



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

EM Deactivation and Decommissioning Program: Status and Progress

Andrew Szilagy

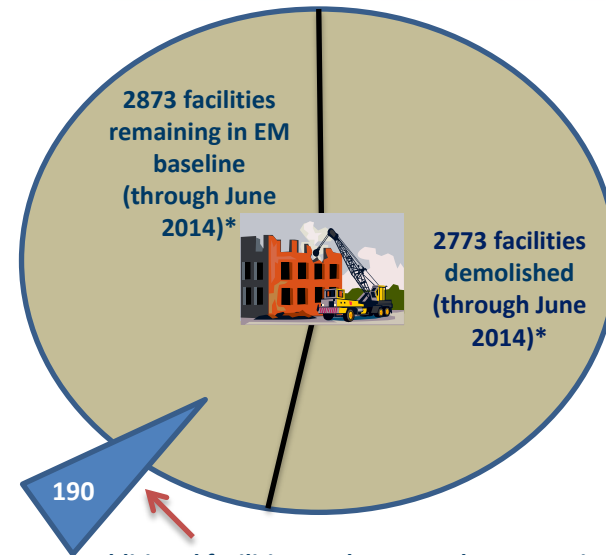
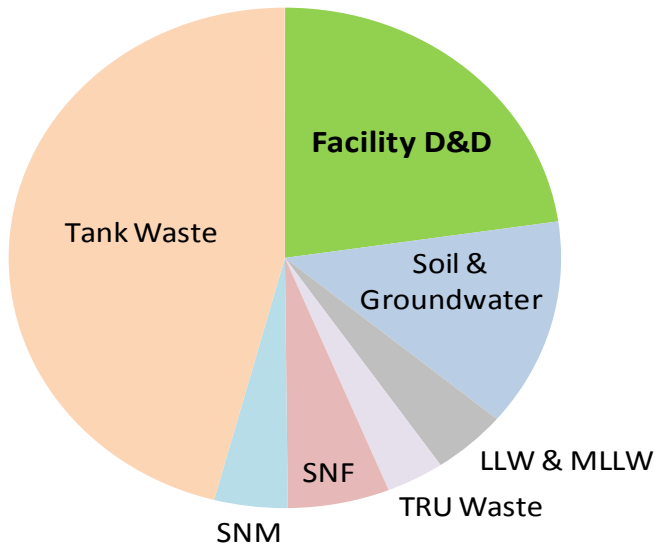
DIRECTOR, OFFICE OF D&D AND FACILITY ENGINEERING
Office of Environmental Management

Waste Management Symposia
March, 2015

Preview

- D&D vs. EM Program
- D&D Accomplishments in 2014
- Excess Facilities: Remaining and Status
- Pipeline from NNSA, SC, NE,
- IG/ GAO Interest on Excess Facilities

D&D Program Scope is the Second Largest Component of EM Program



Additional facilities EM has agreed to accept in the future. Y-12 and ORNL represent 157, approx. 83%

* Source: Corporate Performance Measure Summary Report (PER-01) IPABS. August 2014

- \$37-45B completion cost (FY12-FY13 planning data)
- >2,800 facilities yet to be addressed
 - Most are radioactively and/or chemically contaminated
 - Many have source-term quantity holdup of nuclear materials
- Additional 191 facilities are identified for transfer to EM in the future (~\$10-15B)
- 1000+ additional facilities likely will be proposed for transfer by NNSA, SC and NE

Idaho

Materials and Fuels Complex

- D&D accomplished with 1314 days since last lost workday, 1009 days since last recordable, and 407 days since last first aid
- Completed removal of small bore, dead leg and sodium containing piping in the Sodium Boiler Building (56.5 gal of sodium)
- Completed mockup for wet vapor sodium treatment process
- Completed sodium treatment of MFC-799 tanks



Sodium bicarbonate in
MFC-766 evaporator

Idaho

Materials and Fuels Complex

- Completed bulk sodium treatment campaign in MFC-766
- Received RCRA closure certification for MFC-799
- Placed 3,400 yd³ of estimated 3,450 yd³ in EBR II basements
- MFC D&D completed treatment of the first of nine heat exchangers in Sodium Boiler Building



