OU2 Landfill Closure Site 39 Soil Remediation Groundwater Treatment Plant Relocation

Community Involvement Mobile Workshop February 23, 2013

Peter Kelsall

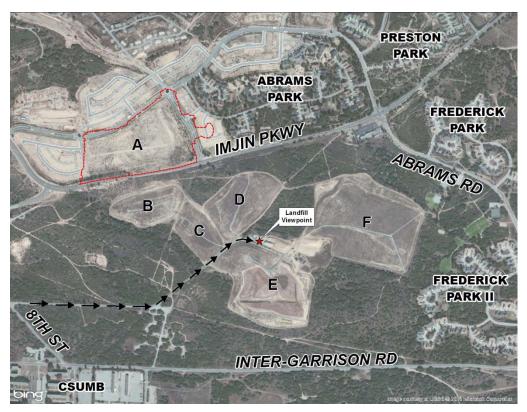




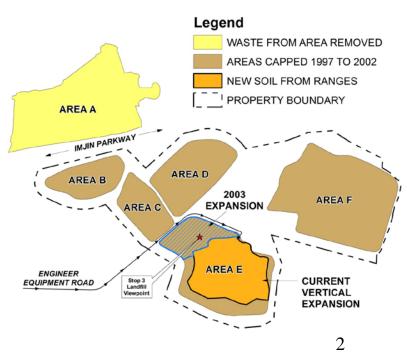
Operable Unit 2 (OU2) Landfills

- Used for residential and on-base waste disposal, 1956 to 1987
- Record of Decision 1994
- Cover constructed in two phases, 1997 to 1998, 2002 to 2003
- Landfill incorporates soils from Fort Ord remediation sites, placed under the cover

Recent Aerial Photograph



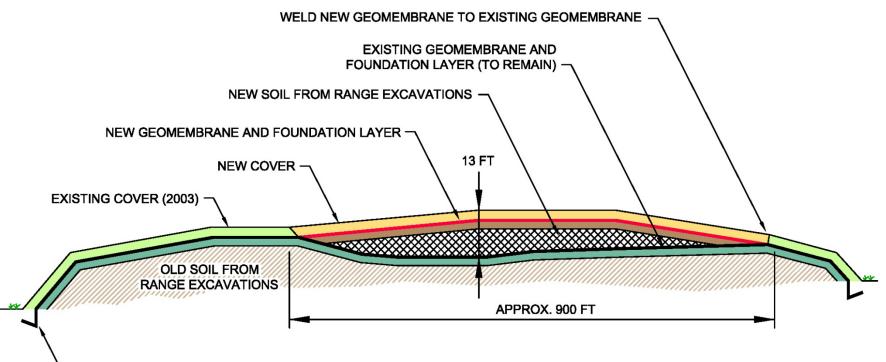
Area A was clean closed by transferring all wastes to other landfill areas



