

Environmental Restoration (ER) Overview



Rob Boehlecke

Federal Project Director, Environmental Restoration
Community Environmental Monitoring Program

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Environmental Management (EM)

- Characterizing and cleaning up locations where radioactive and non-radio-active contamination resulted from historic nuclear testing are key components of the EM mission. These restoration activities focus on:
 - Groundwater, soil and on-site infrastructure contamination from historic nuclear testing
 - Radioactive and hazardous waste management and disposal
 - Environmental planning, compliance and monitoring



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ER Video Clip



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Environmental Restoration

- Made up of three sub-projects:
 - Industrial Sites
 - Soils
 - Underground Test Area (UGTA)
- Cleanup sites are grouped (referred to as Corrective Action Units [CAUs]) by source of contamination, location, and other technical characteristics
- State of Nevada oversight provided under the Federal Facility Agreement and Consent Order (FFACO)
- Funding recently received through the American Recovery and Reinvestment Act of 2009 to accomplish and accelerate cleanup of various CAUs



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Industrial Sites Sub-Project

- Nevada Test Site (NTS) and Nevada Test and Training Range (NTTR) facilities, such as gas stations, motor pools, worker housing, and research buildings, used in direct support of nuclear testing
- Activities resulted in some environmental contamination and subsequent hazardous and radioactive waste generation
- Industrial Sites sub-project remediates the contaminated sites which may include leach fields, sumps, disposal wells, tanks, landfills, and ordnance sites
- Contaminants of concern may include hazardous chemicals, unexploded ordnance, and low-level radionuclides

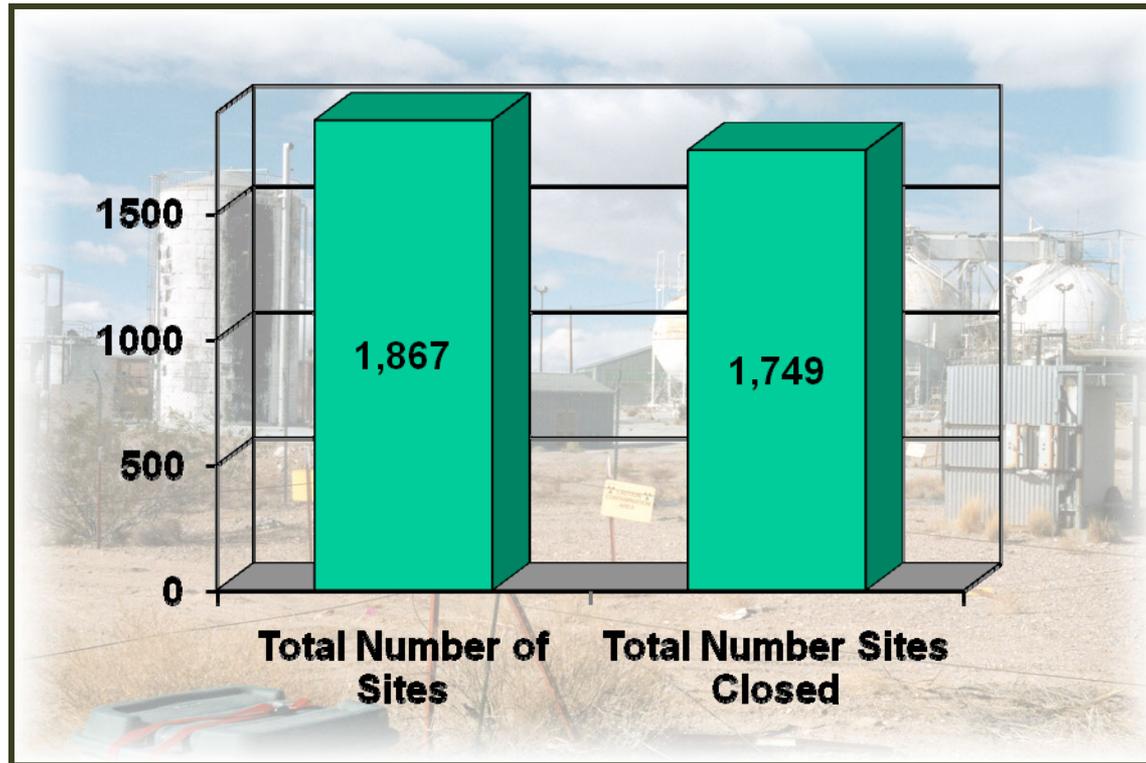


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Industrial Sites Cleanup Status



