



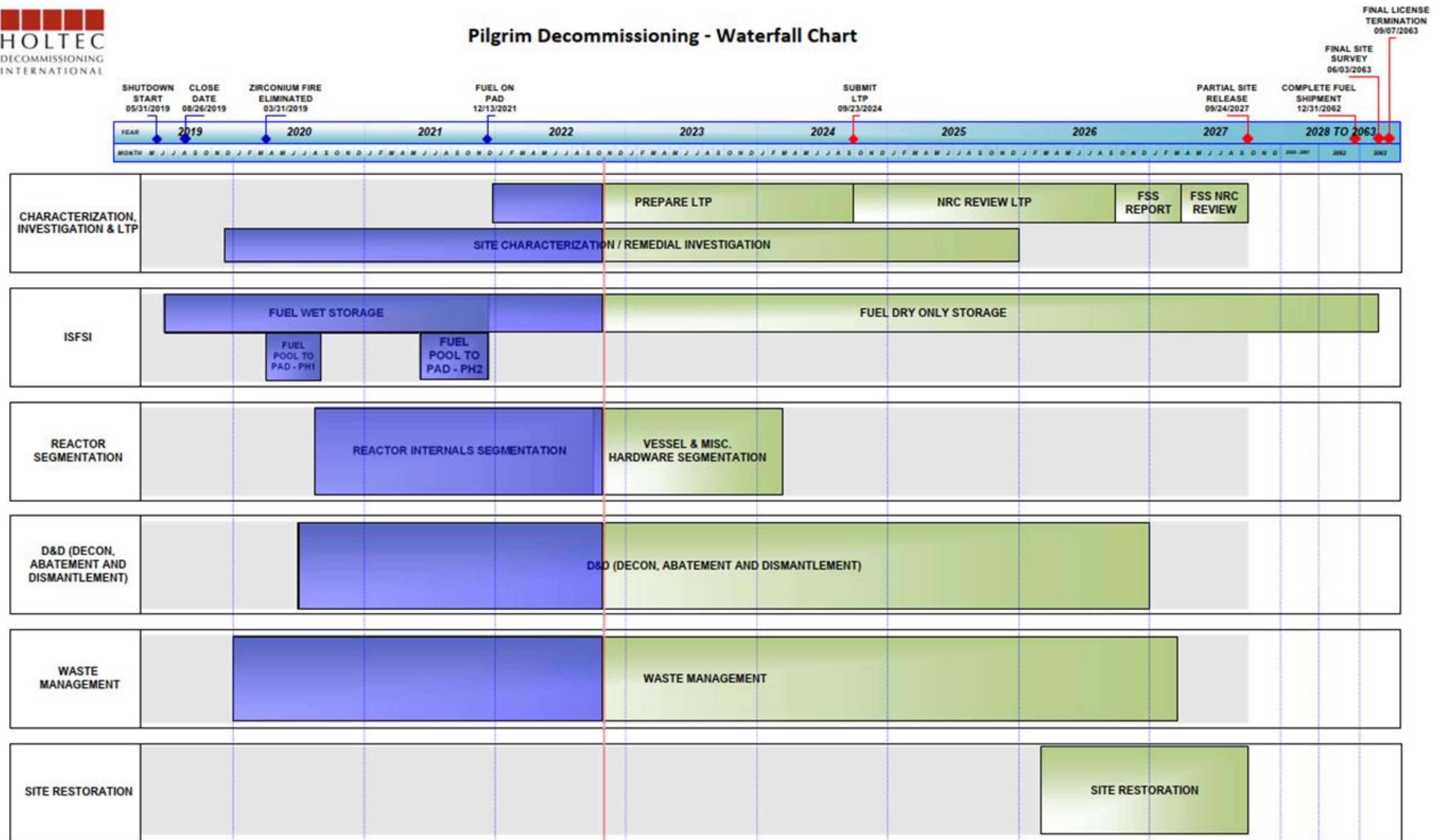
Pilgrim NDCAP