

Township of West Milford
ENVIRONMENTAL COMMISSION

MINUTES

JANUARY 9, 2012

The special meeting of the Township of West Milford Environmental Commission regarding the On-Site Wastewater Treatment System Plan was called to order at **7:06 p.m.** In attendance were members of the Environmental Commission including Andrew Abdul, Gillian Hemstead, Douglas Ott, Thomas Tamayne, Gary Oppenheimer, Lucas Slott. Also in attendance were Stephen Sangle and Maryellen Gabay, with Dr. Fred Lubnow of Princeton Hydro LLC.

Vice Chairman Douglas Ott presided over the meeting/presentation as a result of the new/re-appointments that were not completed at the Township Council Re-organization meeting on January 7, 2012.

PRESENTATION: Final Draft of the On-Site Wastewater Treatment Prioritization Plan – 604(b) Grant - Dr. Fred Lubnow, of Princeton Hydro, LLC was present to provide an overview of the project leading up to the final draft report for the On-Site Wastewater Treatment Plan. Dr. Lubnow discussed the TMDL – Total Maximum Daily Load - for the New Jersey portion of the Greenwood Lake watershed, which is located entirely in West Milford, noting that phosphorous was the main concern due to its affect on increased aquatic growth. He explained that the 604b grant that was awarded to the Township consisted of federal funds provided to the State of New Jersey and distributed through the grant program. This project attempted to address and remediate elevated phosphorous and fecal coliform levels in the sub watersheds that have adversely affected the health of the lake and community. Dr. Lubnow reviewed the GIS mapping which incorporated the digital data, and explained how the data was obtained, integrating the highest concentration of residents, the zone of influence, soil types, wetlands, percentage of slopes, and depth to groundwater and bedrock, so that the most sensitive lands could be identified. He observed that as a result of the data, the Belchers Creek sub watersheds were determined to be the most vulnerable. Dr. Lubnow further advised that collection of data from an actual septic system was required, with the assumption that the older the system, the more phosphorous. The actual concentrations that result from an existing system were identified with the use of the aging Town Hall septic system, with all levels (nitrate, e coli, fecal coliform) at a very high level down gradient from the system, at times exceeding state limits. He explained the process and calculations used in the study, as well as the science behind the phosphorous bonding to the soil. He also noted that, as a result of the data collection, it was determined that Pinecliff Lake had moderate levels of phosphorous. The study revealed the areas that had the greatest need, and these areas could possibly qualify for incentives for installing alternative septic systems. Dr. Lubnow explained how septic systems operate, noting that the majority of the public is not aware of the intricacies of septic systems, from the infrastructure in a dwelling, the actual tanks(s) and the leach and drain fields, and how the whole system is integrated. He made note that just 1 pound of phosphorous can generate 1100 pounds of green algae in the lakes. He provided the conversion calculation for pounds to kilograms, i.e. 1 lb divided by 2.2 = .5 kg. From the data collected, it was determined that 500 kilograms of phosphorous per year is leaching into Greenwood Lake; the Environmental Protection Agency wants this number to be reduced to 290 kilograms, representing a 210 kilograms per year reduction. To achieve this, Dr. Lubnow lists some of the steps to be taken, including mandatory pump-outs of all septic systems, which would remove 73 kilograms per year, use of non-phosphate detergents, phosphorous free fertilizer, and structural alternative systems. He observed that the data suggests that 72 per cent of properties would benefit from alternative septic systems in the targeted zone, emphasizing that this data was concentrated on a specific zone. He also discussed phosphorous in dishwasher detergents, noting that Pennsylvania and New York has a ban on phosphates in detergents. Water use was considered, and Dr. Lubnow noted that the average person uses approximately 70 gallons of water a day, mainly for flushing toilets, but a new study on low flow toilets, faucets and newer washing machines suggest that water use can be reduced by 32%, which, according to a Penn State study, could reduce phosphorous by 38 kilograms.