MFC-767 Grout pouring into basement area

Idaho

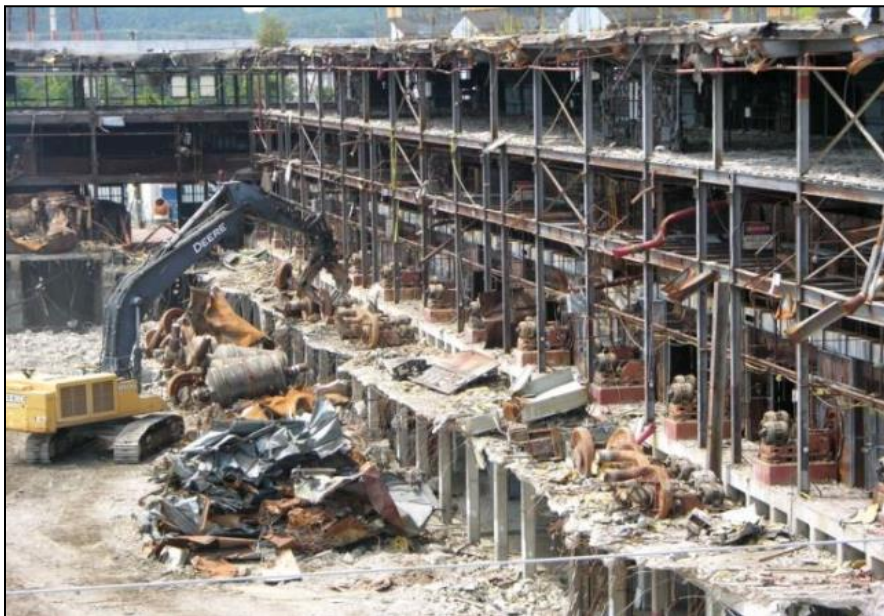
- Complete removal and treatment of sodium discovered in the Reactor Lid Lifting Mechanism during CRDM removal in EBR II
- Complete grouting of EBR II basements
- Complete superheater/ evaporator sodium treatment
- Complete engineering for demolition of Sodium Boiler Building and EBR II
- Complete CFA-688 and CFA-689 Asbestos Abatement and Beryllium Duct Removal



Four of the nine heat exchangers to be treated in MFC-767

Oak Ridge

K-25 Building Demolition Complete FY 2014



- Structural demolition began in December 2008 and completed in December 2013
- March 2014 – Final debris shipment to EMWMF
- June 24, 2014 – All contract scope complete

Oak Ridge

K-27 Building



Vent Purge, Drain & Inspect

- FY 2014:
 - Conducted deactivation and preparation for demolition activities in order to be “Criticality Incredible” & “Cold and Dark”
- FY 2015 Look Ahead:
 - Operations activities from FY 2014 ongoing
 - Finalize Waste Handling Plans with Regulators
 - Process Piping and Equipment
 - Building Structure
 - Attain CD-2/3 approval for demolition capital project:
 - UCOR documentation submitted Oct. 2014
 - APM Independent Cost Estimate Dec. 2014
 - APM External Independent Review underway (onsite week of March 9)
 - CD-2/3 approval necessary to begin exterior transite removal in Summer 2015
- FY 2016 Look Ahead:
 - Initiate structural demolition in Fall 2015

Oak Ridge

K-31 Building Demolition

K-31 "Before"



Transite
Removal



- FY 2014:
 - CD-2/3 Approved April 28, 2014
 - Structural demolition began October 8, 2014
- FY 2015:
 - 50% demolished as of 2/8/15
 - Projected to complete demolition and debris hauling for disposal in July 2015.
- FY 2016:
 - Capital project scope also includes K-761; CD-4 submittal planned in FY 2016.