Update



November 28, 2022

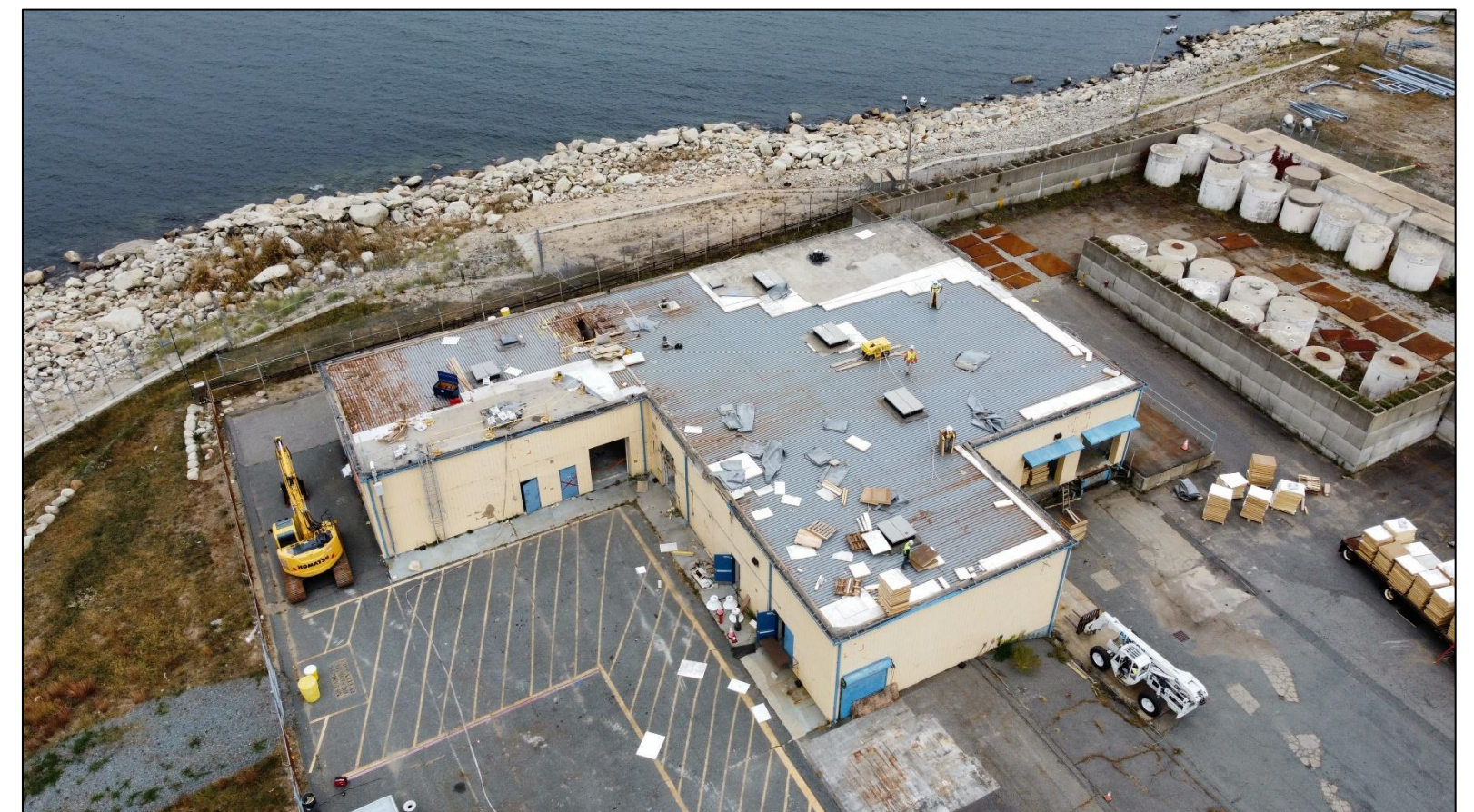
