

TOW Conservation Commission

Meeting Notes

Meeting of 11/28/05

Begin

7:35 pm

Attending

- Salvatore LaBruna
- Claude Braithwaite – Not attending
- Patricia Owen
- Jon Paul Heurich
- Kevin Sumner
- Mike Leary
- Kate Fox

Review of Previous Meeting Notes

- Minutes were handed out and read individually. Nominated for approval by Jon Paul. Seconded by Kevin.

Official Business

- Mr. Smith from the town's Water and Sewer Department and Matthew Yonkin from consultant Malcolm Pirnie attending to explain the rationale for the proposed increase in the town's TS limit.
 - How Malcolm Pirnie got involved:
 - In the fall of 2001 there was a "plant upset" for unknown reasons.
 - The source of the upset was never found.
 - The town contracted with Malcolm Pirnie for an "operator assistance program" working in conjunction with DEC help minimize the chance of the problem reoccurring.
 - Background on the Ball Plant
 - The original Ball (then Reynolds) plant, along with others, was offered an incentive package to locate here, from late 60s to early 70s.
 - At the time they built here there were no limits for several discharge items not in the town code.
 - After the plant upset of 2001:
 - Pirnie reviewed the plants operation and made recommendations, both for the operation of the plant and for the local discharge limits.
 - Pirnie used the EPA model for a 4 mgd (million gallons per day) plant.
 - Pirnie's review found:
 - 6 potential pollutants with no limits.
 - 4-5 that they recommended be lowered.
 - 12-15 that the EPA model showed were too stringent.

- The report was discussed at the town board meeting where Mr. Smith recommended that the more stringent limits be retained. The board agreed.
 - All industrial users were sent a copy of the limits the town was considering adopting and informed of a public forum where they could express any disagreements that they had with the limits.
 - No industrial users came to the public forum. Mr. Smith suspects this is because they are “EPA categorical industries” and therefore must meet EPA limits and supply a report to the EPA 1-2 times per year.
- The Ball plant is sampled 4 times per year.
 - The town performs the 1st and bills the cost back to user.
 - The sampling is performed on a regular schedule.
 - When the sampling was begun it was discovered that Ball’s TS was in excess of original town code or 2000 ppm. (Ball was also in violation of a couple of other limits, but all those have been rectified).
 - Ball has asked town to increase the TS limit to 4000 ppm.
- Mr. Smith’s discussion of why he believes it is OK to raise the Ball TS limit:
 - Basis for the local limit left blank in Pirnie chart because it is not regulated by the EPA and/or other agencies.
 - The excess TS will not harm the plant. RSR has asked for a 25000 ppm limit in the past and the analysis showed that even this amount would not harm the plant.
 - The rate of change is more important than total quantity. As long as the plant isn’t “surprised” by a significant change in chemistry, then it will handle the limit increase OK.
 - Mr. Smith has contacted both the Middletown and the Newburgh sewer and water departments. Neither of them even sample for TS.
 - All hazardous salts and metals already have individual limits.
 - The average flow into the plant is 3 mgd, all industrial users only 275,000 gpd. Therefore, the industrial users are such a small percentage of the total flow that this relatively small increase in their TS limit will not effect the plant’s operation.
 - TS is not regulated in the WTP’s effluent either.
 - Ball already has a waste water pretreatment plant that is intended mostly to reduce hazardous salts and metals.
 - Ball’s current TS is 2700-3000, however they are expecting production increases that could raise their output close to the proposed 4000 limit.
 - Ball contacted URS (large waste water treatment plant developer) and discovered that it would cost roughly \$5million to upgrade the plant to reduce TS to 2000 and there is no guarantee that it would be successful.
 - If board denies request then no way to recoup the investment.
 - In Mr. Smith’s opinion, if the town does not raise the limit then one of two things will happen: the town will be sued by Ball or they pull the plant out of the town (the Ball jobs are some of the highest paying job in the town).
 - In summary, Mr. Smith believes this is a non-issue, it will cause no problem in the town waste treatment plant, it will cause no problems to the river, it will cause no problem with sludge removal and there is no basis to the limit.
- Questions from the ToW CC:

- Could we characterize what is in the TS?
 - Pirnie rep: Yes, it could be done, though it is pretty well known already.
- Does this set a precedent?
 - Mr. Smith, yes this may set a precedent. Other plants may ask for individual increases also. However, if the increases are justified by the model, do not violate the existing EPA limits and don't upset the town's WTP then they should be allowed the increase.
 - The Times Herald Record and RJIC? Pharmaceuticals also have problems meeting some limits. A new plant looking to move to the area could also ask for an increase.
 - There is also a "catch all" in the town code that says the town can prohibit anything that causes process upset.
- Will this affect the amounts of nitrogen in the WTP's effluent?
 - The nitrogen is mostly in the form of ammonia and comes from residential discharge and runoff. Anything from the industrial users shouldn't be in the form of nitrate. Our WTF treats for ammonia and has a limit for the plant effluent.
- Is Ball required to tell the town about any process change that could affect their effluent?
 - Yes. Plus the town does an inspection during the 1st quarter analysis that looks for process changes at the plant.
- During an "INI" problem when the peak daily flow that exceeds capacity, what happens to the water?
 - The most recent large rain create a plant inflow of 12 mgd. During this time only one discharge had solids overflow from the clarifier for roughly 18 hours. All others discharges were within limits.
 - Some storms wash the solid out of the plant. This happens roughly twice per year.
 - The solids level is based upon a design sludge level. The plant needs some level of sludge to help the plant run. If it is too high then big inflows can wash out some of the sludge blanket.
- Are there any conclusions or suspicions for the 2001 plant upsets?
 - Mr. Smith suspects that it was due to aluminum from the Westwood Chemical site. They also noted corresponding spikes in pH at that time. Once the Westwood site closed, then no more problems with pH and no more problems with plant.
 - The WTP has changed to an activate sludge process now, whereas it began as a trickle flow / fixed media process. The original limits were not designed for our current type of waste treatment. Mr. Smith says several experts say the current plant could handle a 25000 to 27000 TS limit.
- Why didn't the town perform the study recommended in the Ball letter?
 - Opted not to do study recommended by Ball because Mr. Smith is sure that it will come to the same conclusions that we already have on the issue.
 - The town also has the option of setting individual limits for each user. If WTP can handle X amount of a particular component and

only one industry discharges that component, then give most of the limit to that plant and place a stricter limit on other users to keep the total for all users within the limits.

- Are there other heavy metals not checked for that could affect the bugs?
 - Pirnie rep: Not that he knows of. Same limits for other towns.
- Is 4 times a year sampling enough?
 - Pirnie rep: 4 times a year is pretty standard. Some do semi-annual. Samples are roughly \$1900.
 - A couple of the samples are grab samples (ammonia and oil/grease); others are constantly monitored and reported on a 24 hr average.
- Is the town's WTP ready to handle the growth increase in the town?
 - The WTP currently handles roughly 3.3 mgd on average. The historical increase is roughly 100k per day per year. The current WTP has a 4 mgd limit. The town must do an INI study when the WTP reaches 90% of capacity. The WTP was designed to be easily upgraded to increase its capacity to 6 mgd. The entire infrastructure is there already. Just need to add oxidation ditch and one more clarifier, rest is equipment, pumps, belt press, thickener, etc.
- Mr. Smith and the Pirnie rep leave at 9:00.
- The commission continued to discuss this issue after Mr. Smith and the Pirnie rep leave.
 - The general conclusion is that Mr. Smith's science is accurate and that we do not believe that the increase will affect the WTP.
 - However, if the potential for a study from Ball is there, then the town should take advantage of it.
 - Sal will start a recommendation letter to the town board. He will e-mail it to others for review. We will submit it to the town board as soon as possible.

Future Projects

- Tree cover – Mike will investigate / spearhead.
 - Kevin brought in copies of urban forestry grant from City of Middletown.
 - Mike took the bundle to incorporate into his investigation.
 - Mike brought copies of "Planning for an ordinance" from the Phytosphere website.
- Sidewalks – Sal will investigate / spearhead.
- Reduction of pollutants in storm water runoff
- Pace on-line course for land use.

Adjourned

Motion to adjourn by Sal. Seconded by Mike. 9:45.

Copies:

- Mike – 7 copies of 3 page meeting notes.
- Sal – 7 copies of 12 sheets of Agenda.
- Sal also made several copies of documents for town officials, but didn't have an exact count at this time.