Paducah

- C-410 demolition to slab
- C-420 preparation for demolition
- C-746B warehouse miscellaneous equipment removal
- Debris shipment by rail for disposal



Paducah

- FY 2014 Cost - \$21,422,000
- Total Cost through FY 2014 - \$66,476,000
- Total Estimated Cost at Completion - \$76,985,000



Portsmouth

GDP

Deactivation



X-326; 2230' long, 552' wide, 30 acre roof, 2,600,000 ft² of floor space, 200 cells, 2340 stages

X-330; 2176' long, 640' wide, 33 acre roof, 2,800,000 ft² of floor space, 110 cells, 1100 stages

X-333; 1456' long, 970' wide, 33-acre roof, 2,824,640 ft² of floor space, 80 cells, 640 stages

Portsmouth

X-326 Deactivation & Sampling

- Safety Performance
 - FY 14 TRC– 0.75;
DART – 0.0
- Executed X-326 Deactivation in Parallel with Regulatory Decision Process for On-site Disposal Using Sampling Plan Under RI/FS
 - RI/FS sampling
 - Cut & cap of Process gas Equipment (PGE)



Portsmouth

X-326 Deactivation & Sampling

- Auxiliary Process Gas (PG) Systems
 - Bypass Piping Housing removal initiated
 - NDA activities of PG bypass piping/valves initiated
 - All Extended Range Product Withdrawal compressors C&C

- Compressor Deposit Removal Initiated
 - Five “high uranium hold-up” compressors C&C
 - Uranium mined from two

- Hazardous Waste Removal
 - Lube Oil Storage Tanks Drained
 - Lead source locker removed
 - Mercury trap removal
 - Diesel Generator fluids removal

Richland

309 Plutonium Recycle Test Reactor (PRTR) Progress

- Explosive Demolition of the Structure in August
- Above grade structure removed and excavation of the below grade initiated
- **Major D&D Considerations: Discovery of degraded structural concrete around the PRTR due to a previous operational accident or failure which altered the original engineered reactor removal plan.**
- 2015
 - Removal of the remaining structure to the -55 feet below grade continued



Reactor and bioshield monolith removed and transported to ERDF January 2014



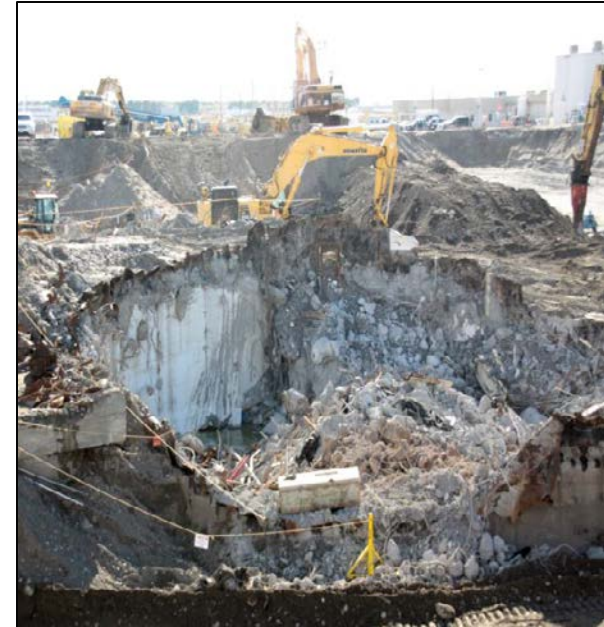
Explosive demolition of contaminated vessel August 2014

Richland

309 Plutonium Recycle Test Reactor (PRTR) – D&D Solution

- Redesigned initial 560-ton lift plan due to the unreliable strength of the concrete and inability to core drill. The revised removal plan required the reactor and the entire bio-shield structure be removed, increasing the lift to @1082 tons.
- Reinforced the containment structure with shoring columns and removed numerous sections of the concrete structure.
- Installed lifting jacks on the bottom of the rigging spider frame assembly.
- Additional jacks were installed and the lift test was a success, the reactor was removed from the containment structure (from the -32ft. level), loaded on a transport and sent to ERDF for disposal.
- The containment vessel, which goes to a depth of -55 feet below grade, was drilled and prepped to a depth of -32 feet below grade for Phase I explosive demolition.