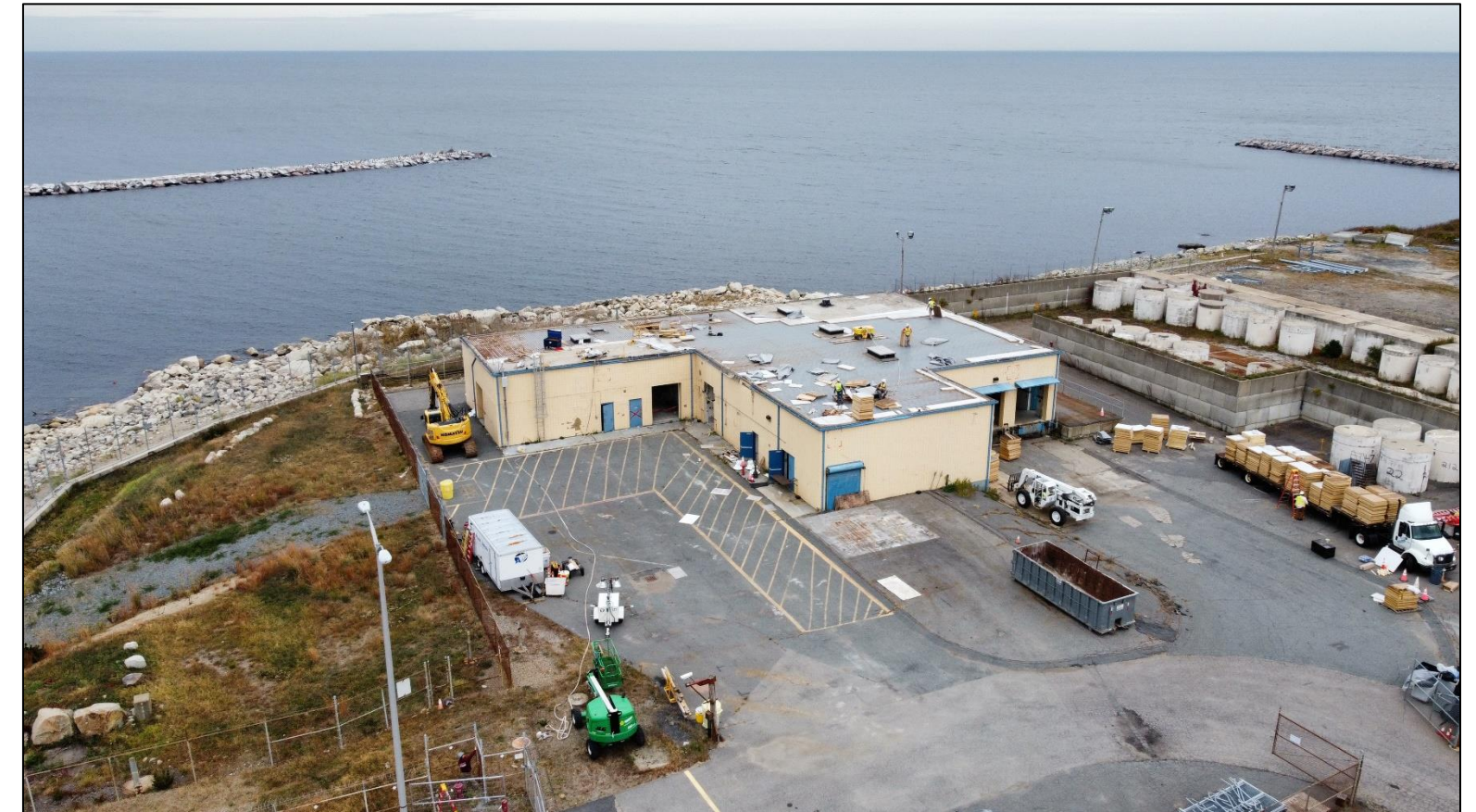
