Environmental Sub-Committee (ESC)
Wainscott Citizens Advisory Committee (WCAC)

Minutes for Meeting of March 24, 2017

Attendance

Chairman Si Kinsella, WCAC Member
Frank Dalene, WCAC Member
Virginia Edwards, WCAC Member
Carolyn Logan Gluck, WCAC Member
Councilwomen Kathee Burke-Gonzalez, East Hampton Town Board
Director of Natural Resources Kim Shaw, Town of East Hampton
Executive Director Sara Davison, Friends of Georgica Pond Foundation
Councilwomen Bridget Fleming, Suffolk County Legislator
Senior Public Health Engineer Jason Hime, Suffolk Country Dept. Health Services
Environmental Toxicologist, Amy Juchatz, Suffolk Country Dept. Health Services

Excused:

Rick del Mastro, WCAC Member
Bruce Solomon, WCAC Member

Approval of Minutes

Minutes for the ESC meeting of January 6, 2017 were unanimously approved.

Welcome

The Chairman, Si Kinsella, welcomed guests from Suffolk Country –

Councilwomen Bridget Fleming, Suffolk County Legislator
Environmental Toxicologist, Amy Juchatz, Dept. Health Services
Senior Public Health Engineer Jason Hime, Dept. of Health Services' Bureau of Drinking Water

Purpose (Kinsella)

The stated purpose of meeting is to discuss how the users of private drinking water wells can have a higher level of confidence in their water quality. Citizens of Wainscott are concerned about contaminants in the water as reported in news. Is it possible to survey private wells and use these results to protect the drinking water supply?

There have been few changes to EPA standards, and in the current [political] climate, it's unlikely that there will be any new regulations introduced by the EPA to safeguard our private drinking water. The onus, therefore, falls on states, counties and local communities to ensure the safety of the water supply. It's important that we test for unregulated contaminants, pesticides, herbicides, organic matter, cyanobacterial related toxins, etc.. Are these contaminant getting into our drinking water supply? There is so much we do not know.

A Suffolk County Water Authority (SCWA) well near the airport in Wainscott, for example, was found to have a high level of chromium-6 (EH Star, 9/27/16), a compound not regulated by the EPA that has been linked to cancer and also is associated with the production of cement. California introduced a Maximum Contamination Level (MCL) of 10 parts-per-billion (ppb) (originally 0.02 ppb). Toxicologist Amy Juchatz confirmed that the original California MCL of 0.02 ppb was based on a 1-in-1 million chance that an individual who is exposed to chromium-6 for a lifetime gets cancer. This standard is often quoted as the "*de minimis* risk".

Kinsella brought to the attention of the ESC a table published by the Environmental Working Group that ranks all counties within the US according to California's 1-in-1 million cancer risk level is 0.02 parts per billion. Suffolk County Water Authority (SCWA) was listed as the fourth worst county in the US. Of the 808 samples, 751 (93%) tested positive to chromium-6 contamination greater than 0.02 ppb, with an average contamination of 0.413 ppb – 21 times the *de minius* risk.

Kinsella noted that articles such as that in the East Hampton Star (Sep. 27, 2016) and the list published by the Environmental Working Group (date?), together with the fact there is a cement plant within Wainscott, gives cause for concern for our local community.

Cement plants have been cited by the EPA as a known source of chromium-6 contamination. The cement plant within Wainscott sit immediately on top of the water table. Since it was a sand mine, the top layers have been mined exposing the water table. So more accurately, the cement plant is "almost in the water table".

Private wells vary in depth, some may only be 40-feet deep, others may go down 350 feet.

Councilwomen Fleming said that she was hoping to push the Health Dept. to conduct further testing at the Wainscott Sand and Gravel pit as well as some of the private wells within the vicinity. Councilwomen Fleming was in Albany meeting with Senator Brooks (from Western Suffolk) who has introduced a bill similar to the one for 1,4 Dioxane and to push the DEC to set a standard. She pointed out that even without an established standard high levels of cancer on Long Island call for erring on the side of caution. She also raised a question about the effect of compounded contaminants. [10-11min]

Suffolk County Health Engineer Jason Hime suggested that the WCAC encourage residents who are not hooked up to the public water supply to get their private well drinking water tested each year (as recommended by the SCDHS).

Suffolk County Legislator Bridge Fleming called for additional monitoring wells to be placed in the hamlet of Wainscott.

The USGS map per Kinsella's letter to Dodson and Flinker (Jan. 31, 2017) showing depth to water table below land surface was reviewed (Fig 1 on page 2). The water table is closest to land surface in the area south of Montauk Hwy, which has no regulatory protection. This is an area that has the highest density of private wells.

Health Engineer Jason Hime and Toxicologist Amy Juchatz pointed out that all of the sole source aquifer is susceptible to contamination. If the contamination is local, it's more likely to contaminate a shallow well more quickly. Sources of contamination in shallow wells are likely to be local, e.g. septic or agricultural, however the level of contaminants in wells is not so much linked to well depth as to contaminant. A light non-aqueous phase (LNAP) liquid e.g. oil floats on the water table whereas a DNAP liquid, e.g. solvents, go deeper. Chromium-6, being a natural contaminant, probably is found deep in the ground.