Dr. Lubnow advised that the results indicate that structural technology is required as BMPs (Best Management Practices) and he reviewed certain alternative technologies available, some that have been approved by the NJDEP. Based on the study, approximately 71 homes in the targeted zone should use an alternative system. Aerobic treatment was also considered but this type of system removes bacteria and nitrogen, but not phosphorous. Some of the alternative options include incinerating (may create odor) and

composting toilets (\$4-5000. per unit), as well as installation of peat systems. He mentioned two of the systems, Eco Flow and Puro Flow, both approved by the NJDEP. It was noted that the peat biofilters cost approximately \$8,000 to \$10,000, and may often exceed \$20,000. Doug McKittrick, resident and civil engineer, commented that the peat systems require one unit for each bedroom, which can quadruple the cost of a system, adding that homeowners who have to replace septic systems are not always in the position for the expense of an alternative system. Dr. Lubnow concurred and suggested that funding may be available, similar to New York, which will be the next phase of this plan. He noted that as technology improves, systems will become more efficient and the cost should come down. With regard to the on-site wastewater treatment prioritization plan, he stressed that the plan needs to be used and implemented over time, updated as needed, stating that it is a "living, breathing, document." A Commissioner inquired about dwellings constructed on bedrock and the type of systems that could be used, and Sue Muhaw of the Health Dept. commented that two homes are currently installing the new alternative systems and are being sampled for the data. Intermittent sand filters were also discussed, and Dr. Lubnow requested that additional information from the Health Dept. on the various alternative systems be included in his data. He noted that 80% of phosphorous is removed from properly functioning systems, but as a system ages, less phosphorous is removed. Public outreach and education is crucial and has been included in the plan. The septic ordinance has good information and he stressed that more information should be made available on the website. He observed that the parcel data included in the plan had gaps that needed to be filled, and financial incentives should be available to resident septic owners. He also suggested another way to educate the public was to apply for grant funds and incorporate a demonstration project at Town Hall using the data collected, and showing how an alternative system works. Gary Oppenheimer inquired if there were any organic compounds that would help to remove phosphorous, and Dr. Lubnow responded that alum is very effective in binding with inorganic phosphorous, but sludge is created, and most of septic waste results in organic phosphorous. A member of the audience from Lake Mohawk commented on the alum-injected system that is used at the lake, but noted that the majority of phosphorous resulted from fertilizers and stormwater runoff. Dr. Lubnow had been involved with the Lake Mohawk project and noted that their system cost over \$90,000. for the removal of phosphorous. At the conclusion of the presentation, the Environmental Commission thanked Dr. Lubnow for providing the presentation on the wastewater prioritization plan. Dr. Lubnow noted that he would provide digital copies of the plan for posting on the website.

Following the special presentation by Dr. Fred Lubnow, the regular meeting of the Environmental Commission was called to order at **8:17 p.m.** with the reading of the Legal Notice followed by the Roll Call. New and re-appointments to the Environmental Commission were not made by the Mayor at the Township Council Re-organization meeting on January 7, 2012, so therefore, Douglas Ott chaired the regular meeting.

ROLL CALL:

Present: Andrew Abdul, Maryellen Gabay, Gillian Hemstead, Gary Oppenheimer, Douglas Ott, Stephen Sangle, Lucas Slott, Thomas Tamayne.

APPLICATIONS – None.

TELECOMMUNICATION APPLICATIONS - None.

GRANT MANAGEMENT AND STATUS REVIEW

2004 Greenwood Lake 319H Grant/2007 Stormwater Implementation 319H Grant: Gillian Hemstead reported that the installation of the filters had been completed and noted that there would be more testing in the spring. She also noted that there were remaining grant monies to be utilized on several additional NJDEP approved projects prepared by Princeton Hydro.

Streetscape Grant: There was nothing new to report at this time.

Recreational Trails Signage Grant: Doug Ott reported that Bob Jonas was compiling the information for the signage that is being created.

2010 ANJEC Smart Growth Planning Grant - Trails Master Plan: Doug Ott reported that a very successful meeting was held by the Environmental Commission in December 2011 with great feedback from

various groups who have decided to meet individually prior to coordination of the information for the trails master plan. Luke Slott reported that he scouted the area along Belchers Creek to ascertain the feasibility for a possible hiking path, and he noted numerous wetlands that would hinder this to be a possibility. He also reported about the discussion to attempt to connect Bearfort Ridge trails due to the dangerous access points that currently exist, as well as providing access to Sandcap, and providing parking for trailheads.