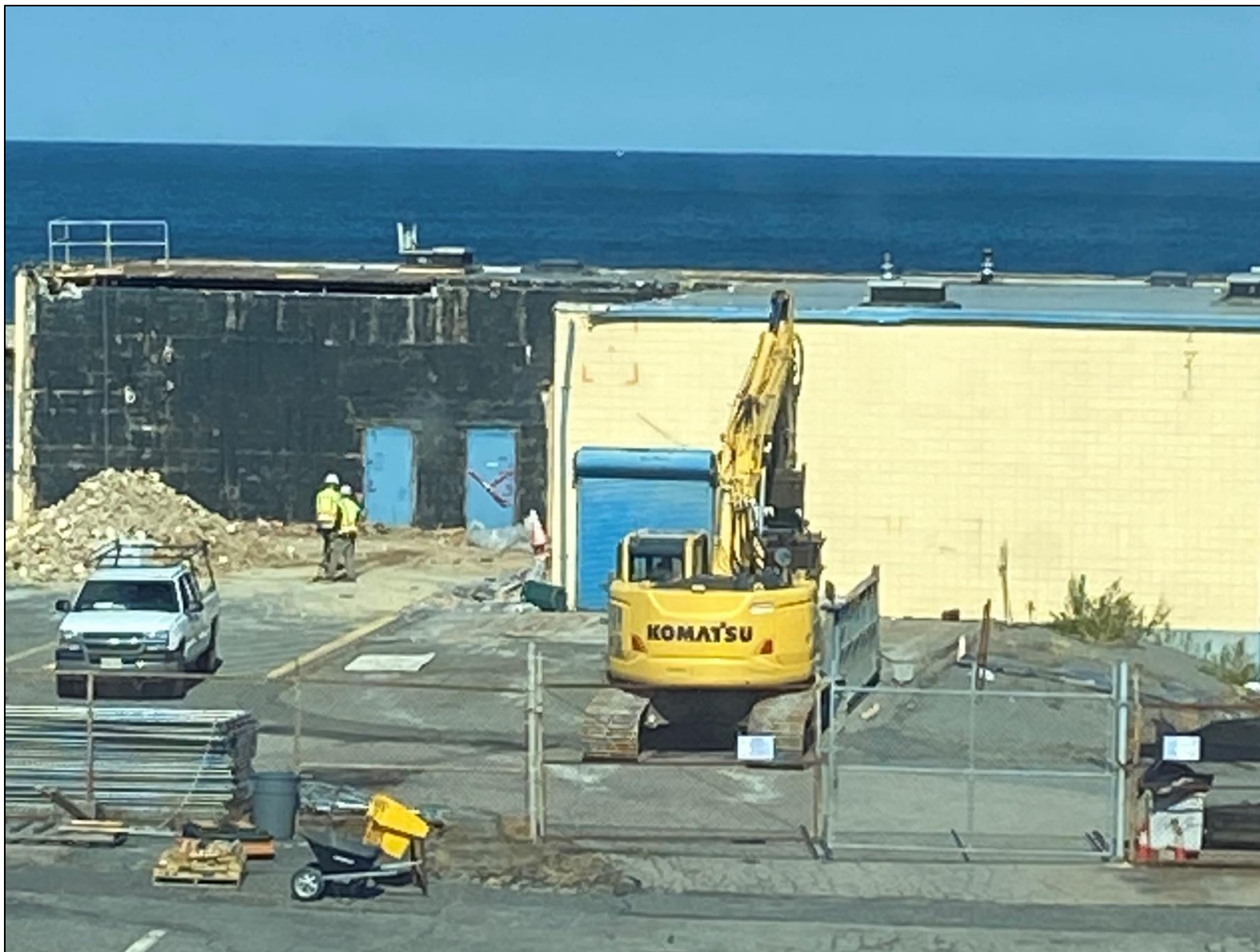
Draft Waterfall Chart