- Anticipated sub-project completion date is 2013



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Industrial Sites Activities FY 2010

- Industrial Sites Base Funding
 - Complete Streamlined Approach for Environmental Remediation (SAFER) for CAU 547, Miscellaneous Contaminated Waste Sites
 - Conduct planning and decontamination at CAU 114, Engine Maintenance, Assembly, and Disassembly Facility
 - Conduct planning and demolition of CAU 116, Test Cell C Facility
- Industrial Sites ARRA Funding
 - Conduct planning and demolition activities at CAU 113, Reactor Maintenance, Assembly, and Disassembly Facility
 - Complete closure of CAU 408, Bomblet Target Area on the Tonopah Test Range
 - Conduct planning activities for the demolition of CAU 117, Area 26 Pluto Disassembly Facility



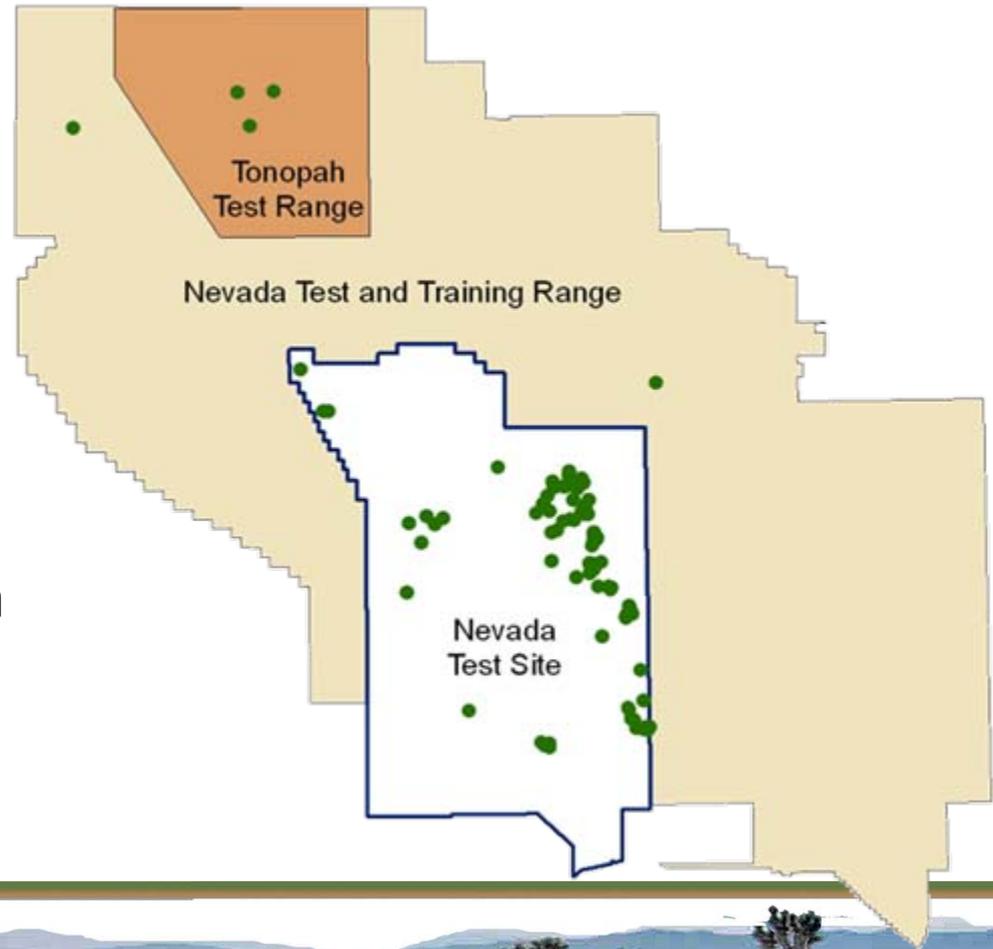
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Soils Sub-Project

- Atmospheric nuclear weapons tests, nuclear safety experiments, and evaluation tests for peaceful uses of nuclear explosives (i.e., Plowshare Program) conducted at the NTS, Nevada Test and Training Range (NTTR), and Tonopah Test Range resulted in the radioactive contamination of surface soils



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Soils Sub-Project

(continued)

