

Adopted March 28, 2014

CMP POLICY & IMPLEMENTATION COMMITTEE MEETING

Richard J. Sullivan Center
Terrence D. Moore Room
15 C Springfield Road
New Lisbon, New Jersey
February 28, 2014 – 9:30 a.m.

MINUTES

MEMBERS IN ATTENDANCE: Robert Jackson, Richard Prickett and Candace Ashmun (1st Alternate)

MEMBER ABSENT: Chairman Mark Lohbauer, Leslie Ficcaglia, and Paul E. Galletta

OTHER COMMISSIONERS PRESENT: Ed Lloyd and Ed McGlinchey (*as non-members of the Committee, they participated in discussion but did not vote on any matter*)

STAFF PRESENT: Executive Director Nancy Wittenberg, Larry Liggett, Susan R. Grogan, Ed Wengrowski, Paul Leakan, and Betsy Piner. Also present was Ms. Kerstin Sundstrom, with the Governor's Authorities Unit.

Acting Chairman Prickett called the meeting to order at 9:30 a.m.

1. Adoption of minutes from the January 6, 2014 CMP Policy & Implementation Committee meeting

Commissioner Ashmun moved the adoption of the January 6, 2014 meeting minutes. Commissioner Jackson seconded the motion and all Committee members voted in favor.

2. Presentation by the United States Geological Survey: Rapid Landfill Assessment

Ms. Wittenberg said that today's presentation is a continuum of the work done with the United States Geological Survey (USGS), using funds received from arrangements with Stafford Township to examine a means of screening Pinelands landfills regarding closure obligations.

Mr. Wengrowski introduced Dr. Ron Baker and Mr. Tim Reilly, USGS Research Hydrologists and the lead consultants on this project.

Mr. Wengrowski provided a PowerPoint presentation (*Attachment A to these minutes*) on the Screening-level Assessment of Pinelands Area Landfills project. He said there are more than 60 landfills in the Pinelands Area, and cited the requirements for landfill closings and capping obligations. Approximately 40 of these landfills are closed but not capped, are not undergoing current remediation, or are not solely vegetation ("stump dumps") or construction debris landfills that are exempt from Comprehensive Management Plan (CMP) capping requirements. The last category does not require environmental closing because they do not generate leachate. The

Cape May County Municipal Utilities Authority landfill is the only one still operating in the Pinelands. All others are “closed”, although not necessarily *environmentally* closed (capped), and are no longer accepting refuse. The purpose of the assessment project is to identify those landfills of high concern, potentially in need of remediation and those where capping requirements needn’t apply. The study looks at the fate and transport of leachate and potential impact to nearby receptors (streams and wetlands as environmental receptors or residences).

Mr. Wengrowski said that a number of municipalities are interested in siting solar voltaic systems at their landfills. Although staff believes it is an appropriate use, the CMP does not allow siting of solar facilities on uncapped landfills. Staff believes that by assessing landfills and finding those that are not a threat, such benign projects might be allowed to proceed and also lead to a reduction in New Jersey Department of Environmental Protection (NJDEP) landfill permit fees.

Mr. Wengrowski said this assessment project involved a thorough review of files held by the NJDEP, containing years of landfill-monitoring well data submitted as part of New Jersey Pollutant Discharge Elimination System (NJPDES) permit requirements. (The accuracy of periodic lab monitoring reports was not evaluated, just the files.) The first phase was a 2010 staff pilot project in which a summer intern from The Richard Stockton College of New Jersey examined NJDEP data from six landfills, developed spreadsheets for data entry and compared monitoring well lab reports to various water quality spreadsheets. Also, Geographic Information Systems (GIS) was used to evaluate the proximity of the landfills to potential receptors.

Mr. Wengrowski said once the feasibility of such a study was proven, the Commission developed a cooperative agreement with USGS to create: (1) a searchable access database of the historic well monitoring data; (2), a “fate and transport model” linked to this database with GIS coverage of potential landfill leachate receptors; and (3) an interpretive report describing the landfill assessment methodology.

Dr. Baker delivered a PowerPoint presentation (*Attachment B to these minutes*). He said USGS used data already available and did not perform any new well sampling. Of 48 landfills that met the study criteria, 30 had monitoring well data. These data were transcribed from the paper files at NJDEP with a high level of quality control.

(Commissioner McGlinchey arrived at 9:55 a.m., during Dr. Baker’s presentation.)

