering. Stickland asked if we were approved for the S-2 grant for the collection system. Huff and Halberstadt said yes, it has been approved and started.

Benoit commented that one of the stipulations connected to the S-2 grant is to apply for a loan from the Department of Environmental Quality within three years of the date of the completion of the plans and specifications.

Halberstadt asked Benoit what could happen if we do not do something; Benoit said we could wind up getting permit violations. Mulac pointed out that the moving parts of that equipment are 1962. Mulac also stated that the Aeration System was improved in 1988 but shows signs of deteriorating. Mulac noted that the City is pushing the limits on the plant very significantly. Halberstadt noted that finding parts for these old mechanisms is nearly impossible and sometimes the only way to obtain a part is to have it be custom built, making the plant work at half power until the part can be manufactured. Benoit noted that is why having three pumps would help with that sort of problem. Benoit said when equipment breaks in an emergency situation it always costs more than when replaced under a planned project.

Burr said he cannot see how the Infiltration & Inflow can be reduced by twenty percent Benoit said the numbers are still significant. Halberstadt said looking at videotapes we have had done in the past, the system has many clay pipes with a lot of small defects. The problem is chasing those down to get rid of those small infiltrations. Burr said we did the St. Joe project and never forced people to plumb their pumps out of the sanitary sewers. Benoit said it is difficult for a City to do: it usually takes a new ordinance. Halberstadt said even with an inspection, it could be put into the sanitary sewer the next day, and noted that there has to be some education involved in this, too. Huff said as far as Benoit's task, he is using what has already been documented; if the reduction is less, the numbers for the process will get closer to our original figures.

Stickland said we need to get started now; "five years comes fast and I have sympathy for Mulac; he has come very close to permit violations numerous times." Stickland stated that this project is the only way to handle this problem; asked "What are our options?" and noted that the City cannot shut down the sewer plant.

Burr said if you start the engineering the clock starts ticking. Stein asked if the entire project has to be done immediately or just Phase 1. Benoit said there are some things in Phases 2 and 3 that should be done in conjunction with Phase 1; let us zero in on a project somewhere between the two. Stickland said we will probably end up with another \$20,000,000 project. Burr said, regarding the assumption of reducing flow by twenty percent, there is a huge amount that is bypassing the system and running directly into the river. Burr said the problem is that most people have houses that are piped into the sewer system. Halberstadt said one suggestion is to have a holding tank for all the excess water, which can be treated over time.

11. Board will be presented an update of the Indian Grove Infrastructure Project prepared by Abonmarche Consultants, Inc.

NEW BUSINESS

12. Board will be presented the Data Evaluation Report of Water Quality Sampling for *E. coli*, Peterson and Phoenix Drains prepared by Fishbeck, Thompson, Carr & Huber.

Huff noted this is the e-coli study; the second step prompted by the data sampling program we did starting in July 2010 as a result of the beach closures.

Claire Schwartz and Wendy Ogleby; Fishbeck, Thompson, Carr & Huber.

Schwartz said they focused on the Phoenix and Peterson Drains because the 2010 study showed high counts in those two bodies. Out of 90 samples during that period, about 51% exceeded water quality standards. Schwartz noted that the E-coli counts were not of grave concern however some very high counts were found in the Peterson Drain. Schwartz noted that some of that can be attributed to an illicit drain which was found and remedied recently.

Schwartz stated that on the Phoenix Drain there were a number of monitoring sites. The monitoring is done at one point in time so it is hard to put it all together to come to a specific conclusion.

Stickland asked why there was not more found downstream; Schwartz stated it could be dilution or it could be that all of the contamination had not made its way downstream at the time of the samplings. In the Peterson Drain it was thought it could be due to illicit connections whereas in the Phoenix Drain might be runoff. While there was thought that private septic systems might be contributing to the problem, the septic systems that exist were not located close to the areas where the worst numbers were found. The highest numbers are during the summer which could be tourism or seasonal wildlife.

Schwartz noted that there were no sanitary sewer overflows during the time their sampling was being done. One sample, from the Peterson Drain, was sent to Michigan State University for DNA testing; no human or bovine markers were found. What was found was not high enough to cause the beach closings which happened during the 2010 season. If there are westerly winds following 2" of rain, as there was in 2010; there is a larger contribution of e-coli than just those two drains. Heavy rain, wind conditions, but no conclusive evidence of what is the only cause.

Schwartz pointed out that Recommendations are at the end of the Executive Summary on page 1 in the report. Prioritized activities (Tier One) managerial actions which are mostly common sense things. Schwartz noted that the Van Buren County Drain Commissioner came out with some new standards that could be adopted to help minimize the potential for bacteria entering the waterways directly.

Tier Two activities include addressing your Sanitary Sewer Overflows; when the City does capital improvement projects incorporate some of the low impact storm water treatment activities. Schwartz stated that these activities or priorities are all outlined in the report in some detail.

Stickland asked if the drains are candidates for treatment. Schwartz said if there was a project on a site development level; treatment could include the use of vegetation; sandy soils mixed with compost to reduce runoff; or treat runoff on site. Stickland asked if that is something you can do in conjunction with retention; Schwartz said yes, there have been studies that have shown it can be effective. Schwartz reiterated that if the City adopts the Van Buren County Drain Commission standards, new developments have to meet those standards. Another activity that is helpful is continued maintenance of the storm and sanitary sewers and county drains.