Health Engineer Jason Hime said that the SCDHS evaluates and prioritizes the contaminants and that it is currently focusing on 1,4 dioxane and perfluorinated compounds. It collects data from community and non-community supply wells and seeks guidance on whether there is a need to set a specific drinking water standard at the New York State or Federal level.

Health Engineer Jason Hime said that the SCDHS does not have authority to set drinking water standards. During the Unregulated Contaminant Monitoring of 2013-15, SCDHS found only four well fields in Suffolk County with total chromium measuring more than 10 ppb (CA drinking water standard).

There is no EPA or DEC standard for chromium-6. It has looked for total chromium and chromium-6 in Wainscott and found one detection of Cr-6 at a site west of the cement plant, by Cowhill Road. No further testing has been conducted.

Legislator Fleming noted that the data supports additional well testing in the Wainscott area and she called for expanding the monitoring private wells. The testing laboratory has fewer resources – from 33 people down to 23 people. The question of contaminants at Wainscott Sand and Gravel was discussed.

A drinking water standard has to be promulgated from either the EPA or New York State. Legislator Fleming said that this does not prevent us and advising the public, nor does it stop us from "dropping five monitoring wells in the areas to get a sense of what is happening". Legislator Fleming also said that she was lobbying in Albany for a drinking water standard.

Wainscott Sand and Gravel is the same operator at Sand Land in Noyac. We're in court right now with regards to concerns about the water table.

Kinsella presented his letter to Town Attorney Sendlenski (Jan. 15, 2017) in which he asked whether it would be possible for SCDHS to test water in the unlined pools around the cement plant when it conducted its periodic testing of the storage tanks. Mr. Hime and Ms. Juchatz said the SCDHS pollution contamination is concerned only with the tanks but thought inspectors would report back if they saw something of concern on the site.

Kinsella pointed out that SCDHS test results for a private well immediately north of Wainscott Pond had a detectable level of Chromium-6 which measured 0.07 ppb (µg/L), but that he'd seen levels of chromium-6 reported within Wainscott at level higher than 600 ppb (per testing by Pace Analytics within immediate proximity to the cement plant).

Referring to the article published in the East Hampton Star (Sep. 27, 2015) that cited a level of chromium-6 which measured 0.54 ppb, Member Dalene wanted to know which of the wells marked on the Suffolk County well map (on page 23 of agenda documents), had this level of chromium-6. [35mins] We do not know which well on Town Line Road tested positive to Chromium-6.

Suffolk County only has regulatory authority to test the storage tanks at Wainscott Sand and Gravel, and the DEC may have limited authority to test, but it is unsure what authority. The DEC has access to the Sand Land property in Noyac (this proprietor is in court with Southampton Town, Suffolk County in three venues … and separately in East Hampton Town), Health Dept. had worked with proprietor to install a monitoring well, but the proprietor pulled out at the last minute – hence the Commissioner authorized legal action to obtain a restraining order to allow the SCDHS which was appealed. It has been a couple of years. Sand Land finally agreed to provide a sample of the ground water from a standing pond. It was surprising to note the in the case of Sand Land, the water was not travelling in the direction that initially thought (USGS can assist with determining water traveling direction and time).

It was noted the Wainscott Sand and Gravel leases the property to Suffolk Cement who operates the cement plant. There are multiple activities on the broader Tintle-owned old sand pit site, including the movement of fill and landscaping materials, etc.

Chairman Kinsella pointed out that there are two approaches –

(1) Analyzing the supply-side or source of contamination; and/or

(2) Testing private drinking-water wells owned by consumers.

(1) As discussed at length, there are many obstacles and problems with accessing the Tintle-owned site to obtain samples for testing. These problems are prohibitive.

(2) A survey of wells located around the Tintle-owned property is a viable alternative.

Health Engineer Jason Hime noted that Suffolk County Lead Hydrogeologist Ronald Paulsen (who runs the well-drilling crew) is currently reviewing the Suffolk County Dept. Health Services' (SCDHS) water quality test results database of water samples taken from private drinking water wells within Wainscott dating back to 1998. Preliminary analysis shows high levels of naturally occurring elements, for example, manganese (please see below for details on manganese). The manganese contamination was not introduced to the area, but rather it was the activities in the area that caused the already existing manganese in the ground to be released. Likewise, chromium-6 is also naturally occurring and it could be the activity onsite that is causing it to be released into the ground water.

The primary objective of the proposed survey of private wells is to increase Wainscott residents' confidence in drinking water drawn from private wells located immediately above the shallow aquifer and to ensure that drinking water from such wells is healthy.

It was agreed that SCDHS will assist the ESC in developing a program to test private drinking water wells, where such tests target contaminants identified as potentially problematic by Hydrogeologist Ronald Paulsen in his aforementioned analysis. Immediate areas of focus would be those downstream from the Pit and around the public well on Town Line Road that tested high for hexavalent chromium and other contaminants which form part of the EPA's Unregulated Contaminant Monitoring Rule (UCMR) program.