- FY 2014 Estimated Costs: \$17.67M



Richland

310 RTS Facility Completion

- D&D Structures
- Backfilled Site



Site after Backfill, August 25, 2014



During Demolition, July 2014

Richland

326 Facility Completion

- Originally known as the Pile Technology Building, began operations in 1953 to support the safe and efficient operation of the production reactors, and to identify technologies and processes for improving their operation.
- It was later known as the Physics and Metallurgy Building, and finally as the Material Sciences Laboratory.
- Major D&D Considerations:** To establish a demolition plan that protected the active utilities needed to support the operational (PNNL) 325 Facility and support facilities.



326 Building June 1, 1957

Richland

326 Facility Completion – D&D Solution

- The demolition plan was developed, communicated and coordinated with other site affected contractors.
- Without their support and willingness to work with and around and site inconveniences, the project would have experienced additional costs and delays.
- 2014 Approximate Cost: \$2.25M



Basement prior to Backfill, May 2014



Site after Backfill, May 13 2014

Richland

340 Complex

- A radioactive liquid waste storage and transfer system that received radioactive and hazardous waste from many 300 area research and laboratory facilities at Hanford.
- Wastes were transferred by pipeline, via trucks/drums, transfers from the 307 Retention Basins. Following neutralization, waste was transported by truck and rail to Hanford's 200 Areas for long term storage.
- **Major D&D Consideration(s): Locating and remediating several leak and spill areas around the 340 complex.**
- **The most difficult portion of the site was the boring through alpha contaminated soil to place lifting support for the vault directly beneath the vault structure itself.**
- **The vault could not be demolished in place due to the tank inventories within the structure which required the project to remove the vault in its' entirety.**
- **The Waste Vault (estimated at @ 1100 tons) had to be supported in place while the waste site was remediated.**



Richland

340 Complex – D&D Solution

- Engineer, construct and develop a remediation process that introduced and blended clean soil with the highly contaminated soil (soil levels, up to 17R p/hr.) during soil extraction.
- A structural support system was engineered and installed to support the vault while being undermined during the remediation process. Monolith was more than a 1100 ton lift.
- 2014 Approximate Cost: \$14.72M



Vault on lift assembly, January 16, 2014



Vault Excavation February 18, 2014



Vault during transport , January 31, 2014

Richland

342Complex

- Complex consisted of waste collection sump, control room, transformer pad/power vault and a generator pad for collection of waste water from the 300 Area transfer it the 310 Treated Effluent Disposal Facility.
- Major D&D Consideration(s): Working in non-permitted confined space to isolate the lift pumps, pump out the excess water and clean out the sediment in preparation for demolition.
- The ladder access to the below grade vault was degraded and personnel access was prohibited.



The 342 Complex, April 13, 2006.



