Halliburton unveils contamination remediation for Sand Draw facility

By Kaitlyn McAvoy

Because a number of chemicals were found to contaminate soil and groundwater at a Halliburton storage facility at Sand Draw in recent years, the company and the Wyoming Department of Environmental Quality (DEQ) have agreed on a plan to clean the site as part of the DEQ's Voluntary Remediation Program (VRP).

DEQ, Halliburton and the company's environmental consultant, LT Environmental, Inc. (LTE), held a public meeting Tuesday night at the Sublette County Library in Pinedale. No members of the public attended the meeting. However, DEQ and LTE representatives explained the history of the site and the remediation program, which includes excavating and treating the contaminated soil and groundwater.

The contamination to the subsurface was discovered during a number of environmental assessments conducted in 2008 and 2009 when Halliburton was looking to purchase the site from former owner Wind River Oil Field Services.

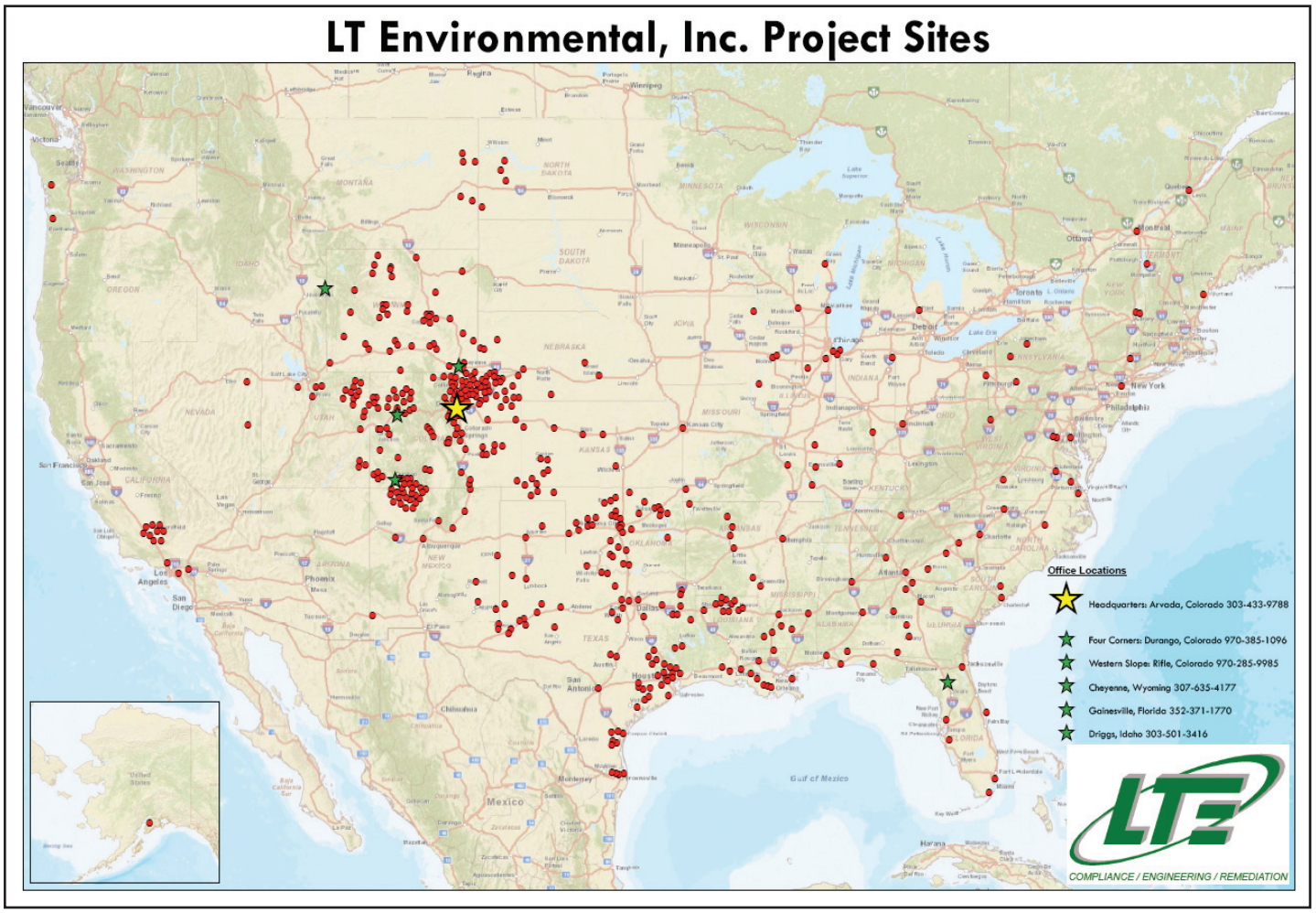
Numerous investigations found benzene, toluene, ethyl benzene, methanol, petroleum hydrocarbons, barium and lead in the groundwater onsite, said Jules Fleck, DEQ environmental scientist and VRP manager for the Halliburton site. Benzene and ethyl benzene were found to also impact the soil, she said.

"Those are constituents more commonly found in gasoline," Fleck said.

It is believed fuel tanks at the site, which were installed in 2003 when Wind River Oil Field Services owned the land, leaked and contaminated the ground.

Fleck said there were three "hot spots" of contamination to groundwater identified near the fuel tanks, and two of those spots showed methanol concentrations in groundwater above one million micrograms per liter. The DEQ's standard is 18,000 micrograms per liter, she said.

Heather Otterstetter of LTE said Halliburton purchased the site from Wind River Oil Field Services knowing the level of contamination to the subsurface. Halliburton entered into the VRP with the DEQ in July 2010.



Courtesy image

LTE has project sites across the nation including the program Halliburton is conducting this year.

"[Halliburton] did take it over and are going through the proper channels to clean up the site," Otterstetter said.

LTE will begin excavating nearly 2,000 cubic yards of soil next month as part of Halliburton's pilot test remediation plan, Fleck said. About 600 cubic yards of that soil is expected to be contaminated.

The soil will be excavated up to 14 feet down, treated and placed onto an onsite bermed area for composting. That area will be sealed with a liner to protect the clean soil below, Otterstetter said. If the pilot program proves successful, Halliburton will submit a full-scale remediation plan to the DEQ. Otterstetter hopes to begin work on the full-scale project in July and continue excavating and treating a total of 10,000 cubic yards of soil through the fall. LTE expects only 3,000 cubic yards of soil total to go through the treatment process, as the remaining 7,000 cubic yards should be clean, she said.

DEQ requires the site to be contaminant-free for four quarters before Halliburton can obtain site closure. Otterstetter said she expects the site to be completely clean within two years. Once the liner is removed from the soil treatment area, the subsurface will be tested for contamination as well, she said. However, no contamination is expected to occur.

"We don't expect any impacts to the subsurface by how we have engineered it," Otterstetter said.

Fleck said Halliburton's clean-up plan is an aggressive one, as excavating up to 14 feet deep is not only expensive but also effective. By excavating to that depth, Fleck said Halliburton will be removing the source of contamination, which is the best way to clean both the soil and the groundwater.

"All things considered, this a good remedy, we think," she said. ■

kmcavoy@pinedaleroundup.com