Burr said the day we had the beach closure the plume was flowing to the north, and the north beach tested okay, while the south beach was the one that tested bad. Halberstadt noted that the plume may have shifted. The wind shifts and it can vary. Schwartz said we did not look at the wind just the day off the beach closing, but also the time prior to the beach closing. Schwartz noted that there was a Sanitary Sewer Overflow and then several days with a predominantly southerly wind and then the beach closing. Schwartz stated that in inspecting the data it does seem there was a correlation with the Sanitary Sewer Overflow and the amount of rainfall that occurred and what is coming out of the Black River, specifically. Schwartz stated that there was no smoking gun found in the Drains.

Wendy Ogleby, Fishbeck, Thompson, Carr & Huber. Ogleby noted that wave action can reactivate e-coli. Stickland said when there is a Sanitary Sewer Overflow, Mulac, the Wastewater Superintendent, goes to the bridge and takes samples and does not find e-coli levels to be high. When you do have a Sanitary Sewer Overflow it is a heavy rainfall everywhere, with everything flowing to the lake.

Schwartz noted that the second beach closing had wind from the west to the east and more commingling than with a north-south wind.

Halberstadt asked for Ogleby to explain future plans. Ogleby said a grant has been applied for with the Southwest Michigan Planning Commission that started in October 2011. To get the grant some other water bodies that were on the States' "bad" list for water quality had to be included so the Paw Paw watershed was added to the Black River watershed. Ogleby noted that there is a committee which will conduct sampling, conduct analysis, lined up some labs to look at things like caffeine to identify the sources more quickly than through DNA testing, education and outreach, and write an implementation plan. This is an expansion of the current plan, with the expansion of more water bodies.

For the Black River watershed, levels and sources of E.coli will be looked at. For Pine Creek they will try to determine if the E.coli is from the City of Hartford or one of the large dairy farms in the area? For Mill Creek; how do levels of E.coli affect the beach at Three Rivers?

The Black River gets flow from the Phoenix Drain, the Peterson Drain, North Branch and South Branch. The Health Department will conduct sampling in the places where we found high levels. Halberstadt said we talked about adding a couple of sampling points on Deerlick Creek; Ogleby noted that we are going to meet Friday with the DEQ. If the DEQ cannot or will not pay for extra testing, the City and the Drain Commissioner are going to try together to fund those. Ogleby noted that since these are not in the Black River watershed it is possible we cannot do that, but if they allow us to do single grab samples instead of triple samples, it will reduce the cost and we will be able to test more sites.

13. Board will be requested to approve the purchase of consignment transformers from Power Line Supply.

Stickland said we have a policy with purchasing our electric materials, with an agreed-upon markup. With the agreement Power Line Supply (PLS) keeps inventory for us. It saves the City having to go through the bidding process and we have the right to audit their books. The issue that has come up for Power Line Supply is that being in a slow-down economy has affected them. They purchased transformers to meet our anticipated need and maybe even more than that when building was at peak.

Stickland explained that Power Line Supply is asking for relief on the transformers they say were bought primarily for the City of South Haven. They have about \$600,000 worth of transformers they would like us to buy. Bill Conklin has looked at our needs and determined how many transformers we need in case of failure so we can get failed transformers replaced and up and running in good time. This request is to help the company with their cash-flow problem. Berry asked if they will continue to store them for us; Stickland said we will take possession of the transformers we pay for. Burr said he thought Ray ordered some odd sized ones. Stickland said none of these were under a purchase agreement; there is no evidence that we requested them to have these transformers on hand, but they purchased them "for us". Stickland said we feel that purchasing those transformers is a satisfactory resolution, but it is going to take some negotiations. Stickland said the agreement worked well but to keep things working smoothly. Stickland recommends that the Board buy the transformers Conklin has identified.

Berry asked if they have transformers beyond the 35; Conklin said yes, they do. Stein asked if the cost will be significantly higher if we bought new ones. Conklin said some of them were bought when demand was high and inventory was low so the cost was higher. Burr asked if they will be sold at what we paid for them, Conklin said he charges what the market price is.

Olson said he thinks this is a one-sided agreement; Stickland begged to disagree with them. Olson noted that the agreement says we will purchase transformers up through September. Stickland answered Rose's question about cost noting that it isn't about cost as much as it is about availability. If we have to purchase by the approved method, there is a bid process and a lead-time.

Motion by Burr, second by Berry to purchase these transformers at the price indicated.
Nay: Olson, rest in favor – Motion carried.

Stickland noted that this agreement is up in September and will be up for renewal; it will be discussed at that time. Olson noted that we are just doing this to help them out; Stickland noted that is true.

14. Next meeting is scheduled for Monday, March 26, 2012 at 4:00 pm in the DPW Conference Room, 1199 8th Avenue, South Haven, Michigan.

15. Director's Comments

There were none.

16. Board Member Comments

There were none.

17. Adjourn

Motion by Olson, second by Burr to reconvene the meeting on Friday at 9 a. m. All in favor.
Motion carried

RESPECTFULLY SUBMITTED,

Marsha Ransom
Recording Secretary