Process sewer inlet piping , July 30, 2014

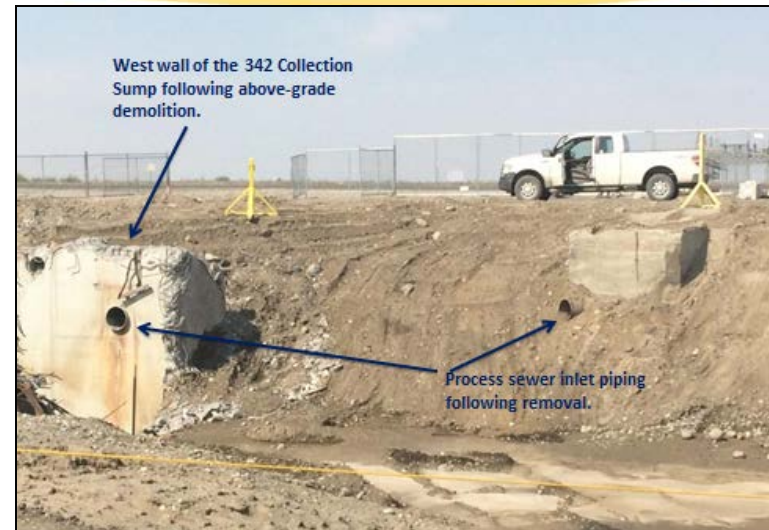


Collection Sump, April 2014

Richland

342Complex – D&D Solution

- Upon providing a compliant alternate access, the pumps were removed with heavy equipment, the water was absorbed and removed utilizing adjacent dirt as an absorbent.
- The Sediment was sampled and removed from the structure and the remaining structure was demolished and sized reduced for disposal.
- 2014 Approximate Cost: \$204K



Below Grade Demolition, August 12, 2014



Complex after backfill August , 2014

Richland

352 Facility Completion

- The 352F Substation was constructed in 1949 and served as a switch station for various facilities within the southern portion of the 300 Area.
- The Substation was not posted as a radiological controlled facility and was constructed outside of the 300 Area Underground Radioactive Material Area.
- **Major Considerations: The project pursued recycling of the substation which typically is not a common practice within the 300 Area based on the mission of the facilities.**



Richland

352 Facility Completion – D&D Solution

- The recycle effort saved the tax payers approximately \$400,000.
- The project recycled 400,000 pounds of transformers, oil circuit breakers, wire and other electrical components.
- More than 16,500 gallons of PCB – contaminated oil was safely shipped to the Hanford Site Consolidated Recycling Center.
- 2014 Approximate Cost: \$98K



Cable Vault Following above-grade Demolition, September 8, 2014

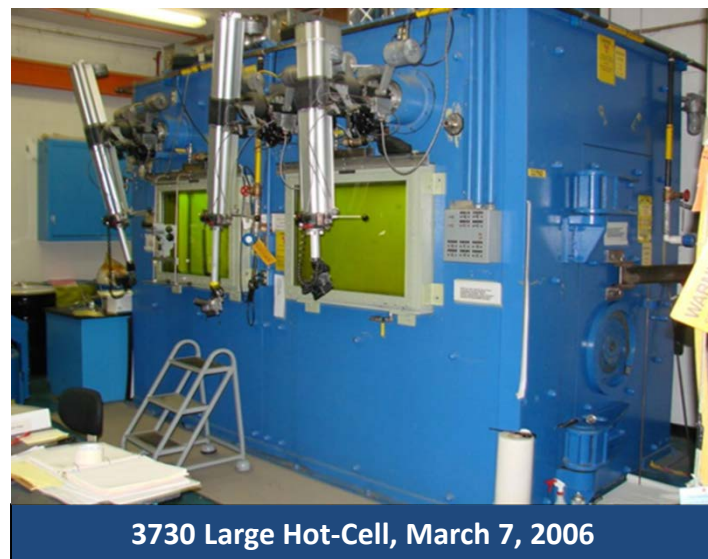
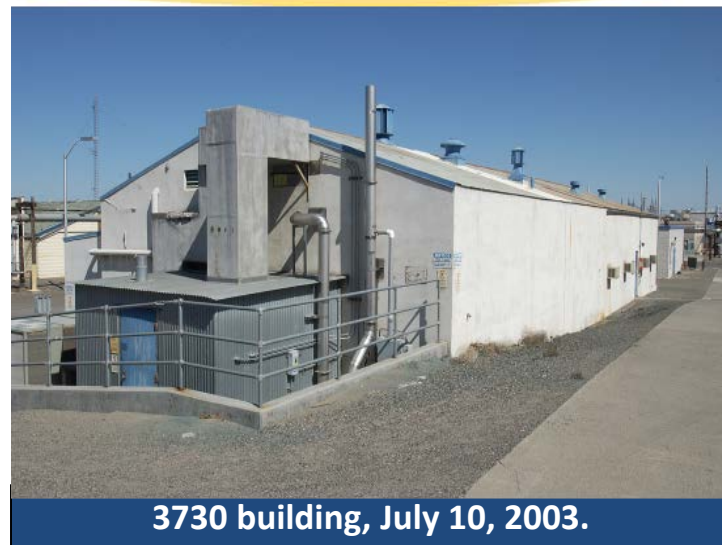


