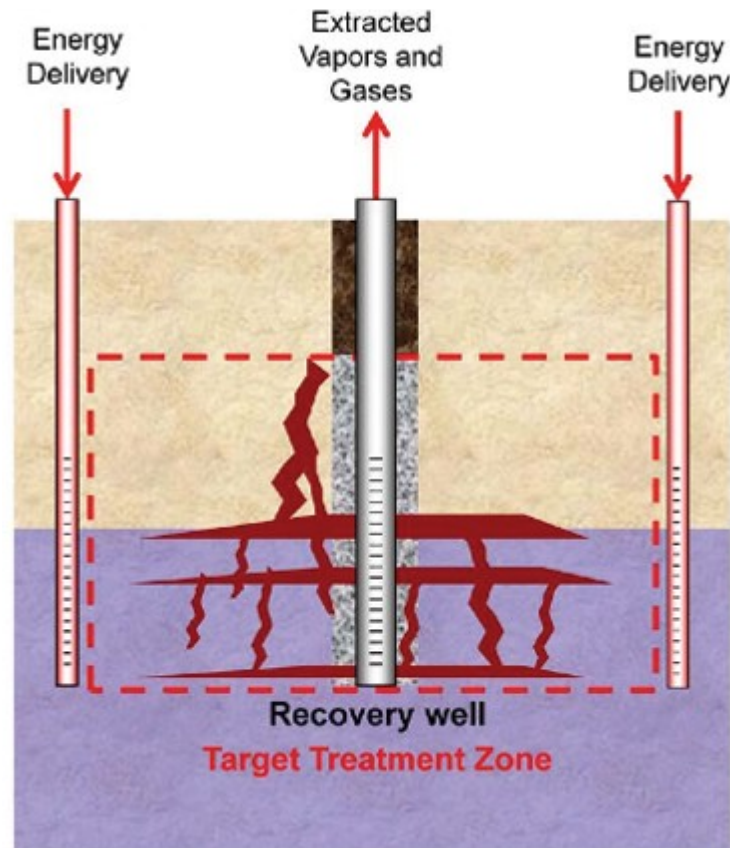


Red hot remedy found for Neponset River ground contaminants

Boston Bulletin, March 30, 2016 By Christopher Roberson



A diagram of In Situ Thermal Remediation. This technology will be used to destroy ground contaminants at the Lewis Chemical site. *Photo Courtesy of Naval Facilities Engineering Command*

The Department of Neighborhood Development (DND) in partnership with engineering firm Woodard and Curran have devised a way to eradicate the pollutants from the former Lewis Chemical site, which have continued to pollute the Neponset River.

Jarrold Yoder, an associate principal at Woodard and Curran, told members of the Fairmount Hill Neighborhood Association that In Situ Thermal Remediation will inject heat through a series of cylinders to destroy the contaminants in the ground.

“We’re essentially changing it from a liquid to a vapor,” he said during the association’s March 23 meeting.

Yoder said prior studies have shown that chemicals such as polychlorinated biphenyls (PCBs), petroleum and solvents have invaded that part of the riverbank adjacent to the Fairmount Commuter Rail Station. The contaminants then enter the river through storm water runoff.

He also said that in the 1960s, the Army Corps of Engineers dropped boulders on parts of the riverbank to prevent erosion. Therefore, obtaining soil samples from those areas has been virtually impossible.



The Lewis Chemical building on the bank of the Neponset River before being torn down in 2013. Lewis Chemical operated from 1963 to 1983 and was cited for a number of environmental violations. *Photo Courtesy* <http://www.swbcdc.org>

Yoder said In Situ Thermal Remediation was the best option, as it can reach 932 degrees - the threshold needed to destroy PCBs.

“There aren’t a lot of technologies that are effective in addressing PCBs and metals,” he said.

However, Yoder said it could take years to begin the process, adding that the design phase of In Situ Thermal Remediation could last for another 1 1/2 years.

He said permits will also be needed from the city, the state and the Army Corps of Engineers



A rendering of a possible future development at the Lewis Chemical site on the Neponset River.
Photo Courtesy <http://www.swbcdc.org>

“It’s a painstaking process, the permitting process is going to take a really long time,” said Yoder, adding that it could take nine months just to obtain a permit from the Army Corps of Engineers.

Member Martha McDonough was concerned about future river clean ups, given the current contamination levels.

“We don’t want to put people in harm’s way, but we don’t want to wait 100 years to clean up the river,” she said.

However, Yoder assured her that health problems would only become a concern if someone was in the water for an extended period of time.

Although the site is cordoned off, Member Michael Smith asked if there would be a risk of airborne illness if a group of kids broke into the site and spent an evening “roasting marshmallows and drinking vodka.”

Yoder gave a similar response, saying trespassing and the consumption of hard liquor would be their biggest problems.

“They might not be okay from drinking for four hours,” he said.

Speaking about the history of the site, James Smith, the DND’s senior environmental compliance manager, said Lewis Chemical often quarreled with the State Department of Environmental Protection (DEP) during its 20-year tenure.

“Lewis Chemical got in quite a bit of trouble with the DEP,” he said.

Member Rita Walsh said there was an explosion at the site in the 1980s.

“It was on 24-hour watch, we were convinced there was something going on,” she said.

Smith said that of all the projects he has right now, Lewis Chemical is the worst.