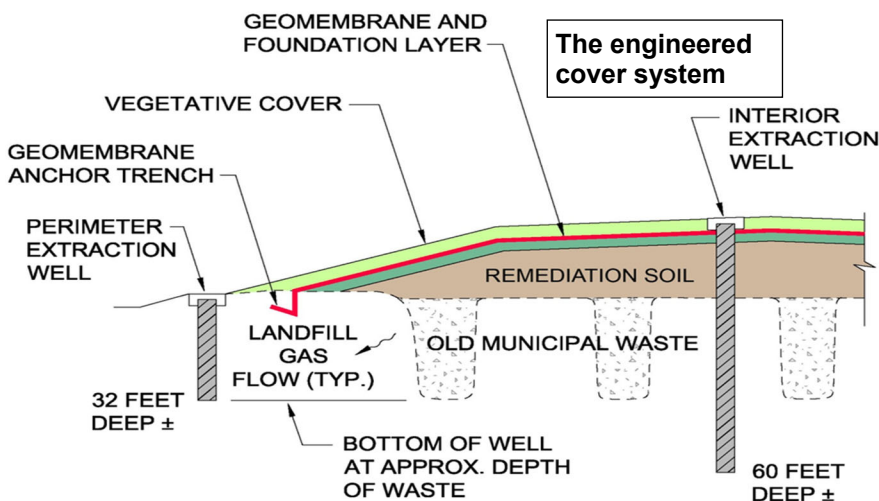


Fort Ord Cleanup Fact Sheet: Operable Unit 2 (OU2) Landfill Maintenance

History:

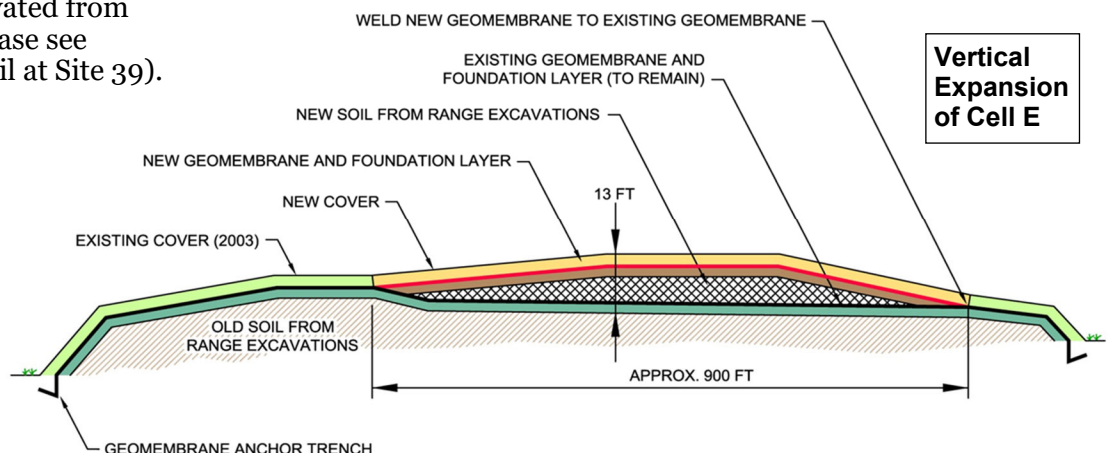
The Army operated a landfill during the years Fort Ord served as a training base. The landfill provided waste disposal for Fort Ord's housing, offices and support facilities, such as machine shops and motor pools. The Army stopped accepting waste into the landfill in 1987. Like many municipal landfills from this era, Fort Ord's landfill (see photo at right) was later found to be leaching hazardous chemicals into the groundwater beneath it. It consisted of 6 areas (A through E) covering about 150 acres. In the late 1990s, contents of Area A (about 33 acres) were excavated and placed into other areas (B through E). The Fort Ord Landfill site is known as Operable Unit 2 (OU2).