Site Completion following backfill, September 11, 2014

Richland

3730 Facility Completion

- 3730 Gamma Irradiation Facility, also known as the 3730 Graphite Laboratory and Shop, was classified as a potentially contaminated by past operations and processes that used hazardous or radioactive materials and represent a potential for a release to the environment during D4 activities.
- Major D&D Consideration(s):** An extensive effort was required to remediate the Asbestos containing materials throughout the structure.
- Due to the location of a large Hot Cell within the facility, the project team had to develop a work plan to demolish the structure with the Hot Cell remaining in the place without causing any damage during demolition.



Richland

3730 Facility Completion- D&D Solution

- A work plan was developed to remediate the Class I and II Asbestos Contaminated Material throughout the building and was successfully completed.
- The demolition plan removed the entire structure up to the Hot Cell.
- Surgically dismantled (using heavy equipment) the remaining structure, not to damage the hot cell. The demolition plan was successfully executed and completed.
- The hot cell (weighing @252,000 lbs.) was then rigged and hoisted onto a transport and sent to ERDF for disposal.
- 2014 Approximate Cost: \$689K



Large Hot-Cell Loaded on trailer March 11, 2014



Site Completion April 30, 2014

West Valley

Main Plant Process Building (MPPB) Deactivation

- Liquid Waste Cell – Completed removal of Raschig rings from tanks 13D-7 & 13D-8; Decontamination of Tanks 13D-7, 13D-8, 4D-10 & 4D-13
- Upper Warm Aisle – completed deactivation of piping systems
- Plant Office – Asbestos-Containing Material (ACM) Removal – complete



ACM Removal

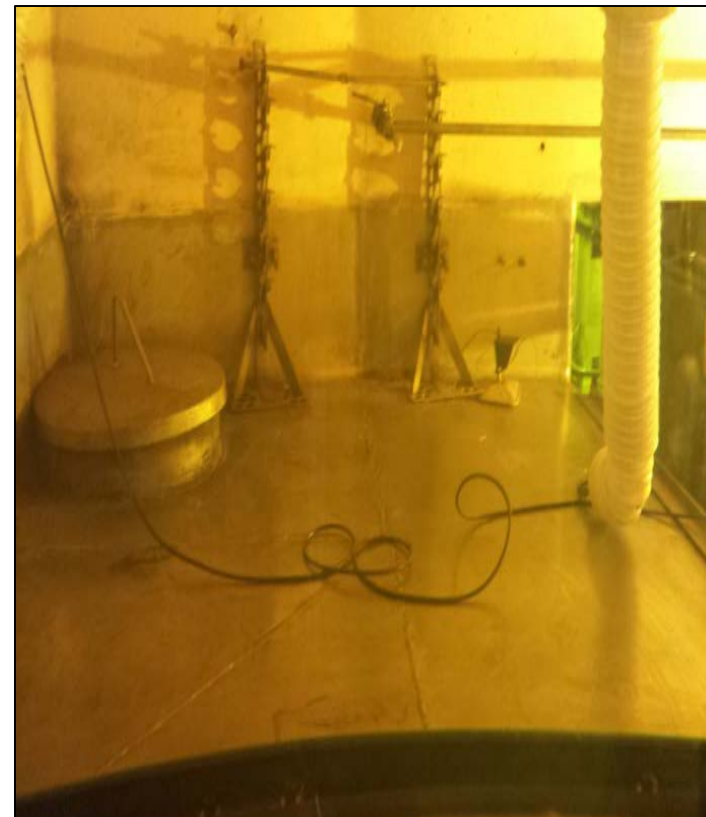
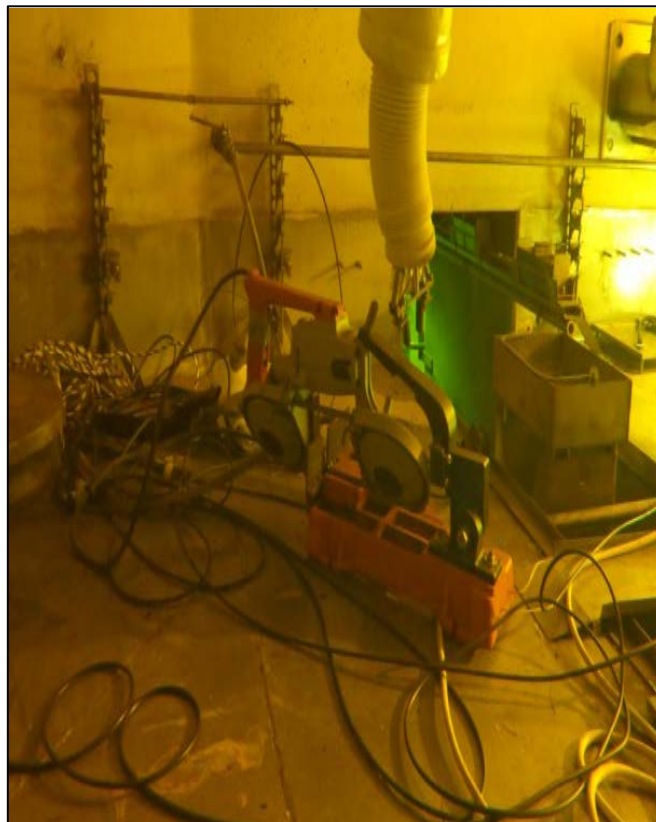