ON GOING BUSINESS

Lakes Committee: Andy Abdul reported that there was no meeting in December 2011 and he provided a copy of the November 2011 Lakes Committee minutes to the Commission. The main topic of discussion in November was the new lake requirements with regard to construction and septic installation. Mr. Abdul also noted that the Lakes Committee wanted to be advised of Environmental Commission meetings. The Commission responded that the meetings are posted on the Township website. The Commission discussed working more closely with the Lakes Committee on issues that affect the lakes, and noted that the presentation at tonight's meeting could apply to any of the lakes. Gillian Hemstead suggested that Andy Abdul provide them with a copy of the on-site wastewater prioritization report and summarize it for them. The Commission also discussed ways to get the information out to other residents and Gary Oppenheimer suggested a brief You Tube video be created and posted. Ms. Hemstead commented that Fred Lubnow could produce one that could be shared with other entities and be paid with grant funds. She will contact Dr. Lubnow about this, adding that possibly his powerpoint presentation could be used.

Open Space Subcommittee: Doug Ott reported that the open space matters are on hold for the time being until a Township Administrator has been hired.

Environmental Contamination Issues: No update was available at this time as there is no Health Officer currently employed by the Township.

Green Team – Sustainable Jersey: Tom Tamayne reported that the Green Team is still attempting to secure the information from the DPW on the Township fleet. Steve Sangle advised that former Administrator Kevin Boyle assured him that the information would be forthcoming. He also contacted the Mayor about the matter, but did not intend to offend the DPW in an attempt to acquire the information needed for the Sustainable Jersey program. Gillian Hemstead suggested that the Green Team submit an OPRA request for the information. Resident Doris Aaronson reported to the Commission that Renee Alessio would provide an update at the January 18, 2012 Council Meeting regarding the Sustainable Jersey Certification Presentation.

Tennessee Gas Pipeline: Luke Slott reported that there was nothing new transpiring in the Township at this time, but that Vernon had representatives from the Ramapough Mountain Indian tribe at a meeting because the pipeline was proposed to go through their tribal burial grounds. He also advised that he receives updates from FERC and will report on any new information that becomes available.

NEW BUSINESS

ANJEC Smart Growth Planning Grants for 2012 – The Commission briefly discussed the potential for applying for an ANJEC grant, but it was noted that they are matching grants, and with limited personnel and resources, the Township is not in the best position to apply for these grants. In addition, it was noted that often the grants are awarded with limited time to complete the projects. Doug Ott commented that former GIS Specialist, Rob Sparkes, coordinated and administrated many of the Township grants, and without his services, it would be difficult for the grants to be managed.

The Commission also briefly discussed two recent Township resolutions regarding state legislation for logging on state forests and a bill concerned with the water quality management plan, both of which were opposed by the Township.

MINUTES

The minutes of the October 3, 2011 Regular Meeting of the West Milford Environmental Commission were **unanimously approved** on a **motion** by Luke Slott and a **second** by Gary Oppenheimer.

The following documents were reviewed by the Commission and filed:

HIGHLANDS WATER PROTECTION AND PLANNING ACT

1. Notice of Technical Incompleteness, dated December 22, 2011, regarding a Highlands Applicability and Water Quality Management Plan Consistency Determination for Donald & Kathleen Davies, Rockburn Pass, Block 5003; Lot 9 with respect to an exemption for the construction of a single family dwelling, advising that additional information is required. Follow up emails from the NJDEP and the applicant's engineer advised that, due to the recent death of the applicant's prior engineer, a 90- extension for compliance was granted.

NJ DEPARTMENT OF ENVIRONMENTAL PROTECTION

1. Correspondence dated December 29, 2011 from the NJDEP to David Hyland, 1281 Macopin Road, Block 11601; Lot 9, advising that an inspection had been made of the site and restoration was performed per the department's requirements, and also advising that further disturbance would require a permit, with any unregulated activity subject to enforcement action without necessary the approvals.

