



DuPont/Pompton Lakes Works Site Cleanup Newsletter

APRIL 2013

Welcome to the second edition of the U.S. Environmental Protection Agency's DuPont/Pompton Lakes Works Site Cleanup Newsletter. The EPA plans to issue this communication regularly to keep you informed of cleanup activities related to the Pompton Lakes, New Jersey area. This edition of the newsletter is being provided in a Q&A format based on the questions presented during previous public information sessions. In subsequent editions of the newsletter we will continue to address questions raised from the public regarding activities related to the Pompton Lakes cleanup.

Permit Modification:

In December 2012, the EPA issued a final permit modification for the cleanup of the Acid Brook Delta and uplands. (Available at: www.epa.gov/region2/waste/dupont_pompton/additionaldocs.html). The final permit modification would have become effective on February 4, 2013, however DuPont and the Passaic River Coalition submitted appeals to the EPA's Environmental Appeals Board (EAB). The EAB is the final decision-maker on administrative appeals at the EPA and an impartial body independent of all other agency components. In early March 2013, the EPA, DuPont and the Passaic River Coalition jointly filed a motion to stay, meaning that the appeal process would be halted for the time being. The EAB granted the stay until October 25, 2013 while the parties undertake technical work, analyses and discussions to cooperatively resolve the matters raised in the two appeals. In addition, the EAB is requiring an update by August 26, 2013 on the progress to resolve the appeals to the Permit Modification.

Can you provide more details about the work that is ongoing despite the appeal process?

During the appeal process, a wide variety of work is continuing, including the preparation of work plans, pursuit of state and local permits, and regular public meetings.

Although the permit modification was appealed, it should be noted that these actions are consistent

with the scope of work that would be performed if an appeal had not been filed. With EPA oversight, DuPont is also conducting additional sampling in the Ramapo River channel and other portions of the lake in order to help identify hotspots, concentrated areas of contamination in the sediment. In addition, the investigation of the uplands soil area will continue in order to optimize the implementation of the remedial action for this aspect of the work.

Water Quality:

Can you explain what ground water is?

Ground water is water below the land surface in a zone of saturation. Ground water is the result of rain and other precipitation seeping into the soil and moving into the pores between sand, clay and rock formations.

MARK YOUR CALENDARS!

Public Information Session
June 19, 2013
3-5 p.m. and 7-9 p.m.
Carnevale Center
10 Lenox Ave.
Pompton Lakes, NJ 07442

TOPICS: Permit appeal process and timeline, bioremediation pilot study, on-site investigation and plan for addressing the areas of concern

Additional Resources:

EPA Pompton Lakes website: www.epa.gov/region2/waste/dupont_pompton
New Jersey Department of Environmental Protection:
www.state.nj.us/dep/srp/community/sites/dupont_pompton_lakes



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Does the drinking water in the plume area come from the contaminated ground water?

No. Drinking water in Pompton Lakes is supplied by three wells outside of the plume area. The drinking water system is maintained by the Pompton Lakes Municipal Utilities Authority. More information is available here: www.plbmua.org/. Additional information on drinking water quality is available from the New Jersey Department of Environmental Protection:

https://www11.state.nj.us/DEP_WaterWatch_public/JS/P/WSDetail.jsp?tinwsys=503&PWSID=NJ1609001.

Bioremediation Pilot Study:

The next phase of the pilot study will begin in mid-April with baseline sampling of ground water monitoring wells in the vicinity of the study area. The purpose of the study is to evaluate the process of bioremediation as a potential additional treatment technology for the contaminated ground water. Bioremediation uses naturally occurring microorganisms to reduce contamination in the environment. In this study, sodium lactate will serve as the food for the microorganisms to help them grow to sufficient numbers to result in a significant reduction of the chemical concentrations in the ground water. The pilot study will determine the effectiveness and the practical implementability of bioremediation in the Pompton Lakes area. The system is scheduled to start up in May.

What can residents expect during the pilot study? Will yards be affected?

Once the system is operating, ground water will be extracted at about one gallon per minute from a single well and re-injected into a single well. Sodium lactate and a potassium bromide tracer will be added to the re-injection water. To promote degradation of the target volatile organic compounds (VOCs) a bioaugmentation culture (i.e. microorganisms or bacteria) that contains known trichloroethene (TCE) degraders will be added

once ground water conditions are suitable. This culture, (KB-1 – for more information visit: www.siremlab.com/products/kb-1), does not contain pathogens and requires chlorinated VOCs to proliferate. It is not expected that nearby yards or sidewalks would be affected by this work. Once the system start up occurs, DuPont's contractors will be monitoring on a daily basis to verify that the system is operating as anticipated. The pilot study will operate for a period of about six months with sampling occurring on a routine basis.

