

RAS 2042

PRIVATE FUEL STORAGE FACILITY
SAFETY ANALYSIS REPORT

DUPLICATE
USING

SAR CHAPTER 9
REVISION 13
PAGE 9.1-13

'00 AUG -7 AS 29

9.1.2.1.5 Security

The site security force will be trained in accordance with 10 CFR 73. The site security force will be responsible to maintain the security of special nuclear materials that are within the physical confines of this site. They will be responsible for initial responses to security intrusions as outlined in the Physical Protection Plan.

The security staff, in addition to their assessment responsibilities, will function to initiate the response to any off-normal site event as outlined in the emergency plan and procedures. The security staff is also responsible for monitoring the storage cask temperature monitoring system and reports alarm conditions to the designated personnel.

9.1.2.1.6 Quality Assurance

The Quality Assurance staff will be responsible for the implementation of the Quality Assurance Program including the maintenance of appropriate records. The Quality Assurance staff will ensure that the appropriate steps are added to site procedures for operation and maintenance to ensure and monitor that all activities are performed in accordance with the site License.

9.1.2.1.7 Site Administrative and Engineering Staff

Site administrative and engineering staff will be responsible for the administrative requirements of the site including the maintenance of records in accordance with the conditions of the License. Administrative staff will be responsible for the necessary

template = SECY-028

NUCLEAR REGULATORY COMMISSION

Docket No. 73-23 5 Ortel Ed. No.
in the matter of Private Fuel Storage

Staff	_____	IDENTIFIED	<u>X</u>
Applicant	<u>DPS</u>	RECEIVED	<u>X</u>
Interviewer	_____	REJECTED	_____
Other	_____	WITHDRAWN	_____
DATE	<u>19 June 68</u>	Witness	<u>Lewis / Dungan</u>
Clerk	<u>Susette</u>	Witness	<u>M Snider</u>

9.3.2.1 General Employee Training (GET)

The following topics will be addressed in GET:

- Facility operations and design,
- Instrumentation and controls,
- Emergency Plan and Procedures,
- Security Plan and Procedures,
- Radiation Control Procedures and Practices, including: The nature and sources of radiation and contamination, interactions of radiation with matter, biological effects of radiation, methods of detecting and controlling radiation and contamination, ALARA concepts, facility access and visitor controls, decontamination procedures, use of monitoring and personal protective equipment, regulatory and administrative exposure and contamination limits, and site specific hazards,
- Environmental Protection,
- Quality Assurance,
- Administrative Procedures,
- Normal and Off-Normal Procedures,
- Safety, and
- General Fire Protection.

9.3.2.2 Job Specific and Certification Training

Individuals who operate equipment and controls that have been identified as "important to safety" in the Safety Analysis Report and in the NRC license must be trained and certified. Supervisory personnel who direct the operation of equipment and controls that are "important to safety" must also be certified. These individuals shall be certified

as the emergency response facility, from which emergency response actions are coordinated.

As detailed in the EP, should an emergency event occur, the General Manager (during normal working hours) or the Security Sergeant (at all other times) assumes the position of Emergency Response Leader. The Emergency Response Leader assumes responsibilities for declaring an Alert, as appropriate, and activation of the Emergency Response Organization (ERO), as well as communicating with on-site emergency response personnel and appraising them of the situation at the PFSF. The EP identifies responsibilities and staffing of the on-site ERO and for requesting off-site assistance. Members of the PFSF ERO will be trained on how to respond to various emergencies at the site, as established in the EP.

In order to expedite response to a fire, a fire pumper truck is stationed at the PFSF site, and members of the on-site fire brigade are trained in its operation. An additional fire truck is presently located at the Goshute Skull Valley Reservation. An ambulance is also located at the PFSF to expedite the transport of any seriously injured individuals.

Off-site assistance may be requested as necessary from the Tooele Regional Medical Center, Tooele County Fire Department, and Tooele County Sheriff, all of which are located in Tooele, Utah. Other off-site assistance may be requested from industry or the NRC, as specified in the EP.

The Tooele County Emergency Operations Plan was consulted in the development of the PFSF EP, and meetings were held with PFSF personnel and Tooele County officials responsible for emergency response operations to discuss accidents that could possibly occur at the PFSF and gain input in the development of the PFSF EP. The EP

All Tooele County law enforcement, fire and emergency medical services are dispatched from the Tooele County Sheriff's Dispatch Center, located in the Tooele County Courthouse in Tooele City, as described in the Tooele County Emergency Operations Plan (Reference 3). Because of the intervening Stansbury Mountains, it is a drive of approximately 55 miles from Tooele City to the PFSF, with the north route completely around the mountain range, and the south route through the mountains, by means of Johnson Pass.

The Tooele Valley Medical Center, which has about 38 beds and is equipped to provide decontamination and ambulance services, is located in Tooele City. An ambulance procured by the PFSF will be stationed at the PFSF to expedite transporting any seriously injured personnel to Tooele Valley Medical Center, as necessary.