2. Correspondence dated December 14, 2011 from the NJDEP to Tim Birkoff, 470 Ridge Road, Block 5501; Lot 2.03, 2.04, advising that an inspection had been made of the site and restoration was performed per the department's requirements, and also advising that further disturbance would require a permit, with any unregulated activity subject to enforcement action without necessary the approvals.

3. Copy of correspondence to the NJDEP, dated December 20, 2011, from the Bald Eagle Village Condominium Association, regarding the Pettet Pond Dam (NJ Dam File No. 22-293), advising that they have engaged the services of Morris Engineering of Somerville, NJ to perform the dam inspections and address the recommendations required by the NJDEP.

4. Copy of Memorandum from John Moyle of the NJDEP Bureau of Dam Safety & Flood to John Trontis, NJDEP Division of Parks & Forestry, advising that the No Name Dam No. 40 (NJ Dam File No. 22-181) Dam Safety Compliance Schedule was unacceptable because no deadline was given for an EAP (Emergency Action Plan) update, and the EAP has not been updated since 2003. Updated information must be received by February 15, 2012, with the next regular inspection to be conducted by August 2012, with only regular maintenance of the site permitted without further approval by the Department.

5. Copy of a Response Action Outcome, dated December 8, 2011, superceding the September 1, 2011 RAO, received from Conestoga-Rovers & Associates, regarding the remediation of the gasoline UST system for the Lukoil Station #57360, 1910 Union Valley Road.

6. Copy of Public Notification and Outreach with attachments, dated December 20, 2011, sent to the NJDEP from the Elm Group, regarding the West Milford Shopping Center, LLC, Block 6701; Lot 10, advising that the required signs have been erected at the site and all requirements had been met regarding the site investigation as a result of PCE (tetrachloroethylene), TCE (trichloroethylene, and (PCBs) polychlorinated biphenols discovered at the site.

CORRESPONDENCE

1. Renewal Invoice received for 2012 ANJEC Membership - \$360. including Workshop Plan.

2. Copy of correspondence, dated December 6, 2011, received from William Longhi, President and CEO of Orange & Rockland Utilities, addressed to the Mayor and Township Council, recapping O&R's response during the numerous 2011 storms, and requesting to meet with various municipalities in 2012 to review the planned changes and upgrades to response services.

3. Copy of correspondence dated December 16, 2011 from the Passaic County Planning Department regarding the Q & S Deli, 1952 Union Valley Road, Block 3601; Lots 1 and 3, advising that a corrected Deed, Description, Title Policy, New Jersey Form GIT3 and an Affidavit of Consideration indicating that no transfer tax is due must be submitted to Passaic County for review and filing, and upon receipt of these documents, the project will be considered for unconditional approval.

4. Notice from the NJ State Department Office of Planning Advocacy regarding six presentations and public hearings for the Draft Final State Strategic State Plan: New Jersey's State Development and Redevelopment

Plan and the Draft Infrastructure Needs Assessment – including February 27, 2012 beginning at 6:00 p.m., Frelinghuysen Arboretum, Haggerty Center, 353 East Hanover Avenue, Morris Township, NJ 07962.

5. ANJEC Alert – Concern regarding possible adoption on Monday, January 9, 2012 of legislation for S-3156/A-4335 which would delay water quality management plans for two years and allow site specific exceptions to permit sewer services.

PUBLIC COMMENTS

Doris Aaronson addressed the Commission, advising that she was a recent appointee to the Health Advisory Board, and she intended to interact with Andy Abdul and the Lakes Committee in order to disseminate information on lake related matters. She noted that she was an environmental trustee of Pinecliff Lake, and advised that any lake that has swimming must be licensed, and must be tested. She will be in contact with Andy Abdul regarding the information she has access to for the Lakes Committee.

ADJOURNMENT

With no further business to come before the Commission, the meeting **adjourned** at **9:05 p.m.** on a **motion** by Gillian Hemstead with a **second** by Luke Slott.

Approved: May 7, 2012

Respectfully Submitted,

Tonya E. Cubby, Secretary