

EXECUTIVE SUMMARY

A Preliminary Assessment (PA) was conducted at the Chemical Disposal Pit No. 4 at the Utah Test and Training Range (UTTR) North Range to determine if the Disposal Pit was releasing or had released contaminants into the environment, and if so, if any releases required response actions. The Chemical Disposal Pit No. 4 was one of the sites identified during preliminary environmental investigations conducted at the UTTR North Range (Phase I - Records Search) as an area of potential contamination. Consequently, further studies were recommended for the Disposal Pit in accordance with the requirements of the U.S. Air Force (USAF) Installation Restoration Program (IRP).

The specific goals of the PA were to:

- Collect, compile, and evaluate existing data to determine whether the site posed any threat to human health or the environment
- Identify if the site required immediate response actions
- Develop preliminary Hazard Ranking System (HRS) scores
- Set priorities for the site based on the prevalent risks to human health or the environment
- Determine whether further study (i.e., a Site Inspection [SI]) was warranted at the site.

A records search was conducted at the Base to obtain all existing data on the Disposal Pit. In addition, interviews were held with past and present Base personnel to obtain information regarding past waste generation and disposal activities at the Chemical Disposal Pit No. 4. The results of the Phase I study for the site also were reviewed and a site reconnaissance was conducted.

No documented evidence exists on the quantity and types of wastes that were disposed of at the Chemical Disposal Pit No. 4. However, based on available information, the Chemical Disposal Pit No. 4 is an abandoned gravel pit and was used mainly for disposal of approximately 500,000 gallons of waste

engine oil in the early 1970's. In addition, small quantities of chemical solvents and diesel fuel occasionally were disposed of at the site. However, the site has not been used for disposal in the past 14 years. Only the area that comprises the Disposal Pit is abandoned; the site is part of a bigger gravel pit that provides sand and gravel for road construction activities.

Results of a preliminary risk appraisal indicated that current risks due to the wastes disposed of at the site were minimal. However, potential for future risks could not be discounted with certainty without additional information and assessment of the nature, extent, and movement of contamination that could still exist at the site. Two potable water wells that serve the UTTR North Range Oasis Complex are located approximately 1.5 miles southeast of the Disposal Pit. Employees at the Oasis Complex using drinking water from the wells were identified as potential receptors at risk due to groundwater contamination. It was determined that the risks of groundwater contamination due to chemicals deposited at the Disposal Pit appeared to be minimal; however, this could not be stated with certainty without further field-obtained data. The following factors supported the theory of limited potential for groundwater contamination:

- Annual precipitation in the area is low (less than 10 inches).
- Evapotranspiration potential is high (83 inches per year).
- Soil permeability at the UTTR North Range is low.
- Distance (1.5 miles) from the Disposal Pit to the UTTR North Range water supply wells located at the Oasis Complex.
- General direction of groundwater movement is away from the water supply wells and the Oasis Complex, thereby further reducing risks.
- Water quality of the two potable water wells is poor and reflects background concentration of chemicals. In addition, organic contaminants that would be indicative of the kind of wastes disposed of at the Disposal Pit were not detected in the potable water wells.

In addition, the water in the potable water wells is treated before use, and the concentration of chemicals in the water after treatment is below the drinking water standards.

Since the gravel pit surrounding the abandoned Chemical Disposal Pit No. 4 is still being used, additional potential risks to on-site personnel were identified due to direct contact with the soils surrounding the Disposal Pit. The HRS score for the Chemical Disposal Pit was 5.1. However, the scoring was conducted in the absence of data on the presence of chemicals at the site and does not reflect potential risks associated with disturbance of soils and direct contact with the soils at the site.

Based on an evaluation of all existing data, a medium priority rating was assigned to the site. A medium priority rating indicates a reasonably high potential for problems and suggests that an SI is required. It was recommended that limited SI field investigations be conducted at the site to assess the extent of contamination and to obtain data relating to any movement of contamination.