In order to respond to fires, a PFSF fire truck will be stationed at the site. A second fire truck is presently located at the Goshute Village. Members of the PFSF fire brigade will be trained in the operation of the fire trucks and in advanced first aid.

1.4 DESCRIPTION OF THE PFSF

The PFSF is designed to store spent fuel from U.S. commercial nuclear reactors, containing up to 40,000 MTU in sealed metal canisters (approximately 4,000 storage casks). The canister-based spent fuel storage technology selected for use at the PFSF utilizes sealed metal canisters to store multiple spent fuel assemblies. Each canister is placed inside of a concrete cask. The dry cask storage system design is passive and relies on natural convection for cooling. This system is an integral part of the facility "Start Clean / Stay Clean" philosophy, in that it eliminates the need to handle individual

- C. Severe Natural Phenomena: The cask storage systems and the Canister Transfer Building are designed to withstand the effects of severe earthquakes and tornadoes. Therefore, releases of radioactivity from the cask storage and Canister Transfer Building are not anticipated to occur even if severe environmental events were to take place at the PFSF site.

Mitigation of such an event would require personnel to take shelter on site until the condition no longer exists. Activation of the Emergency Response Organization (ERO) will also serve to mitigate the effects of such an event by mobilizing emergency response personnel to investigate the effects of the event and initiate any recovery actions which may be appropriate.

- D. Fires: Fire fighting capability is available onsite, consisting of a fire truck, fire fighting equipment and trained personnel assigned to the fire brigade. Personnel will be evacuated from the affected area and the fire brigade will be mobilized to mitigate the consequences of a fire. A second fire truck is presently located near the PFSF site at the Skull Valley Indian Reservation village. The Tooele County Fire Department will be called to assist in extinguishing fires beyond the capability of the fire brigade.

The Canister Transfer Building is constructed of fire retardant and non-flammable building materials. Administrative controls will restrict combustibles within the building to those necessary for canister transfer operations. However, the diesel fuel in tanks of the heavy-haul transport vehicles will enter the Canister Transfer Building when shipping casks are trucked into and out of the building. Automatic fire detection and suppression capability will be provided in the Canister Transfer Building, in accordance with National Fire Protection

- Technical Support (Minimum staffing: 1). Responsible for radiological assessment, post-event assessment, media releases, criticality safety assessment, emergency response records.
- Administrative Support/Security (Minimum staffing: 1). On-site personnel evacuation and accountability, search and rescue operations, first aid, communications, facility security and access control.

A minimum of five PFSF staff personnel is required to fully staff a PFSF fire brigade. As a minimum, personnel in Instrument/Electrical Maintenance, Mechanical Maintenance/Operations, and Radiation Protection (11 persons, as shown in Figure 4-1) shall receive fire brigade training. The fire brigade will be organized, operated, trained, and equipped in accordance with NFPA 600 (Reference 12). The senior brigade member will carry a pager, while the remaining positions will be filled through call out by phone during off normal hours.

Additional personnel may be called in, as determined by the Emergency Response Leader, to support the functions of the ERO. The Emergency Plan implementing procedures will detail the staffing assignments in the event that an emergency lasts longer than 8 hours.

4.3 EMERGENCY RESPONSE LEADER AUTHORITY

The Emergency Response Leader has overall authority and responsibility for coordinating all emergency response and recovery efforts. The primary responsibilities of the Emergency Response Leader are to:

- Take control of the situation, including emergency facility activation and staffing of the ERO.

- Security personnel will receive training in search and rescue, access control, accountability, facility evacuation, assessment of fires, first aid, and procedures for handling and treating contaminated and injured personnel.
- Facility Fire Brigade members will receive training as prescribed by NFPA 600 (Reference 12). As a minimum, personnel in Instrument/Electrical Maintenance, Mechanical Maintenance/Operations, and Radiation Protection (11 persons, as shown in Figure 4-1) shall receive fire brigade training. The training will include methods of controlling fires under accident conditions in accordance with Fire Protection Procedures, search and rescue, first aid, and procedures for handling and treating contaminated and injured personnel. Additional training will be provided on operation of the fire trucks.
- The training program for the operators of the ambulance will be based on the U.S. Department of Transportation's (USDOT) national standard EMT-Basic Curriculum and the USDOT EMT-Ambulance Curriculum.
- Radiological Survey Team training will include operation of portable radiation survey instruments, air sampling equipment and techniques, contamination surveys, and radiological exposure.
- Communications personnel will receive training on communications protocol, equipment, and the notification process.
- Personnel involved in transporting spent fuel on public highways will receive emergency response training as required by the Department of Transportation (DOT).

6.2 ONSITE PERSONNEL ORIENTATION

PFSF personnel who are not directly involved in the emergency response organization will receive annual training in basic radiation protection, exposure guidelines, personnel monitoring devices, basic contamination control principles and actions they may have to take following the declaration of an emergency.