Industrial Sites

safe ❖ secure ❖ successful

Background

The Nevada National Security Site (NNSS) and Tonopah Test Range played important roles in advancing the nation's nuclear testing program, functioning like small towns with a variety of facilities such as gas stations, motor pools, worker housing, and research buildings. Some of the facilities and land were used in direct support of nuclear testing, resulting in environmental contamination and generation of hazardous and radioactive wastes.

Safe, Secure, and Successful

These sites were classified as Industrial Sites. They include drains and sumps, disposal wells, inactive tanks, contaminated waste sites, septic tanks, lagoons, ordnances, and spill sites. The Environmental Management (EM) Nevada Program oversees various remediation methods, identifying the nature and extent of contamination, determining its potential risk to the public, site workers and the environment, and performing necessary corrective actions in compliance with federal and state requirements.

A worker sprays water for dust suppression as a worker using hydraulic shears dismantles a building at the Test Cell A Facility on the NNSS

History and Innovation

New, innovative methods are regularly sought out to improve the closure process, reduce cost, and facilitate the safe remediation of sites. Hydraulic shears were used to remove two 500,000-gallon tanks at the NNSS that previously stored gasoline and diesel fuel. The method decreased the possibility of worker exposure to potential contaminants and accelerated completion of the project. Hydraulic shears were also successfully used to dismantle the Test Cell A and Super Kukla facilities.

Other Industrial Sites to reach closure include the Pluto Disassembly Facility, Reactor Maintenance, Assembly, and Disassembly (R-MAD) Facility, Junior Hot Cell, and the U.S. Environmental Protection Agency (EPA) Farm—among hundreds of others.

Fast Facts

- Regulatory closure has been achieved at **99%** of Corrective Action Sites (CASs) under the *Federal Facility Agreement and Consent Order* (FFACO).
- In total, **1,975** Industrial Sites were identified in the FFACO, have been inventoried, and corrective actions planned or completed.

Characterize: To identify the nature and extent of contamination present.

Demolition work at R-MAD using a hydraulic hammer

Past Industrial Sites cleanup

Industrial Sites

How is a site closed?

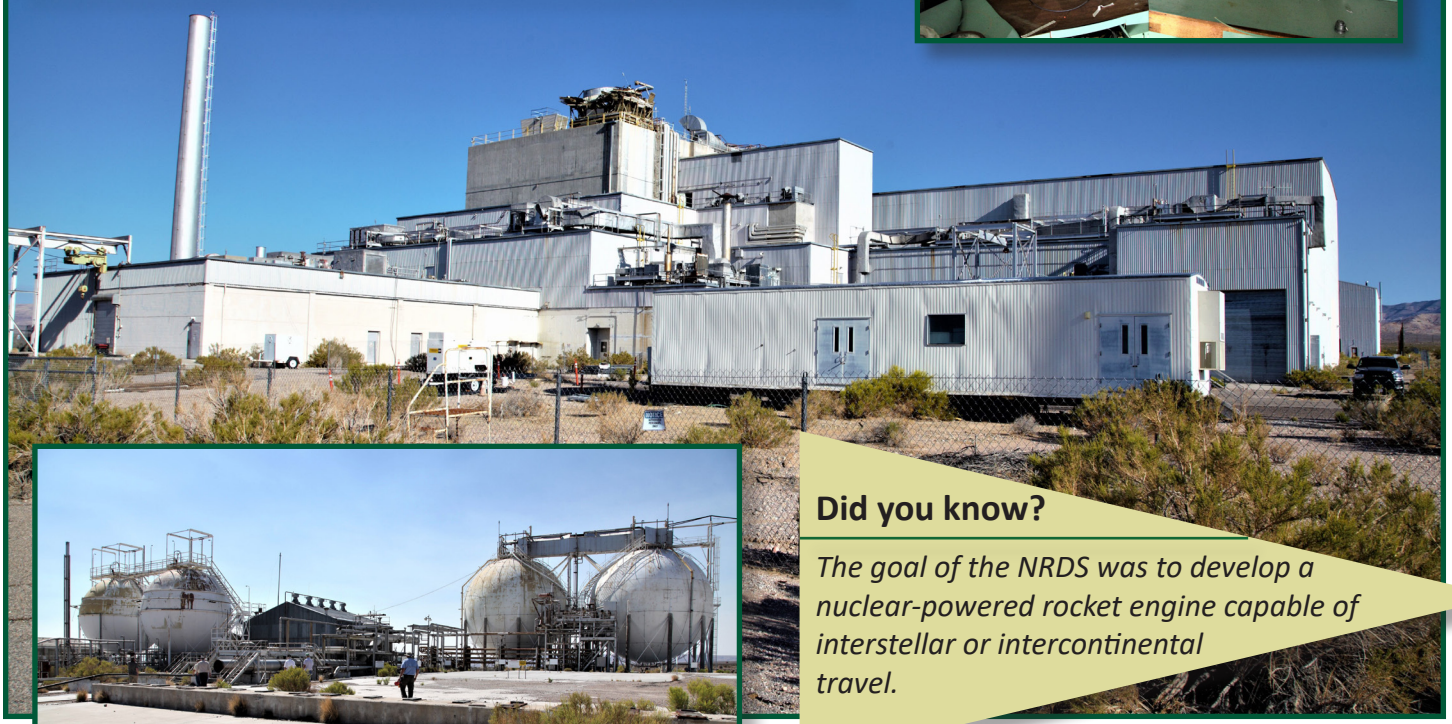
- *No further action: Sites are found to have no contamination above action levels; nothing further is required.*
- *Clean closed: Contamination above action levels has been removed and disposed of; nothing further is required.*
- *Closed in place: Contamination above action levels is left behind and managed through controls such as use restrictions, site controls, and monitoring.*

Next: EMAD and TCC

The EM Nevada Program is currently working two larger sites through the demolition and closure process. The sites are the Engine Maintenance, Assembly, and Disassembly (EMAD) Facility and Test Cell C (TCC) ancillary buildings and structures. Both the TCC site and EMAD Facility are in Area 25 of the NNSS and were part of the Nuclear Rocket Development Station (NRDS).

Control panel on 3rd floor of EMAD

The **EMAD Facility** is a massive structure. Completed in 1968 at a cost of more than $50 million, it was the largest "hot cell" in the world, and contains 100,000 square feet of floor space.



Test Cell C

Did you know?

The goal of the NRDS was to develop a nuclear-powered rocket engine capable of interstellar or intercontinental travel.

Test Cell C, built in 1961, was used to ground test nuclear reactors and engines for rockets. It marked an upgrade from the earlier Test Cell A.

By the Numbers		
	EMAD is anticipated to generate **120,000 cubic yards** of waste, or about 6,500 truckloads.	Test Cell C is anticipated to generate **18,500 cubic yards** of waste, or about 1,200 truckloads.

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