

Independent firm says capping Ringwood Superfund site the best option - NorthJersey.com

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The environmental consulting firm retained by the borough to independently analyze groundwater data collected by Ford's remediation agent Arcadis and the U.S. Environmental Protection Agency (EPA) has determined that capping the three primary areas of concern at the [Ringwood](#) Superfund site would be an appropriate remediation method.

In addition, the firm has declared that the [Wanaque](#) Reservoir and borough-owned wells providing drinking water to residents are not at risk for contamination from groundwater and surface water flow from the Superfund site.

Those revelations were among the conclusions drawn following a lengthy presentation by geologist Lawra Dodge, president of Excel Environmental Resources of North Brunswick, during a special May 23 meeting of the Borough Council.

Due to excessively wet weather that evening, the meeting began a half-hour late because Dodge got stuck in traffic. Approximately 15 members of the public attended. Council members Donna Anderson and Sean Noonan were absent.

Wanda Chin Monahan, a partner with Sedita, Campisano & Campisano who serves as special counsel representing the borough in matters regarding litigation with Ford and the Superfund cleanup, opened the meeting with a brief overview of the history of the Upper [Ringwood](#) site. After dumping toxic paint sludge on several borough-owned properties in the neighborhood for three decades, Ford was ordered to clean up the site by the EPA in 1980. Although deemed remediated by the EPA in 1994, an investigation by The Record in 2006 found that contamination remained. At that time, the Upper Ringwood site became the only Superfund site to be placed back on the EPA's National Priorities List after having been removed from it.

The three areas of concern currently at the center of the Upper [Ringwood](#) remediation are Peters Mine pit, the Cannon Mine off Van Dunk Lane, and the O'Connor Disposal Area, an above-ground dump adjacent to Peters Mine Road. Together they comprise a total area of approximately 14 acres.

Much of the information presented on May 23 had already been given to the public during a similar meeting held in May 2012, when it appeared that the EPA was prepared to take its findings and recommendations to the National Remedy Review Board (NRRB). NRRB is a peer group subdivision of the EPA that is required to conduct a technical review all remediation plans carrying an estimated cost of \$25 million or more. Despite all indications otherwise, the EPA did not follow through by going before the NRRB last summer.

Dodge suggested that the EPA may have decided to postpone that event because the data on groundwater findings at the three areas of concern was notably incomplete. In the interim, both Arcadis and the EPA continued to gather and test samples of groundwater at the three areas of concern, which led to the filing of Arcadis' Groundwater Remedial Investigation Report in January of this year.

Each of the three areas has historically tested positive for a different contaminant. At Peters Mine pit, it is benzene. At the O'Connor Disposal Area, it is arsenic. Naturally occurring metals in the groundwater at the Cannon Mine have been the primary concern at that location.

A large portion of Dodge's presentation used conceptual site models of the areas to illustrate groundwater and surface water flow. Some audience members expressed difficulty in understanding the cross section visuals. A barrage of technical data was issued regarding the results of the groundwater testing, punctuated by an occasional question from an audience member.

'No constituents of concern'

In short, Dodge explained that benzene levels at Peters Mine pit appear to have fluctuated only slightly since 1980 and have remained below the one part per billion considered safe by EPA standards since frequent testing resumed in

2005. A state-of-the-art test called a Biotrap, supported by both Arcadis and the EPA, shows that naturally occurring microbes use benzene as a food source, which is slowly leading to lower levels of the hazardous chemical at that location.

"The microbes appear to be degrading the benzene," Dodge stated, "faster near the surface, and more slowly near the bottom of the pit where oxygen levels are lower."

She stated that the test results did not show "a pattern indicative of concern."

At the Cannon Mine pit, Dodge said, all of the water is in the bedrock, with a variety of metals one would expect to find in a natural system where iron and manganese are prevalent. She said that "no constituents of concern" were found at the Cannon Mine location, "just the usual naturally occurring metals."

The O'Connor Disposal Area is a much larger area than the other two, Dodge said, requiring a high degree of investigation. Small amounts of arsenic have been measured at the edge of that location over the years, she said, but it always appears to be near the surface. Lead found at O'Connor has been determined to be particulate matter and is not in the water, but in the soil. This area was used as a sluice pond when mining operations were still active, and a variety of materials – including tons of paint sludge – were dumped on top of it after the mines shut down. The good news, she said, is that neither the lead nor arsenic found at O'Connor appears to have left that location, which means the contamination is contained.

In conclusion, Dodge said, the accumulated data suggest that no constituent contaminant has migrated from any of the three areas of concern. The geochemistry of the area confirms that monitoring the network of wells is effective at the right locations and should continue far into the future. Dodge said with confidence that capping the three areas of concern is an appropriate remedial solution. In fact, she said, a more aggressive plan of action might result in destabilization of the contaminants.

"Capping is a remedy that is as protective as any other," she said.

Not everyone in the audience was prepared to take stock in the geologist's professional opinion.

Dr. Janet Sailor of Chestnut Ridge, N.Y., addressed the notions of public trust and safety, asking Dodge point blank if she would be able to live "up on that hill" based on the data she had analyzed. Dodge assured her that she would.

Rich Chapin, an engineer from Basking Ridge who serves as technical advisor to the [Ringwood](#) Community Advisory Group (CAG), had this to say on the issue of capping Peters Mine: "That shaft is a conundrum, with benzene that comes and goes for 30 years." He questioned the source of the contaminant. "Is it coming from the mine shaft? Maybe." He added that capping may not be the best course of action without knowing where the benzene is coming from.

As described on the EPA website, capping covers buried wastes to prevent contaminants from spreading. Caps are made of a combination of materials such as synthetic fibers, heavy clays, and concrete. Caps are supposed to minimize water movement through the wastes using efficient drainage; resist damage caused by settling; prevent standing water by funneling away as much water as the underlying filter or soils can handle; and allow easy maintenance.

EPA officials have stated that they plan take their findings and recommendations for the [Ringwood](#) Superfund site to NRRB in June or July. As part of that process, the EPA permits any interested stakeholder to submit information and opinions regarding the remediation. Last year, when the EPA declared its intention to go to the NRRB, Monahan and Dodge prepared such a document on behalf of the borough based on the information available at that time. While much of that statement is still valid, Monahan said, "We really do have significant new information." With that in mind, she asked the Borough Council to vote on a resolution permitting the inclusion of the supplemental information presented by Dodge in its updated submission to the EPA. The council did so unanimously and without reservation.

The [Ringwood](#) CAG (Community Advisory Group), which says on its website that it is "fighting for environmental

http://www.northjersey.com/news/209031141_Independent_firm_says_capping_Ringwood_Superfund_site_the_best_option_for_justice_for_the_Ramapoughs_of_New_Jersey," is scheduled to meet on Tuesday, May 28, at 6:30 p.m. in Borough Hall.

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