
2.9.2 Solid Waste Management System

Design Description

1.0 System Description

The solid waste management system (SWMS) is a non-safety-related system. The SWMS is located in the Radioactive Waste Processing Building. The SWMS design contains components and subsystems that account for the following during normal plant operations and anticipated operational occurrences including startup, shutdown, and refueling operations:

- Collection of wet and dry solid radioactive waste.
- Processing of solid radioactive waste.
- Packaging of solid radioactive waste.
- Storage of solid radioactive waste.

2.0 Mechanical Design Features

2.1 The SWMS provides the non-safety related function of storing radioactive liquid and wet wastes in preparation and prior to storage and shipment.

2.2 Equipment identified as RW-IIa in Table 2.9.2-1 can withstand design basis loads listed in Regulatory Guide 1.143 without a loss of structural integrity.

Inspections, Tests, Analyses, and Acceptance Criteria

Table 2.9.2-2 lists the solid waste management system ITAAC.

Table 2.9.2-1—SWMS Equipment Mechanical Design

Description	Tag Number⁽¹⁾	Location	Seismic Category
Resin Proportioning Tank	30KPC10BB001	Radioactive Waste Processing Building	RW-IIa
Concentrate Buffer Tank	30KPC20BB001	Radioactive Waste Processing Building	RW-IIa
Condensate Collection Tank	30KPC50BB001	Radioactive Waste Processing Building	RW-IIa
Concentrate Recirculation Pump	30KPC20AP001	Radioactive Waste Processing Building	RW-IIa
Condensate Collection Pump	30KPC50AP001	Radioactive Waste Processing Building	RW-IIa
Drum Drying Stations	30KPC30/40/50 BB001	Radioactive Waste Processing Building	RW-IIa
High Pressure Cleaning Device	30KPC60AP001	Radioactive Waste Processing Building	RW-IIa
Scrubber Tank	30KPC50BB002	Radioactive Waste Processing Building	RW-IIa
Vacuum Unit	30KPC60BZ001	Radioactive Waste Processing Building	RW-IIa

1. Equipment tag numbers are provided for information only and are not part of the certified design.

Table 2.9.2-2—Solid Waste Management System ITAAC

Commitment Wording		Inspections, Tests, Analyses	Acceptance Criteria
2.1	The SWMS provides the non-safety related function of storing radioactive liquid and wet wastes in preparation and prior to storage and shipment.	An inspection and analysis will be performed of the as-built SWMS tanks to verify the nominal volumes of each of the SWMS tanks.	The nominal volume of each of the SWMS tanks is as follows: <ul style="list-style-type: none"> • Resin proportioning tank: 150 gal. • Concentrate buffer tank: 3000 gal. • Condensate collection tank: 150 gal. • Scrubber tank: 53 gal.
2.2	Equipment identified as RW-IIa in Table 2.9.2-1 can withstand design basis loads listed in Regulatory Guide 1.143 without a loss of structural integrity.	An inspection and analysis will be performed to verify the as-built equipment identified as RW-IIa in Table 2.9.2-1 will withstand design basis loads.	A report concludes that the equipment identified as RW-IIa in Table 2.9.2-1 will withstand design basis loads listed in Regulatory Guide 1.143 without a loss of structural integrity.