

Bird Machine site clean up nears completion

By Keith Ferguson

Posted Aug 19, 2011 at 12:01 AM Updated Aug 19, 2011 at 7:19 PM

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At this point, current owners can't pinpoint how long it will take before the entire site is pollutant free.

The 134-acre parcel in South Walpole along the Neponset River was used for manufacturing since the early 19th century before it was turned into the Bird Machine in 1920. Baker Hughes purchased the land in 1989 and discontinued manufacturing in 2004.

There are recorded spills of oil, petroleum and asbestos on the site, according to representatives of Baker Hughes, the company that retains control over the land.

The site is over the Great Cedar Swamp aquifer. Experts told sparse attendees at a public meeting in Town Hall Tuesday evening that groundwater under where the manufacturing buildings once stood is still contaminated with metals, solvents, hydrocarbons and chlorobenzenes.

Those buildings were demolished in 2007 and 2008. Knowing the site was contaminated, Baker Hughes launched a cursory investigation of the land when the company bought it and conducted some remediation in 1990. A full-fledged investigation was done in 2004 after which contaminants were removed.

Dina Krykendall, of Baker Hughes, said her company has voluntarily put \$9 million down for the clean-up so far. Since November of 2007, 18,000 tons of soil has been removed from the site and ground water continues to be monitored.

Risk management consultant Kim Henry said there's still lead and hydrocarbons remaining in the soil after the excavation but, at low levels, that's not a problem.

"What is remaining poses no significant risk to human health and the environment," she said.

The vast majority of the former Bird Machine site is wetlands, but Henry said that, other than the land under the former buildings, the rest of the groundwater, the Neponset River and the Ruckaduck Pond, is clean.

"What this is telling us is that the remediation work that's been done has been a success," Krykendall said.

In other words, the only thing left to do before the entire site is deemed uncontaminated is take care of the water under the former manufacturing site, but Baker Hughes can't tell how long that will take until they do some more research.

"It's kind of difficult to say (how long a clean-up will take) until you select a remedy," said Krykendall.

The contaminated water in the water table under the former buildings flows into the Neponset River and downstream to be replaced by clean water bubbling up from the aquifer beneath. That means the area would cleanse naturally, but experts said that would take a significant amount of time because water underneath the earth moves at a near glacial pace.

Water from the contaminated area makes less than 0.5 percent of the water in the Neponset River, said Henry, a concentration too low to affect humans or the environment.

Baker Hughes environmental affairs expert Chris Clodfelter said quicker water purifying solutions could be either treating the groundwater with chemicals to clean it or pumping the water out of the ground. Company representatives are hoping to chose a strategy and lay out a timetable for the public at another meeting in mid-October.

Even after it's clean, the water from that area will probably never be used for drinking, but Baker Hughes must bring it up to those standards as per state law.

Walpole public water comes from the Cedar Swamp aquifer, but the nearest well is 800 feet away from the polluted groundwater, said Henry, far enough where there's no risk of contamination.

Despite the fact Baker Hughes is on the doorstep of receiving a clean bill of health on the land, Clodfelter said the company will keep strict limitations on future development.

"Limited to nothing, basically," he said.

"We're only looking at what the site provides for ecological benefits that can be preserved or enhanced," Krykendall said.