Area E Landfill Cap Construction - 2003

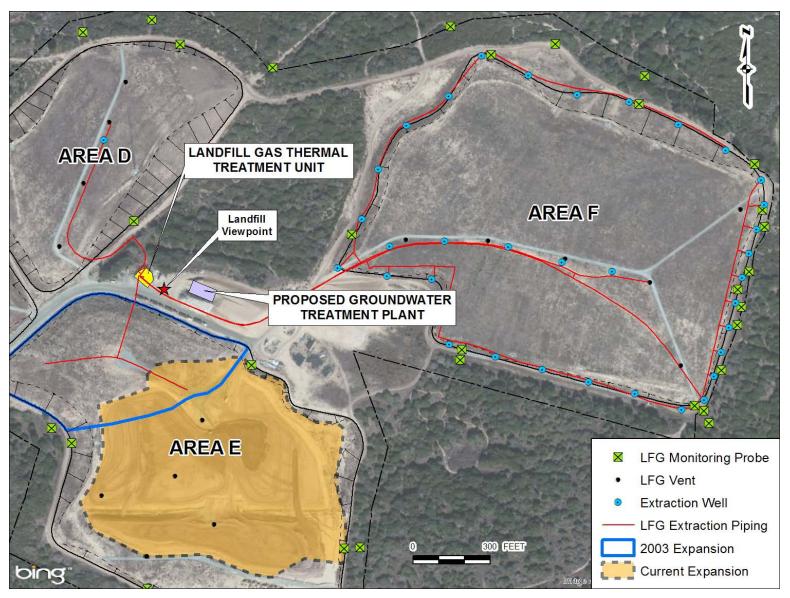


New Landfill Cover Cross Section

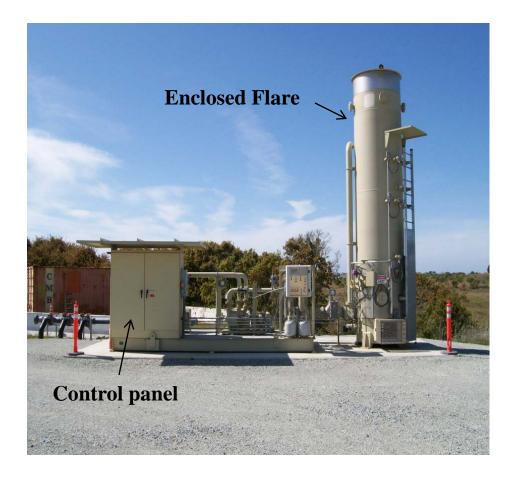


- GEOMEMBRANE ANCHOR TRENCH

Landfill Gas Extraction and Treatment

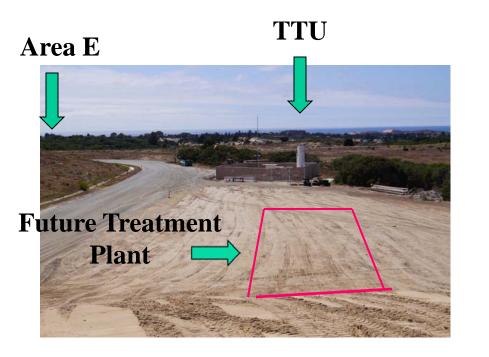


Landfill Gas Thermal Treatment Unit (TTU)



- Industry standard design
- High temperature (1600 °F) destroys organic compounds including methane, producing water vapor and carbon dioxide
- Operating since August 2006
- Destroys volatile organic compounds that otherwise potentially could reach groundwater or the atmosphere

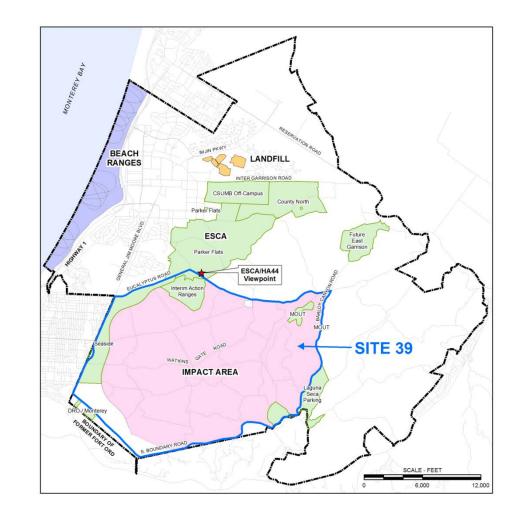
Army Plans to Move the OU2 Groundwater Treatment Plant to the OU2 Landfill



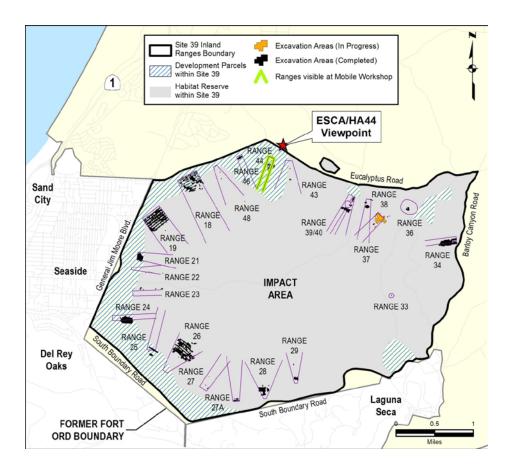
- Frees up existing location on 12th St. for development by Monterey Peninsula College
- Groundwater extraction is now focused in the landfill area where new wells and pipelines will be installed
- Consolidates operations next to existing thermal treatment unit
- Same remedy: extraction, treatment with granular activated carbon, injection of treated water
- Can be achieved with only a short treatment shut down
- Construction expected in 2014

Site 39

- Ranges (or "historical areas") used for live fire training with various weapons
- Mostly within the 8,000 acre Impact Area
 - Munitions issues are addressed by the Track 3 Record of Decision
 - Chemical contamination is addressed by the Site 39
 Record of Decision
 Amendment (1997) and the
 ROD Amendment (2009)