On-Site Investigation:

What exactly is an area of concern and how many have been addressed so far?

An area of concern (AOC) is a location that may have experienced environmental degradation and has been determined to warrant further investigation or remediation by the environmental regulatory agency (i.e. NJDEP or EPA). The identification of AOCs depends on many factors and differs from site to site. So far, 202 AOCs have been identified and more than 30 have been addressed.



Acid Brook as it enters the DuPont property on the north side



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What is the status of the on-site investigation?

The investigation for the on-site portion is complete and the RCRA Facility Investigation (RFI) report has been finalized and approved by NJDEP and EPA. The RFI explains the overall findings including a description of the nature and extent of the contamination at the former DuPont manufacturing site. The next step is a Corrective Measures Study which will develop and evaluate the corrective action alternatives for the facility. EPA and NJDEP will discuss the Corrective Measures Study at future public meetings.

Vapor Mitigation Systems:

How does the Vapor Mitigation System (VMS) work?

The VMS works to vent chemical vapors from below the slab of a building to the outdoors through an exhaust vent located above the roofline. The systems have been shown to be effective for addressing vapor intrusion from chemicals in soil and ground water.

What is the latest update on VMS installations?

Vapor mitigation systems have been installed in 301 homes to date. The EPA continues to encourage all homeowners with homes above the "vapor mitigation area" (the contaminated shallow ground water plume) to install a VMS. See the vapor mitigation map at the NJDEP website:
http://www.nj.gov/dep/srp/community/sites/dupont_pompton_lakes/documents_maps.htm.

If you would like DuPont to install the VMS, please contact David Epps, DuPont Project Director, at 973-492-7703. If you would like a third party contractor to install the VMS, please call Pat Seppi, EPA's Community Involvement Coordinator, at 212-637-3679.

Can I have my indoor air sampled again or more often?

After system installation, the protocol is for one post-mitigation indoor air sample to be collected to ensure

that the VMS is effective. Annual inspections of the system do not include additional indoor air testing because it is unnecessary. As long as the VMS is operating as intended, additional indoor air sampling would indicate background indoor air sources introduced after installation and not vapor intrusion from beneath the home.

If no system has yet been installed, the owner is entitled to one round of "Phase 2" sampling which includes an indoor air sample and a sub-slab soil gas sample.

What should I do if my VMS goes down and would the house need to be retested when it does? And what if the alarm goes off on the weekend?

The system will shut down when the power goes out. Once power is restored, the system will restart, and just like with other electric appliances, should resume previous effectiveness. Generally it takes a significant amount of time for vapors to build up again underneath the slab of a building, so it is not necessary to retest homes after a power outage. Additional information on VMS and power outages can be found at:
http://www.nj.gov/dep/srp/guidance/vaporintrusion/vapor_mit_sys_and_power_outages.pdf.

If the alarm goes off during the weekend, DuPont has two emergency phone numbers posted with the system. They are also included in the literature DuPont provides to the homeowner. If you have a third party system, please contact the contractors who performed the installation.

VMS Inspection Program:

The EPA continues to inspect systems at the request of the homeowner. If you have not been inspected by EPA or NJDEP (or do not know) and would like this inspection, please call Pat Seppi at 212-637-3679.