Pilgrim Decommissioning - Waterfall Chart



Demolition

- Trash Compaction Facility- Underway
- Interior Demolition - complete
- Structural Demolition—complete 12/23/22



Demolition

■ SEP Building

Gapping - complete

Trace ACM Disposal – Q1 2023

Structural Demolition – Q1 2023



■ Old Main Gate

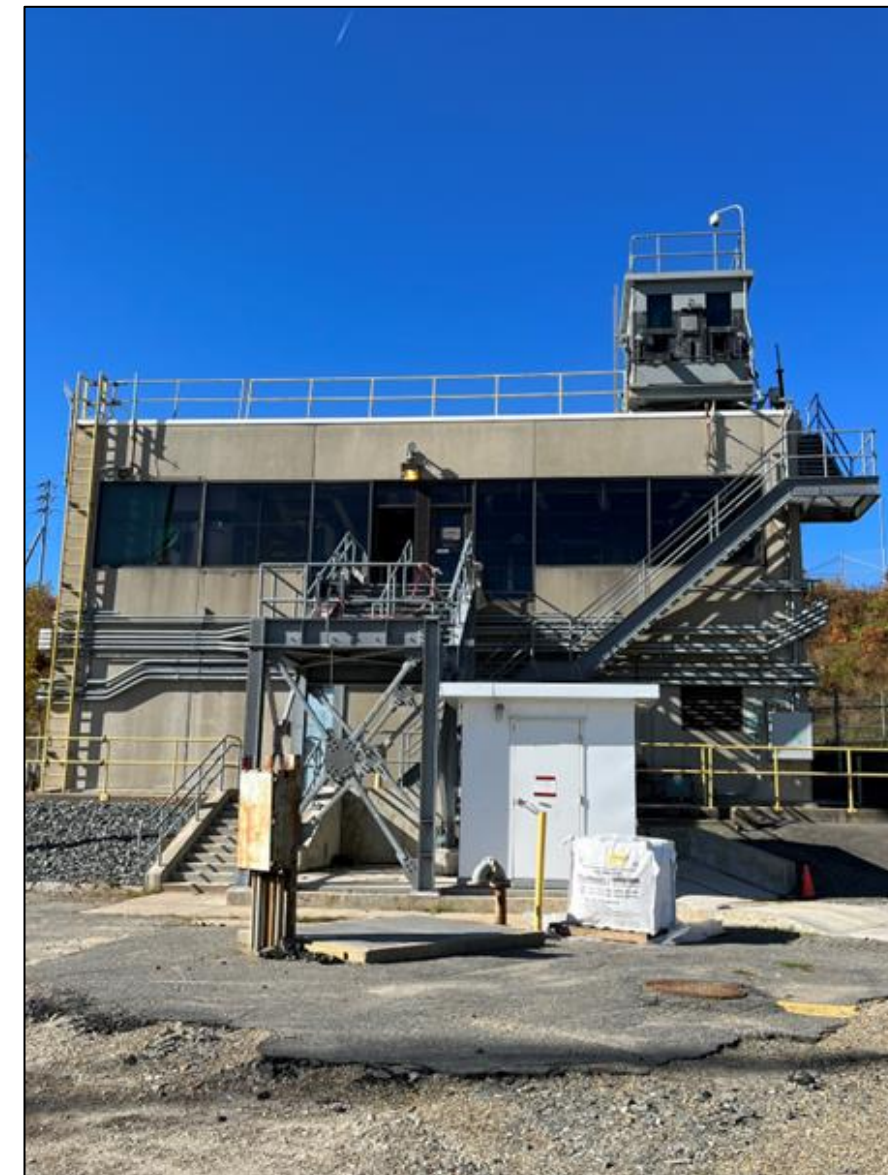
Building Clear-out – Complete

Gapping – 11/30/22

Disposition Survey - complete

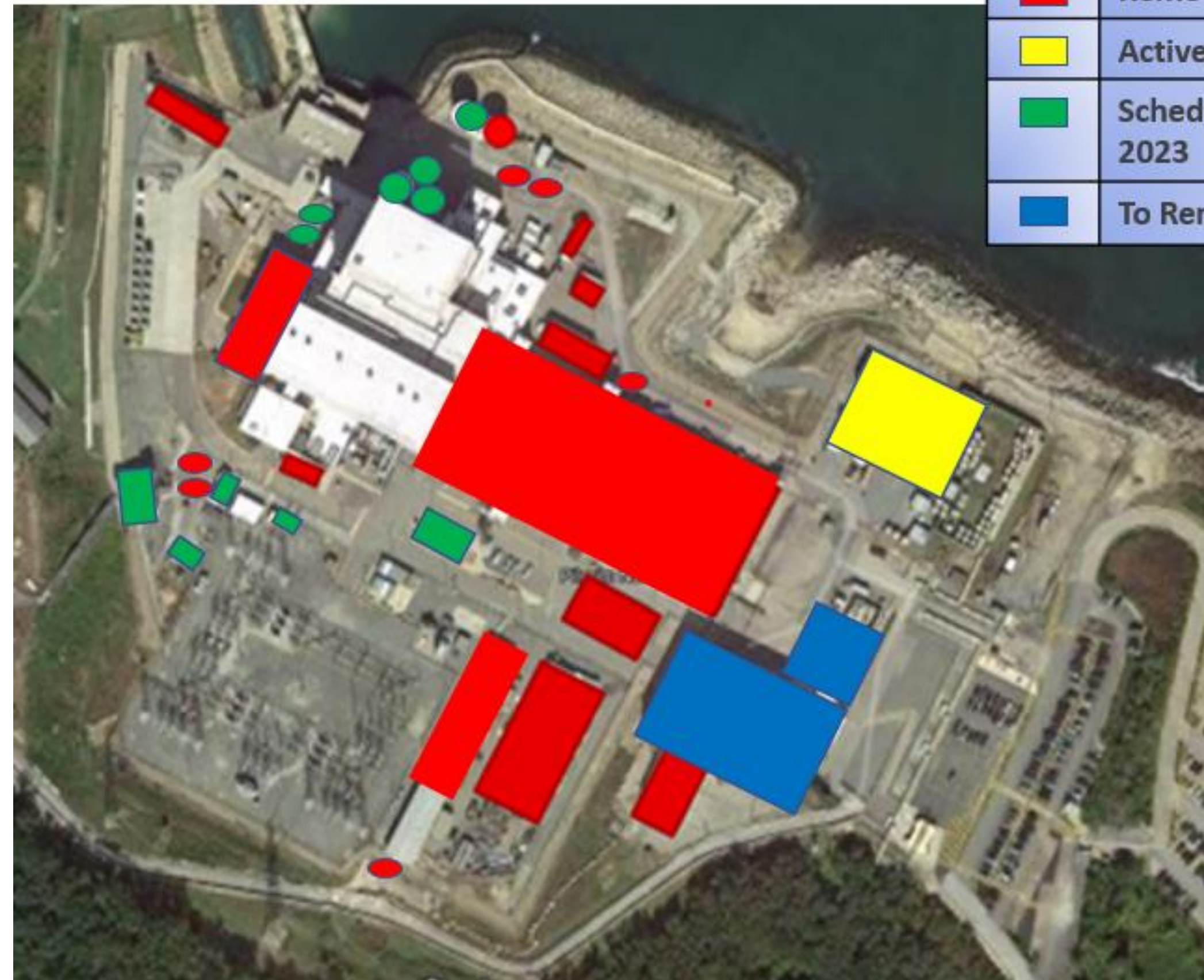
Abatement – Q1 2023

Structural Demolition - Q1 2023



Demolition cont.

- More than 70% of outbuilding square footage has been demolished (**Red**)
- 2023 Demo upcoming (**Green**)



■	Removed
■	Active Demolition
■	Scheduled by Spring 2023
■	To Remain

Reactor Segmentation

- Control Rod Blades – (40 of 173)
Mid 1st quarter 2023
- Fuel Support Castings (130 of 145) – Mid 1st quarter 2023
- CRGT (68 of 147) – Mid 1st quarter 2023
- Core Plate – Late first quarter 2023
- Jet Pumps – 2nd quarter 2023