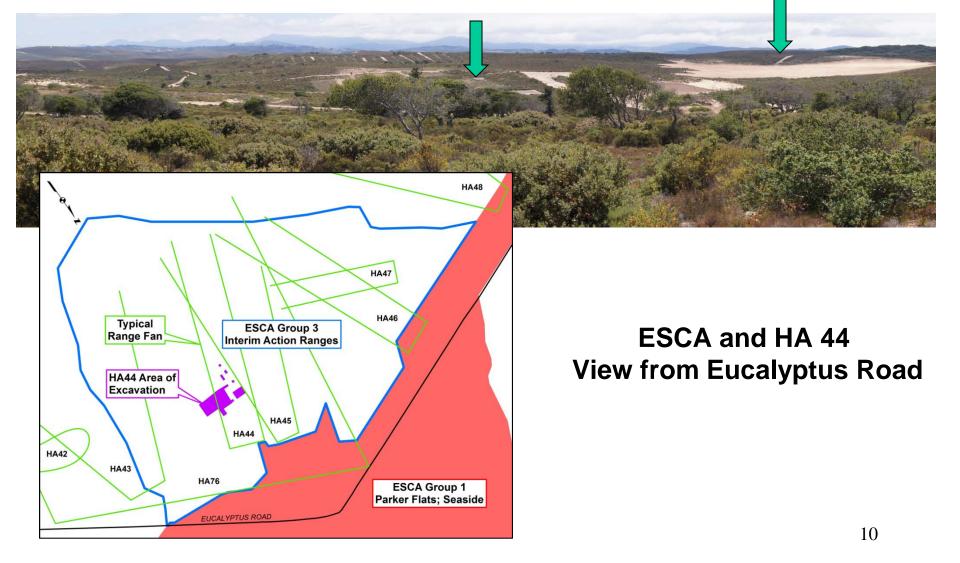
Site 39 Remediation



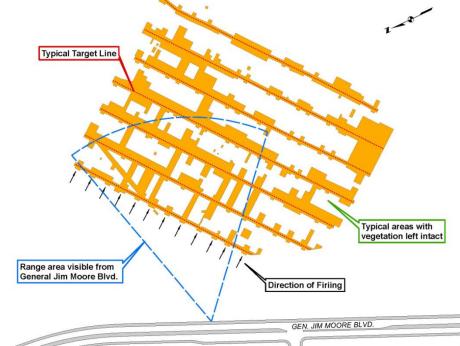
- Removal of soil with lead or explosives above levels of concern for human health and ecological receptors
- Remediation to below average concentrations allows areas with high habitat quality to remain in place
- 80 HAs in Site 39
 - 6 HAs remediated in 2003 (60,000 cubic yards)
 - 17 HAs remediated 2010 to January 2013 (145,000 cubic yards)
 - 1 HA with remediation in progress (HA 37)
 - 42 designated as no further action
 - Remainder require further evaluation following munitions response actions

HA 44 (Completed in 2010) Mixed Use Range - Sampled for Explosives and Metals

ESCA MEC Remediation







HA 19 (Completed in 2010) Small Arms Range – Sampled for Metals

as seen from General Jim Moore Boulevard (not visited today)

For More Information

www.fortordcleanup.com

- Fort Ord Administrative Record: Building 4463, Room 101, Gigling Road, Ord Military Community
- California State University Monterey Bay (CSUMB): Library Learning Complex, 100 Campus Center, Bldg. 12, Seaside, (831) 582-3733

Seaside Branch Library, 550 Harcourt Avenue, Seaside, (831) 899-2537

- U.S. Army, Fort Ord BRAC: William Collins, (831) 242-7920, william.k.collins.civ@mail.mil. OR Melissa Broadston, (831) 393-1284, Melissa.M.Broadston.ctr@mail.mil
- **U.S. Environmental Protection Agency, Region IX: Martin Hausladen**, Remedial Project Manager, (415) 733-2388, hausladen.martin@epamail.epa.gov (for issues related to groundwater) or **Lewis.Mitani**, Remedial Project Manager, (415) 733-2388, mitani.lewis@epa.gov (for issues related to Site 39)
- Cal/EPA Department of Toxic Substances Control: Franklin Mark, Remedial Project Manager, (916) 255-3584, Franklin.Mark@dtsc.ca.gov

Cal/EPA Regional Water Quality Control Board: Grant Himebaugh, Remedial Project Manager, (805) 542-4636, Ghimebaugh@waterboards.ca.gov