Due to the presence of contamination in groundwater, the Army installed a groundwater extraction and treatment facility which has been operating since 1995. The landfill cells are now covered with an engineered cover system (completed in three phases, 1997-2013) so that rain water cannot contact the waste and cause chemicals to leach through the soil into groundwater beneath the landfill. The U.S. Environmental Protection Agency, the California Regional Water Quality Control Board, and the California Department of Toxic Substances Control oversee the landfill project.

This work also included incorporating contaminated soils excavated from former firing ranges (please see Factsheet: Cleanup of Soil at Site 39).

The soils excavated from Site 39 were placed on top of the previously-installed geomembrane layer, and sealed under a second layer of geomembrane, in a "vertical expansion" of Cell E.

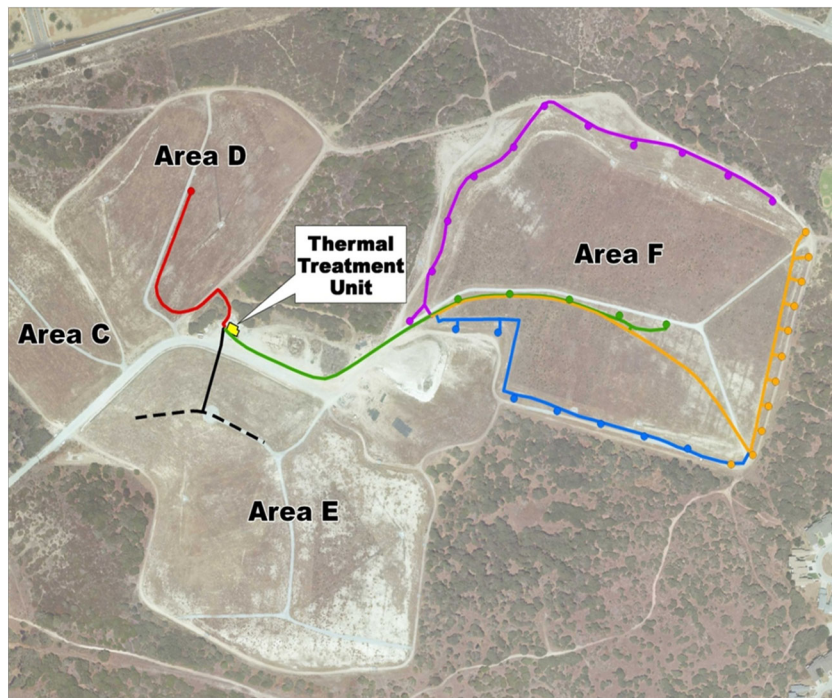


What happens on the covered landfill?

Now that the landfill is covered, the Army conducts a regular maintenance program to make sure the cover remains intact. The cover is inspected routinely and repairs are made to any minor damage caused by erosion and animals. As part of the landfill cover system, the Army operates a landfill gas extraction and treatment system.

As with most landfills, decay of organic waste produces gases (primarily methane and carbon dioxide). Over time, as wastes continue to decay, less methane is produced and eventually will decline to near zero. While methane gas has practically no toxic effects, at levels of 5% to 15% in air, methane can be ignited and could endanger landfill workers and nearby residents.

In 2006, the Army installed a landfill gas extraction and treatment system to restrict landfill gas from reaching high concentrations and migrating off the landfill. The system also removes chemicals that might otherwise migrate to groundwater. The methane levels measured at the landfill perimeter have been below 5% for many years.



This system draws methane and other gases from soil in the landfill and transports them to the landfill gas treatment system. The aerial photo at left shows the pipes (indicated by lines in red, green, black, yellow, blue and purple in photo) of the landfill gas extraction system and location of the thermal treatment system. The landfill gas treatment system consists of a thermal treatment unit (see photo above). The unit destroys methane and potentially hazardous trace gases collected from under the landfill cover.

What Happens Next:

The Army will continue to maintain the landfill and operate the landfill gas treatment system.

The Army continues to evaluate Site 39 for potential soil contamination. When additional soil excavation occurs, the soils will be deposited into Cell E.

To Learn More About the Fort Ord Landfill Maintenance:

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