Mr. Reilly detailed the rigorous quality control efforts. When reviewing the standardized monitoring well report forms, USGS noted anomalies resulting from such errors as misplaced decimal points, pH values entered outside the possible range, skipped lines on the reporting forms and other transcription errors. He said there were errors in roughly 15% of the 300,000 records.

Mr. Wengrowski noted that all of the well-monitoring data was generated by NJDEP-certified labs.

Dr. Baker further described the development of the access database containing water quality data, regulatory data for contaminants, and the chemical properties of contaminants. A model

template was developed for determining contaminant concentrations at potential receptors. The contaminants to model were selected based on frequency of detection, high concentration relative to regulatory standards and the informed judgment of the investigators. Out of some 100 contaminants examined, only a handful rose to a high level of concern. A vulnerability assessment of groundwater to contaminants of concern was developed with unknown, low, moderate and possibly high levels of concern. Dr. Baker said, based on modeling results, of 48 landfills studied, 18 had an unknown level of concern (insufficient data), 12 had a low level of concern, none had a moderate level of concern, and 18 had a possible high level of concern.

Dr. Baker said the next steps involve the USGS' publication of the results. The Pinelands Commission can now apply the information in assessing what additional information is needed to determine the fate of closed landfills in the Pinelands.

The Committee discussed a number of issues regarding the protocol and how the results could be applied.

In response to Commissioner Jackson's question as to what NJDEP thought of the results, Dr. Baker said they are very interested.

Mr. Reilly said because of the Kirkwood-Cohansey study, the USGS was able to build upon previous work. He said the State has more than 600 uncapped landfills.

In response to Commissioner Ashmun's question regarding the travel speed of contaminants, Dr. Baker said it is dependent upon groundwater flow and the interaction of contaminants with the background sediment.

Mr. Wengrowski said the Commission was indebted to NJDEP for their assistance in accessing files, and providing work space and photocopy equipment. In response to a question from Commissioner Prickett if one had to be concerned with the legacy data that predates what was obtained from NJDEP, Mr. Wengrowski said there is always a concern that a slug of contaminant may have moved past the monitoring well and toward a potential receptor. He said the staff will need some time to further examine and apply the model. The goal is to identify landfills in need of capping or some other form of remediation and to eliminate capping and remediation requirements for some landfills where such efforts are not warranted. Such results could be a benefit to landfill owners, primarily municipalities. Such landfills would still be subject to NJDEP monitoring. If new contaminants were to be found nearing receptors, such a landfill requires remediation. There are site-specific and contaminant-specific remediation techniques, in addition to impermeable capping, that could be used.

Mr. Liggett said it also depends upon the receptor receiving the threat. If it is a residence, then the Commission can notify NJDEP as they have the authority to deal with the threat. If it is an environmental threat, then the Pinelands Commission's tool is a gross tool: stop the leachate.

Mr. Wengrowski said, as an example, if lead is coming from a landfill and affects a home, it may be more effective to install a point-of-use treatment system at the home, rather than capping the landfill.

In response to Commissioner McGlinchey's question if there is a low-level concentration of a contaminant, what is the probability that it will become a high level concentration, Mr. Wengrowski said that is why NJDEP requires long-term monitoring to look for instances such as a slug release from a corroded barrel. There are pump-and-treat or permeable reactive barrier technologies that can be implemented after the fact, and public water supply may need to be extended to those on private wells.

Commissioner McGlinchey asked about escrow money for closing landfills and said he felt these funds needed to be protected.

In response to Commissioner Jackson's question about no one at NJDEP looking at the monitoring well data, only filing the reports, Mr. Liggett said the municipalities have an obligation to report problems, not just file the report.

Ms. Wittenberg said NJDEP has an ongoing analysis of landfills and prioritizes them. With some 800 to 900 landfills, they do not have the resources to look at all of the data. She said she would investigate Commissioner McGlinchey's concern as she did not believe NJDEP could take Winslow's landfill closure funds and apply them to another landfill.

Commissioner Ashmun said the Commission now had a little more basis for discussion with the towns when they inquire about development on a landfill.

Mr. Wengrowski said that this project has narrowed the pathway and provides a sharper focus for a town to resolve an outstanding landfill closure issue.

The Committee took a recess from 11:00 a.m. until 11:15 a.m.