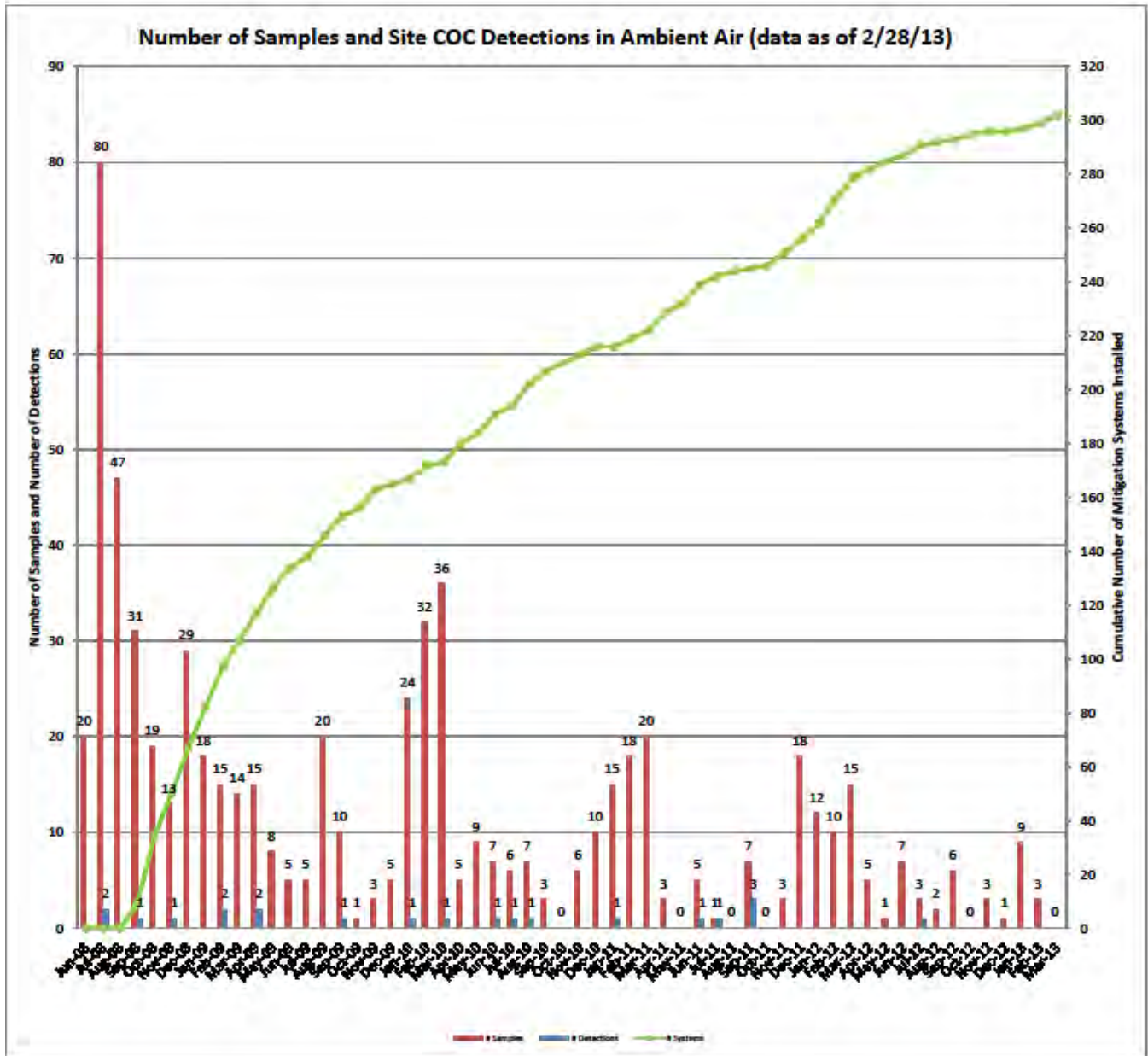
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Ambient Air Sampling:

Can you share the data from the ambient air sampling?

Between June 2008 through February 2013, 670 samples of ambient air within the Pompton Lakes community were collected and analyzed for 10 constituents of concern. As shown in the bar graph below, only 21 of those 670 samples exhibited any of these compounds above detection levels. Review of the data indicates that these concentrations are well within the EPA's acceptable risk range and pose no significant risk to the community.





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Why don't you take samples for longer than 24 hours?

The air sampling protocol that the EPA follows is a well-established, standard procedure used by scientists across the country. The comprehensive air sampling conducted to date in Pompton Lakes has provided more than enough data to characterize the ambient air quality in the area.

Other News:

Can you provide the final conclusions from the radiation review?

The Department of Energy (DOE) closely tracks uranium and other radioactive materials used in any manufacturing in this country due to national security implications. According to the DOE records and the EPA's review of these reports by our radiation experts, there was no radioactive material, depleted uranium or otherwise, used at the DuPont Pompton Lakes site. Any radioactivity that would be at the site is naturally occurring radioactivity which would normally be found in the earth's crust or in building materials.

Can you share the results from previous sediment sampling that occurred after flooding in 2010?

The results have been posted to the website and are available here:

http://www.epa.gov/region2/waste/dupont_pompton/pdf/pompton_dam_samp-9-2010.pdf.

Site Background:

From 1902-1994, DuPont manufactured explosives on a 570-acre site located at 2000 Cannonball Road in Pompton Lakes and Wanaque, New Jersey. Past operations and waste management practices have contaminated surface water, soil, sediment and ground water both on- and off-site. The primary soil and sediment contaminants are lead, mercury and copper. Primary ground water contaminants are volatile organic compounds (VOCs) which can cause vapor intrusion in areas where the shallow ground water VOC plume extends beneath homes. The DuPont Pompton Lakes Works site is regulated under the federal Resource Conservation and Recovery Act (RCRA). DuPont is responsible for conducting the necessary cleanup with oversight by the EPA and the New Jersey Department of Environmental Protection.

For More Information, Please Contact:

Pat Seppi, Community Involvement Coordinator
U.S. EPA
(212) 637-3679
seppi.pat@epa.gov

Additional Resources:

EPA Pompton Lakes website: www.epa.gov/region2/waste/dupont_pompton
New Jersey Department of Environmental Protection:
www.state.nj.us/dep/srp/community/sites/dupont_pompton_lakes