Practice Testing of Cutting Prior to Work in Building

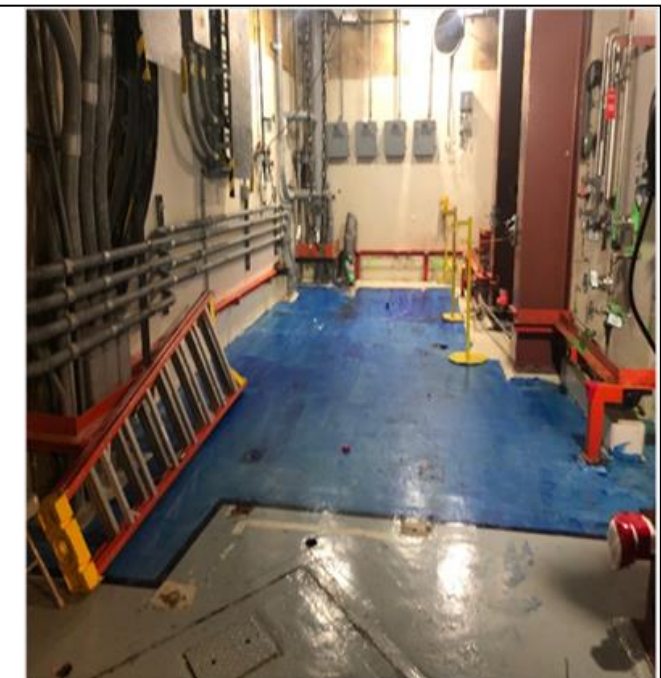
Regulatory Affairs



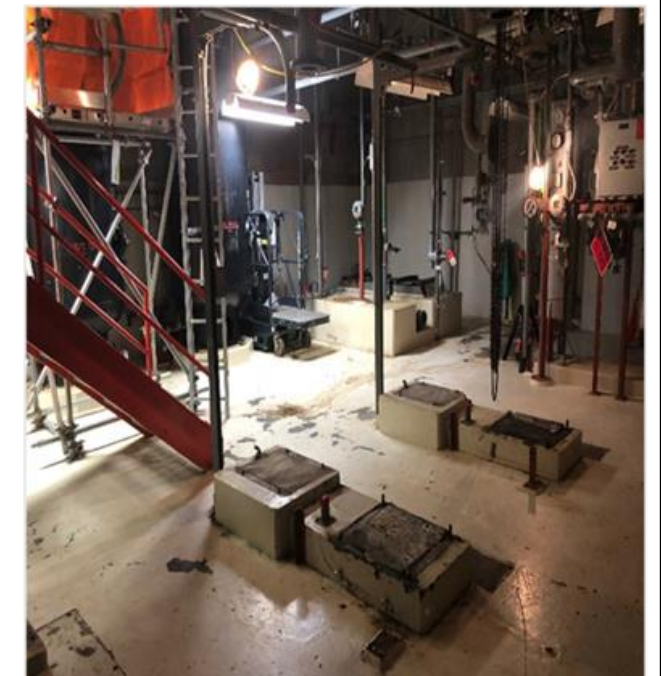
- One Severity Level IV non-cited violation for control of work activities conducted in 2020 related to airborne radioactivity during work inside our Drywell. Further surveying was necessary to ensure personnel were not exposed to unexpected levels of airborne radioactivity during the work evolution, as was required by our procedures. In no case did the exposures challenge thresholds established by the facility which is conservative to federal requirements for worker protection. We entered this into our corrective action program to ensure that we continue to strengthen our protection of the health and safety of our workers.

Pilgrim Update-Waste Management

- Radioactive Waste Shipments – Completed Thru Nov 15th via Transload facility (Mansfield, Ma) and Highway shipments
Total Disposal Class A / Exempt 76,000 ft³ Class B/C 62ft³
 - 40 DAW shipments
 - 8 Trinuke filter (120 filters each)
 - 3 Reactor Vessel Internals (RVI)
- Radioactive Waste Shipments - Planned remainder of 2022 & Q1 2023
 - Dry Active Wastes (DAW)
 - Reactor Vessel Internals
 - Spent Resins & Tri Nuke Filters
 - RB and TB Equipment Removals, Building Demo Debris



CRDM Repair Room removals Before & After - DAW



Compressor Room removals Before & After - DAW

Water Management: Radionuclide Concentrations

Historic radionuclide concentrations in discharges and background

19,000 Gallon Treated Water Tank discharge performed 5/12/2015	
Radioactive Isotope	Concentration (μCi/ml)
Mn-54	8.48E-08
<i>Fe-59</i>	<i>7.30E-09</i>
<i>Co-58</i>	<i>6.02E-09</i>
Co-60	6.21E-08
H-3	3.88E-04
Fe-55	4.54E-08
Cape Cod Bay naturally occurring radioactivity sample performed 8/22/2022	
Radioactive Isotope	Concentration (μCi/ml)
K-40	3.15E-07

Water Management: Untreated Water Comparison to EPA Priority Pollutants

WATER INVENTORY CHARACTERIZATION SUMMARY TABLE:				
Source	Volume (gals)	Detections**	Applicable EPA Aquatic Life Criteria Saltwater CMC (acute)	Applicable EPA Aquatic Life Criteria Saltwater CCC (chronic)
SFP	280,000	Nickel (19.3 ug/L), Zinc (293 ug/L)	Copper (4.8 ug/L), Lead (210 ug/L), Nickel (74 ug/L), Zinc (90 ug/L)	Copper (3.1 ug/L), Lead (8.1ug/L), Nickel (8.2 ug/L), Zinc (81 ug/L)
DSP/Reactor	400,000	Zinc (125 ug/L)		
Torus	285,000	Copper (2.75 ug/L), Lead (8.62 ug/L), Nickel (4.67 ug/L), Zinc (4210 ug/L)		

All other metals/inorganics*, PCBs, pesticides, SVOAs, VOAs, or dioxin furans on the priority pollutant list were not detected

Boron concentrations for SFP, DSP/Reactor, and Torus were 20.4, 22.7, and 186 µg/L, respectively

- Boron is naturally present in seawater at a concentration of 4,500 µg/L, EPA Quality Criteria for Water 1986 and is permitted to discharge in accordance with the permit at through Outfall #011 at 1,000 µg/L above measured ambient.

*Asbestos analysis for radiological samples could not be obtained

**** Not representative of post-treatment expectations**

Water Management: Next Steps

1. Install Torus water filtering system
2. Sample a Treated Water Tank for non-radiological pollutants
3. Shared / split samples of onsite water volumes with stakeholders (MassDEP and MDPH) with results to experts appointed by Senator Markey's Office
4. Submit NPDES and Surface Water Discharge Permits Modifications