3. Executive Director's Reports

Town of Hammonton's Long Term Comprehensive Plan for Treatment and Disposal of Wastewater

Ms. Wittenberg said that the Commission had been working with the Town of Hammonton on wastewater issues for many years and staff is pleased with the recent progress. She introduced Mayor Steve DiDonato and former Commissioner Ed Wuillermin, a current Hammonton Councilman.

Other members of the Hammonton contingency included Bob Vettese with Adams, Rehmann & Heggan, Jerry Barberio, Administrator, and Dr. Ray Ferrara, with Kleinfelder - Omni Environmental.

Mr. Wengrowski thanked the Town for attending today's meeting. He said staff has been working diligently with Hammonton to move forward with plans to cease the discharge of treated wastewater into Hammonton Creek. (*Note: frequently throughout the meeting, Hammonton Creek was referred to as "the stream".*) He told the Committee that he hoped after today's presentation, the Committee would advance the conditional approval of Hammonton's Long Term Comprehensive Plan for Treatment and Disposal of Wastewater (LTCWP) for

consideration by the full Commission. After many years of discussion and tentative solutions, this current iteration has had a very short turn-around time as the most recent Plan was received by staff on February 18, 2014, only ten days prior to this meeting.

Mr. Wengrowski said that this is a complex issue and the approval of the LTCWP represents not the end of the problem, rather another stage in its resolution. He delivered a PowerPoint presentation on the project (*Attachment C to these minutes*).

Mr. Wengrowski said Hammonton Creek is a tributary of the Mullica River and is classified as an “Outstanding National Resource Water”. Such waters are afforded the highest level of protection and are to be maintained in their natural state. He described Hammonton’s Boyer Avenue Treated Wastewater Land Application Facility (LAF), which was constructed as a result of NJDEP required treatment plant upgrades and CMP- required cessation of effluent discharge to Hammonton Creek. The LAF facility became operational in 2004 but shortly thereafter proved ineffective as the infiltration efficacy was poor, resulting in discharge of large volumes of treated wastewater into Hammonton Creek over long periods of time, in violation of the CMP. In 2011, as part of Hammonton’s application for a public development approval for an increase in Kirkwood-Cohansey water allocation, the Commission required the Town to develop a long term plan for the treatment and disposal of wastewater to permanently eliminate the discharge of effluent to Hammonton Creek. The result is the LTCWP before the Committee today.

Mr. Wengrowski summarized Hammonton’s proposed LTCWP solutions to eliminate the discharge to Hammonton Creek, including new surface and subsurface (shallow and deep components) wastewater drip irrigation infrastructure to be phased in over the next several years, with additional lands designated for future expansion of the drip irrigation if needed, ongoing rehabilitation of the aging sewer pipes over the next 25 years, and continued implementation of water conservation measures to reduce the amount of wastewater generated. Mr. Wengrowski noted that although the LTCWP will provide significant improvements to the infiltration of wastewater at the LAF, there are concerns that the 25-year vitrified clay sewer pipe replacement project is too prolonged and the surface and shallow subsurface drip irrigation systems, subject to damage from freezing, would have to be drained and winterized, rendering them useless at the very time of year when the Town has often found it necessary to discharge its wastewater to Hammonton Creek. He said staff recommends a reduction to 10 years for the sewer pipe replacement project as well as imposing other obligations on Hammonton as part of the conditional approval. He also noted that the Boyer Avenue facility is also a premier recreation facility.

Dr. Ferrara complimented Mr. Wengrowski on his presentation and said the Town is committed to having all its wastewater returned to the Kirkwood-Cohansey aquifer through infiltration.

In response to Commissioner Prickett’s question if the “Town” also included members of the public, Dr. Ferrara said that there are various entities, including the soccer groups, which support this plan. They appreciate the idea of reducing the reliance on another source of water to keep the fields in good playing condition.

Dr. Ferrara said that the Town wants to replace some 10,000 linear feet of the older vitrified clay pipe this year and has earmarked an additional 13,000 feet for replacement. That leaves some

75,000 linear feet that the Town would like to examine with a video camera to ascertain a need for replacement (a new concept just added at this meeting). That would allow the replacement of only the faulty pipe and would help relieve some of the financial burden of this project. He said because Hammonton is located in the Pinelands, there are associated financial burdens to wastewater management.