The ESC, seeks the assistance and support of the broader WCAC and the Town, to approach Wainscott residents to ask whether they desire to have their private drinking water well tested. Once a body of residents has been formed, the ESC would immediately request that the SCDHS Private Well Water Testing Program test the Wainscott residents' private drinking water wells.

Health Engineer Jason Hime warned that the SCDHS tests between 500-600 wells per year and that there is currently a back-log of going into November 2017 – i.e. it's currently taking eight (8) months to process drinking water quality test results and that there are no substantial plans in place to improve that time frame (except the employment of one new recruit to assist collecting water samples). Resources are currently dedicated to known excessive contamination.

With reference to Hannon Report (Kinsella) which cites three chemicals (below), we do not know whether they have been tested for in and around East Hampton Airport. These chemicals are related to aircraft manufacturing, maintenance and operations.

1) Perfluorooctanoic acid (PFOA
2) Perfluorooctanesulfonate (PFOS)
3) Trichloroethylene (TCE)

The DEC is working on an inventory of where fire-fighting foam has been used (a cause of the chemicals' release) and it has tested the public wells in East Hampton and has not been found.

Health Engineer Hime said that those drinking from private wells are "drinking at their own risk". Ground water changes every day and some hydrologists say that ground water generally moves at one foot per day in Suffolk County (depending on where you are located). Suffolk County is prioritizing contaminants based on "current science" which is for such as perfluorinated compounds (PFCs), 1.4-dioxane, Freon, MTBE (methyl tertiary-butyl ether), etc.

Results takes about 8-10 weeks. There is a delay on both the sampling and the analytical.

For this reason, Health Engineer Hime suggested employing the services of contract laboratories, such as Long Island Analytical and/or Pace Analytical. Private testing can be costly and therefore should be targeted towards more high-rick contaminants to minimize costs.

It is also possible to employ water treatment plant operators who are properly trained in adherence to water sample collection procedures.

It was concluded that SCDHS will assist the ESC in developing a program to get private wells tested. Downstream from the Pit and around the well on Town Line Road that tested high for chromium-6 would be areas of focus. Both the SCDHS private well testing program and contract labs such as Long Island Analytical and Pace Analytical could be used. The SCDHS testing costs $100, however there is a backlog of requests extending through November. Private testing that looks for the same compounds can be costly. Following proper sampling protocols is essential. It is possible water treatment plant operators also trained in proper collecting procedures could be hired. Legislator Fleming asked whether the results from contract labs could trigger legislative action. The answer is No. In such cases, SCDHS would retest.

Remediation for Chromium-6 was discussed. Ion exchange systems that use reverse osmosis might be a treatment for chromium. Such systems should be NSF approved and/or have the Water Quality Association gold seal.

Once the ESC received the results from Suffolk County Hydrogeologist Ronald Paulsen's contaminant analysis, it will approach both Long Island Analytical and Pace Analytical with the view to gaining water quality test cost estimates for Wainscott residents.

Nitrogen Contamination

Sara Davison reported on the outreach to get homes <2 years water travel time to Georgica Pond to upgrade to nitrogen reducing septic systems. She noted that additional costs have become apparent, e.g. percolation tests, engineers' fees, survey updates, etc. so real costs are likely to be higher that the town rebate of $15,000 for properties lying with the HROD. The town-approved list of professionals who can assist with the installation of nitrogen removing septic systems was distributed.

Frank Dalene introduced the idea of biogas capture. Instead of installing nitrogen-reducing septic systems, one might opt for a full containment system in which contents were brought to a digestor that transformed the contents to biogas.

Kathee Burke-Gonzalez updated the committee on the state of legislation concerning septic upgrades. At present upgrades are voluntary, apart from situations where there is new construction or the significant expansion of an existing structure, both of which trigger the requirement for the nitrogen-reducing system. She noted the approved systems are intended for private, not commercial, use.

Request for the Protection of the Wainscott Hydrologic System (Si Kinsella)

The final version of the Request for the Protection of the Wainscott Hydrologic System within the Hamlet of Wainscott.

Fuel Farm for East Hampton Airport (Frank Dalene) –

Fuel Farm for East Hampton Airport, Bid No. EH16-048 and East Hampton Press Article of January 24, 2017, East Hampton To Borrow $1.6 Million For New Fuel Storage At Airport.

The Fuel Farm for East Hampton Airport was discussed. Members of the ESC expressed concern that the fuel tanks would be situated above the aquifer. Kim Shaw recognized this concern and emphasized that all possible steps have been taken to ensure the safety of the aquifer. Not only did the existing tanks need to be replaced, having larger tanks will obviate the need for fuel delivery trunks to make more than one trip per day during summer months.

Congratulations Finally, Ms. Shaw and Councilwoman Burke-Gonzalez were congratulated on their efforts to obtain a $100,000 state grant for 100% renewable energy goals for the Town.