A Tri-Valley CAREs Factsheet

Cleaning up the Legacy of Nuclear Weapons at Lawrence Livermore National Laboratory

Alliance for Nuclear Accountability Asks:

- Provide sufficient funding for environmental cleanup to assure compliance with all laws and cleanup agreements.
- Maintain a publicly accessible database showing all cleanup agreement milestones and the funding needed to meet them.
- Disclose cleanup contracts, except for proprietary information.
- Bar the disposal of radioactive and chemical wastes in unlined pits and trenches.
- Prohibit import of foreign "low level" waste.

Tri-Valley CAREs Also Asks:

- Congressional appropriators and authorizers prioritize funding for DOE cleanup of LLNL main site and not allow funding gaps which could potentially endanger cleanup activities and therefore public health.
- Congress request that LLNL hold community meetings and disseminate information about the contaminated soil, groundwater, and any other health risks related to its activities.
- Senators and members of the California Delegation write a letter to Dept. of Energy Headquarters supporting the Livermore site officials' $35 million request for stimulus funds to be used for reducing the toxic and radioactive pollution already in soil and groundwater and enhancing environmental management at Livermore Lab's main site and Site 300. These letters should be addressed to: Ines Triay, Principal Deputy Assistant Secretary for Environmental Management, U.S. DOE, 1000 Independence Ave., SW, Washington, DC 20585.

Key Facts:

A number of research and support operations at LLNL handle, generate, or manage hazardous materials that include radioactive wastes. **There are approximately 50,000 people living within a 2-mile radius of the main Livermore site.** It is located about 45 miles east of San Francisco. Groundwater about 2 miles west of the site in downtown Livermore is used as a municipal drinking water source.

According to the EPA website, "Both on- and off-site groundwater [at LLNL main site] have been contaminated with volatile organic compounds (VOCs) and chromium. Fuel hydrocarbons including benzene and ethylene dibromide, the heavy metal lead, and tritium appear only in wells on site. Soil excavated from the site was contaminated with solvents, radioactive wastes, heavy metals, polychlorinated biphenyls (PCBs), and fuel hydrocarbons. Soils remaining on site contain VOCs, tritium, PCBs, fuel hydrocarbons, and inorganic substances. **People may face a health threat if they ingest or**

come in direct contact with contaminated water or soil." If the groundwater is not cleaned up, the EPA estimates cancer risks in Livermore as high as one in every thousand residents.

In 2008 DOE failed to operate 28 groundwater and soil treatment facilities. The initial shutdown was due to a funding gap. However, when funds were restored DOE and Livermore Lab failed to restart the facilities. **DOE has since agreed to pay a $165,000 fine to the EPA for this failure but control of the off site contaminated groundwater plume was lost.**

The most contaminated area of Site 300 is the Pit 7 complex that spreads over 3,200 acres. Primary contaminants include radioactive tritium, uranium-238, PCBs, Furans, Dioxins, and high explosives compounds. **This area consists of a series of unlined trenches where radioactive and toxic debris were dumped.** The EPA estimates that if the groundwater at Site 300 is not cleaned up drinking it will pose a cancer risk of seven cancers per one hundred residents.

The final stimulus bill contains $5.127 billion for "defense environmental cleanup", $483 million for "non-defense environmental cleanup" and $390 million for decontamination and decommissioning activities for uranium enrichment facilities. The total is $6 billion. The category in which the Livermore Lab request has been submitted for $35 million is the $5.127 billion for "defense environmental cleanup."

The requested funds would allow Livermore Lab main site to capture the off-site plume now migrating through neighborhoods west of the Lab and pipe it back on-site to a treatment facility that already exists. That treatment facility (TFA) would treat the groundwater. The clean water would then be used to recharge our groundwater supplies. Livermore depends heavily on groundwater for agriculture and for some of the community's drinking water. Some of the stimulus funds would also be used at the main site to clean up an area where mercury contamination and radioactive materials have been found together in the soil and pose a major hazard to workers and others. These activities would be carried out under the Superfund law, as the main site was put on the EPA Superfund list in 1987.

Site 300 was put on the EPA Superfund list in 1990, and there the stimulus funds would improve the cleanup of polluted soil and groundwater by adding monitoring wells around unlined pits with toxic and radioactive wastes, increasing the rate of removal of radioactive uranium from groundwater, better characterizing toxic contamination and more.

For more information please contact Tri-Valley Communities Against a Radioactive Environment
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