- Soils sub-project is responsible for
 - Characterizing and/or remediating surface soil contamination
 - Characterize means to identify contamination present
 - Remediate can mean an array contaminated site; e.g., closing or perhaps even removing soils
 - Ensuring appropriate controls (i.e. postings, barriers, etc.) are in place at the sites
 - Conducting long-term monitoring of sites



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Soils Activities FY2010

- Soils Base Funding
 - Complete the Corrective Action Decision Document for CAU 371, Johnnie Boy Crater and Pin Stripe
 - Conduct field investigation for CAU 372, Area 20 Cabriole / Palanquin Unit Craters
- Soils ARRA Funding
 - Complete Corrective Action Investigation Plan for CAU 367, Area 10 Sedan, Ess and Uncle Unit Craters
 - Complete Corrective Action Investigation Plan for CAU 374, Area 20 Schooner Unit Crater
 - Complete Corrective Action Investigation Plan for CAU 375, Buggy Unit Crater
 - Complete Corrective Action Investigation Plan and begin Corrective Action Decision Document for CAU 106, Frenchman Flat



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Future Soils Activities

- Complete investigation and closure of contaminated soil sites covering approximately 7,800 acres
- Close all soil sites on the NTS utilizing the risk based closure approach
- Negotiate with the U.S. Air Force concerning corrective action criteria for soil sites located on the NTTR
- Conduct long-term monitoring through compliance surveys
- Monitor close-in-place sites indefinitely
- Sub-Project completion date is 2023



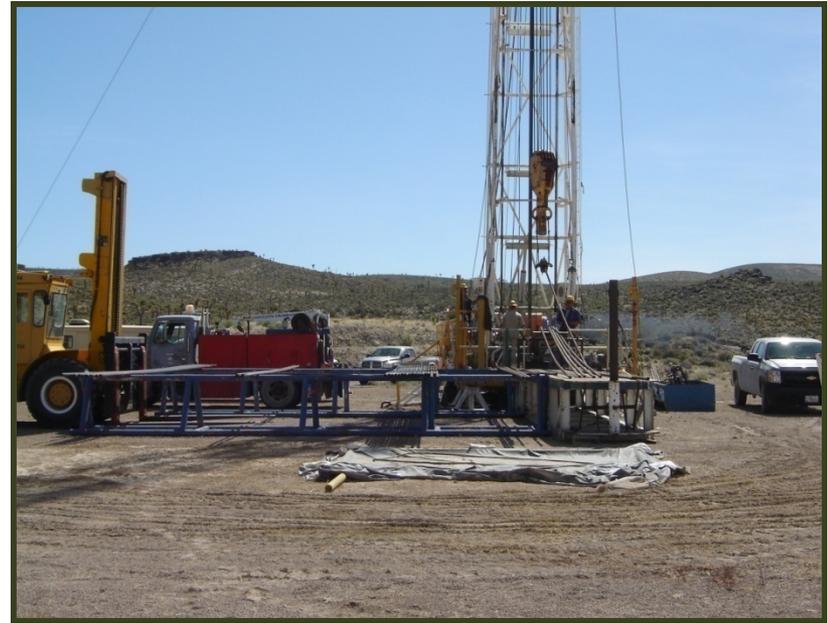
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UGTA Sub-Project

- 828 underground nuclear tests conducted at NTS of which about one-third occurred near, below, or in the water table, resulting in some radioactive contamination of the groundwater
- Complex geology and hydrology of NTS presents unusual challenges in understanding speed, volume, direction of groundwater flow, and the movement of contaminants
- Challenges addressed in UGTA strategy through various research components including drilling and sampling of wells, contaminant characterization, and computer model development
- Sub-Project completion date is 2027



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Stakeholder Involvement

- State of Nevada Division of Environmental Protection provides programmatic and regulatory oversight of Environmental Restoration activities conducted by the Nevada Site Office Environmental Management activities
 - Participates as a Community Advisory Board (CAB) liaison
- Active CAB - members include citizens of Nye and Clark counties and representatives from the State of Nevada, Nye County, and the U.S. National Park Service



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ER Bottom Line

- Nevada Site Office is committed to accelerating cleanup and reducing risk to workers, the public, and the environment with a timely, cost-effective approach for the sites under Nevada control
- Nevada Site Office is committed to working cooperatively with regulators and keeping the public informed of its activities



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