

PRIVATE FUEL STORAGE FACILITY
SAFETY ANALYSIS REPORT

SAR CHAPTER 2

REVISION 0

PAGE 2.1-1

CHAPTER 2

SITE CHARACTERISTICS

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2.1 GEOGRAPHY AND DEMOGRAPHY

2.1.1 Site Location

The proposed site for the Private Fuel Storage Facility (PFSF) is located on the Skull Valley Indian Reservation in Tooele County, Utah. This county is in the northwestern portion of the state bordered on the north by Box Elder County; to the east by Davis, Salt Lake, and Utah Counties; to the south by Juab County; and to the west by the State of Nevada (Elko County). Tooele County is a combination of environments including the Great Salt Lake, western deserts, fertile valleys, and rugged mountains. Many areas of the county are undeveloped and isolated. Most land in Tooele County is under the administration of the Bureau of Land Management (BLM) and the military where large portions of the county are used for federal and military land uses (at Dugway Proving Ground, the Utah Test and Training Range, Tooele Army Depot North and South Areas) and for hazardous waste incineration and storage (at USPCI, Aptus, and Envirocare facilities) (Tooele, 1995).

The proposed PFSF site is located in a valley floor typical of the local basin-range topography. The Stansbury Mountains (maximum elevation 11,031 ft) separate the PFSF from Tooele City, which is located approximately 27 miles east northeast (Figure 1.1-1). Skull Valley is sparsely populated with limited agricultural or other activity. Land owners and administrators of the Skull Valley area include the BLM, privately owned ranches, the Skull Valley Indian Reservation, the Wasatch National Forest, and the

NUCLEAR REGULATORY COMMISSION

Docket No. 722 Official Exh No. 60

In the matter of PER

Staff ✓ IDENTIFIED ✓

Applicant ✓ RECEIVED ✓

Intervenor ✓ REJECTED ✓

Cont'g Off'r ✓

Contractor ✓ DATE 6/23/02

Other ✓ Witness Wahm

Reporter G. Green

Dugway Proving Ground (Tooele, 1995). There are no existing industrial, recreational, or residential uses within the boundaries of the proposed site.

2.1.2 Site Description

The proposed facility would be located on property leased from the Skull Valley Band of Goshute Indians (Band), within Township 5 South, Range 8 West, Section 6, with appurtenant facilities located along the project access road through sections 4, 5, 7, 8, and 9. The northwest corner of the PFSF is located at 40° 24' 50"N, 112° 47' 37" W. The area immediately surrounding the site consists of undeveloped range land owned by the Band, BLM, and private landowners. The PFSF has a restricted area enclosing an area of approximately 99 acres for cask storage. In addition, an owner-controlled area (OCA) encompassing 820 acres will be bounded by typical range fencing to identify the limits of site activity. Figure 2.1-2 shows details of the plant perimeter and the proposed configuration of facilities. Skull Valley Road (designated as Federal Aid Secondary Road (FAS) 108) is located to the east of the site and traverses Skull Valley from Interstate 80 south to the intersection with State Route 199.

2.1.2.1 Other Activities Within the Site Boundaries

No activities are currently conducted within the area proposed for development of the PFSF.

2.1.2.2 Boundaries for Establishing Effluent Release Limits

There are no radioactive or other effluent releases associated with the proposed facility.

2.1.3 Population Distribution and Trends

Population within a 5-mile radius centered on the proposed PFSF consists of tribal residents on the Skull Valley Indian Reservation and two isolated ranches on Skull Valley Road north of the Reservation boundary. The closest residents to the PFSF are two tribal homes located approximately 2 miles southeast of the project and those residences in the Skull Valley Indian Reservation village, approximately 3.5 miles east-southeast of the site. There are about 30 residents currently living on the Reservation.

Two private residences are located northeast of the proposed site along Skull Valley Road, approximately 2.75 and 4.0 miles away. Therefore, the estimated population within a 5-mile radius is 36 persons (30 Goshutes and 2 households of approximately 3 persons each) (Figure 2.1-1). Because of the remoteness of the Skull Valley and because a majority of the land within 5 miles is owned by either the BLM or the Reservation, it is unlikely that the permanent population within a 5-mile radius of the proposed PFSF would change significantly during the proposed license period.

No transient or institutional populations are present within 5 miles of the proposed PFSF. The Skull Valley Road passes through the Reservation approximately 2.5 miles from the site. Traffic on this roadway is primarily related to local resident travel and travel between Interstate 80 and Dugway Proving Ground. During October 1996, a survey was conducted to identify existing and planned public facilities and institutions within a 5-mile radius of the facility. Due to the remoteness and extreme low population density of the area (36 persons within 5-mile radius), no facilities such as hospitals, prisons, and recreational areas are located or planned within the 5-mile study area.

2.1.4 Uses of Nearby Land and Waters

Land use within the Reservation boundary consists of residential uses by tribal members (approximately 30 persons living on the Reservation) and the Tekoi Rocket Engine Test Facility operated by Alliant Techsystems on leased Reservation lands. This facility, located approximately 2.5 miles south-southeast of the PFSF on the south side of Hickman Knolls, has been operated at this location from 1975 until recently.

In the 5-mile radius around the site there are approximately 28,000 acres of BLM land, 9,000 acres of privately-owned land, and 13,000 acres of land that are part of the Skull Valley Indian Reservation. The section is nearly flat, sloping gently downward to the north with small, local elevation changes of about 1 ft.

The principal land use in Skull Valley is range land for livestock grazing. Cattle and sheep are grazed, especially in winter when the livestock is brought down from the higher mountain elevations. The majority of land (55 percent) within a 5-mile radius of the site is owned and managed by the BLM as part of the Pony Express Resource Area (PERA). The remainder of the land is split almost evenly between Reservation property and private ownership.

BLM land within the 5-mile radius is part of the Skull Valley and South Skull Valley grazing allotments.¹ Most of the range land within the Skull Valley allotment (85 percent) is considered to be of fair to poor condition with the overall conditions in decline (BLM, 1988). The allotment is divided into three pastures: West Cedar, Eightmile, and Black Knoll. The southeast corner of the Black Knoll Pasture is within

¹ An allotment is an area of land where one or more permittees may graze livestock.