Councilman Wuillermin said that the Town has already committed to improving water quality. There has been a lot of consternation if the goals are achievable but the Town is committed to its statutory obligation to get out of the stream. He said, in the process, Hammonton has built a new wastewater treatment plant and new land application site and implemented a water conservation plan, including modifications to the rate structure as an incentive. He said the Town is in a difficult situation because of its location in the Pinelands but is committed to solving the problems and needs a workable plan that is achievable. He said that the Town is paying off recent wastewater improvements and must face upcoming costs for improving 10,000 linear feet of sewer pipe.

In response to a question from Commissioner Prickett regarding the drip irrigation system, Dr. Ferrara said that the Town is awaiting a treatment works approval from DEP; the first phase of the overland/surface system will be completed this summer and the remainder of the overland/surface system will be completed by the end of the year.

Mayor DiDonato said there had been a 20% reduction in flow this year compared with 2011 and the Town will be in debt for the next eight years for the costs of the recent upgrades.

Dr. Ferrara said he was confident that the shallow irrigation system will work as the plants will take up the water and satisfy the turf requirements. The deeper trenches will take up much more water.

Councilman Wuillermin said, to sustain the fields, currently the Town is using potable water. The surface irrigation system will provide a beneficial use of wastewater in a more effective way.

Commissioner Jackson said he wanted to hear that the Town was going to meet all of its requirements. He noted that this was a particularly harsh winter and a problem for a drip irrigation system.

Dr. Ferrara said the approach will be to shut down the shallow and surface treatment systems at some point in the winter for several months according to the weather; there is not a fixed date.

Councilman Wuillermin said that the Town has a one-acre demonstration plot that has given great results.

In response to Commissioner Lloyd's question regarding the video examination of the clay pipes, Dr. Ferrara said that this is an idea the Town has only just formulated but he believed it could start soon.

Ms. Wittenberg said there is a significant built-in “hammer”, the call-up of development approvals incorporated into the conditional approval. There is much history with this issue, but staff has confidence in those present. She said the video examination is a great idea but staff needed to talk about it.

Mr. Liggett said the Commission wants to see Hammonton develop but it does not want to see wastewater in the stream.

Councilman Wuillermin said Hammonton wants to turn around the past history. He said the keynote was flexibility. He said if the Town continues to be out of the stream, then the use of the “hammer” should be held off.

Mayor DiDonato said this is a fresh group of representatives from Hammonton; he asked that the Commission allow them to make strides on this project.

Commissioner Ashmun said the Commission believed that the issue had been resolved in the past. She said she supported the staff recommendation.

Mr. Wengrowski said he believed there is a meeting of the minds between the Town and staff. He said he, also, liked the idea of the video examination and the provisions needed to be built into the resolution. Also, he said that although there is a potential for a true emergency, e.g. a hurricane, during which wastewater might be discharged to Hammonton Creek, such a diversion must be a true emergency that might occur, for instance once in 30 years and for no longer than 30 days.

Commissioner Jackson moved recommendation of conditional approval of Hammonton’s LTCWP, subject to further discussion at the full Commission meeting and including the video concept, if feasible. Commissioner Prickett seconded the motion and all Committee members voted in favor.

Mr. Liggett said Commissioners had received today draft copies of the 2013 Long-Term Environmental and Economic Monitoring Program Reports to the National Park Service (NPS). He said this is a two-stage process. The copies today contain no funding information as that will be received later this spring. He noted that the anticipated list of tasks for the upcoming year is dependent upon the level of funding provided by the NPS.

4. Public Comment

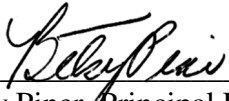
Mr. Fred Akers, with the Great Egg Harbor Watershed Association, said it is a good day when he gets to hear two presentations from Mr. Wengrowski. He pronounced them awesome. He said that he supported the approach to dealing with Hammonton’s wastewater issues and pronounced it a sharp difference from allowing Buena Borough to discharge into Deep Run.

Mr. Gene Kobryn, Little Egg Harbor Township Deputy Mayor, said he had attended today specifically to hear the landfill presentation and found it excellent. He said he felt the problem was well defined and now it is time to find a solution.

5. Other Items of Interest

The meeting adjourned at 12:17 a.m. (moved by Commissioner Jackson and seconded by Commissioner Ashmun).

Certified as true and correct:



Betsy Piner, Principal Planning Assistant

Date: March 17, 2014

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