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Cleanup Progress at Lawrence Livermore National Laboratory Site 300 Pit 6 Landfill Operable Unit

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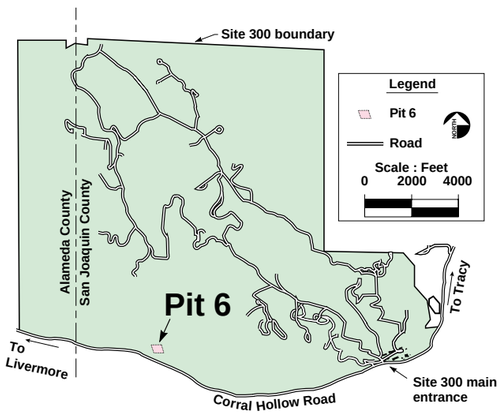
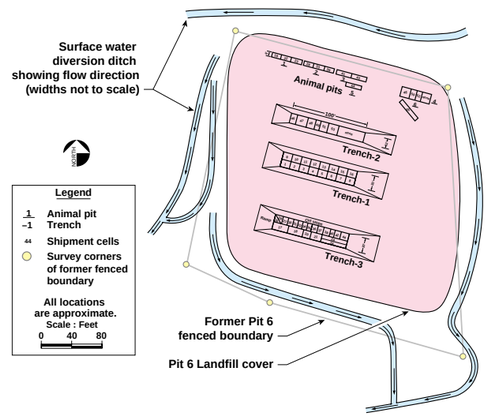
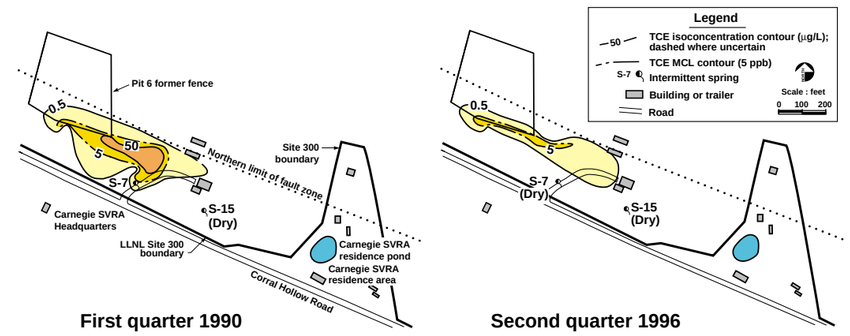
The Pit 6 Landfill is being closed as a non-time-critical removal action under CERCLA.

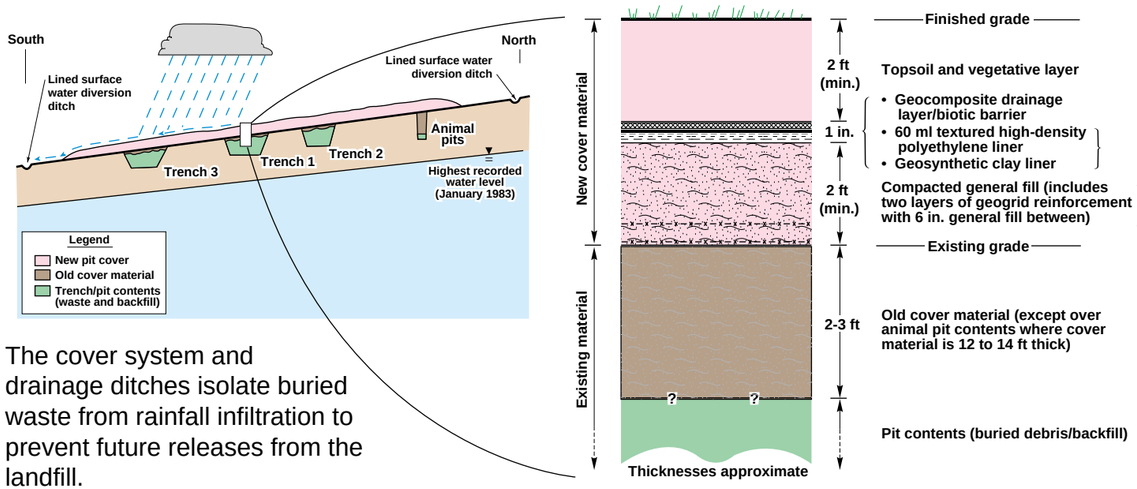


Closure consists of constructing a 2.4-acre, multi-layer cover system and surface water drainage diversion ditches.



An existing low concentration VOC plume (TCE maximum concentration of about 13 ppb) is naturally attenuating but will continue to be monitored to ensure cleanup requirements are met.





The cover system and drainage ditches isolate buried waste from rainfall infiltration to prevent future releases from the landfill.

Combined use of native soils and synthetic materials as cover system components increased safety during construction and maximizes long-term performance cost effectively.

- Establishing a soil borrow source onsite adjacent to Pit 6 instead of using an offsite source saved about $200K in materials and hauling costs.
- Synthetic "geonet" drainage layer also provides protection against burrowing animals. This eliminated the need for a cobble biotic protection layer, saving about $300K.

A combined geosynthetic clay (1/4-in. bentonite matting) liner and 60-mil HDPE liner system was installed as the impermeable layer.

- Use of this material saved time and money over installation of a conventional 1-2 ft thick clay layer, while increasing infiltration protection and reducing weight over the buried waste.

Workers installed structural support "geogrid" layers to prevent collapse into large buried waste void spaces.

- This protected workers operating heavy machinery during construction and increases the long-term integrity of the completed cover system.