UWA Shielded Pipe Chase

West Valley

Main Plant Process Building (MPPB) Deactivation

- Off-Gas Trench – Deactivation commenced
- Analytical Aisle – Sample Storage Cell (SSC) – Loose equipment, material, tools, & sample bottles removed & remote gross decontamination complete)



Sample Storage Cell before & after Equipment Cleanout & Remote Decontamination

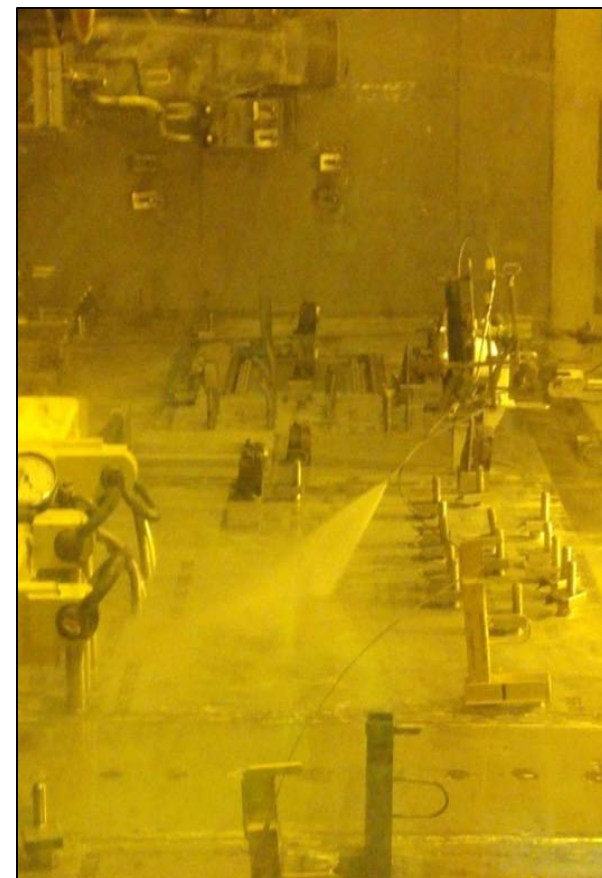
West Valley

Vitrification Facility Deactivation

- Vitrification Cell – Gross decontamination washdown of cell complete
- Decontamination & Radiation Surveys of cell completed - met a Congressional commitment date of Sept 30, 2014

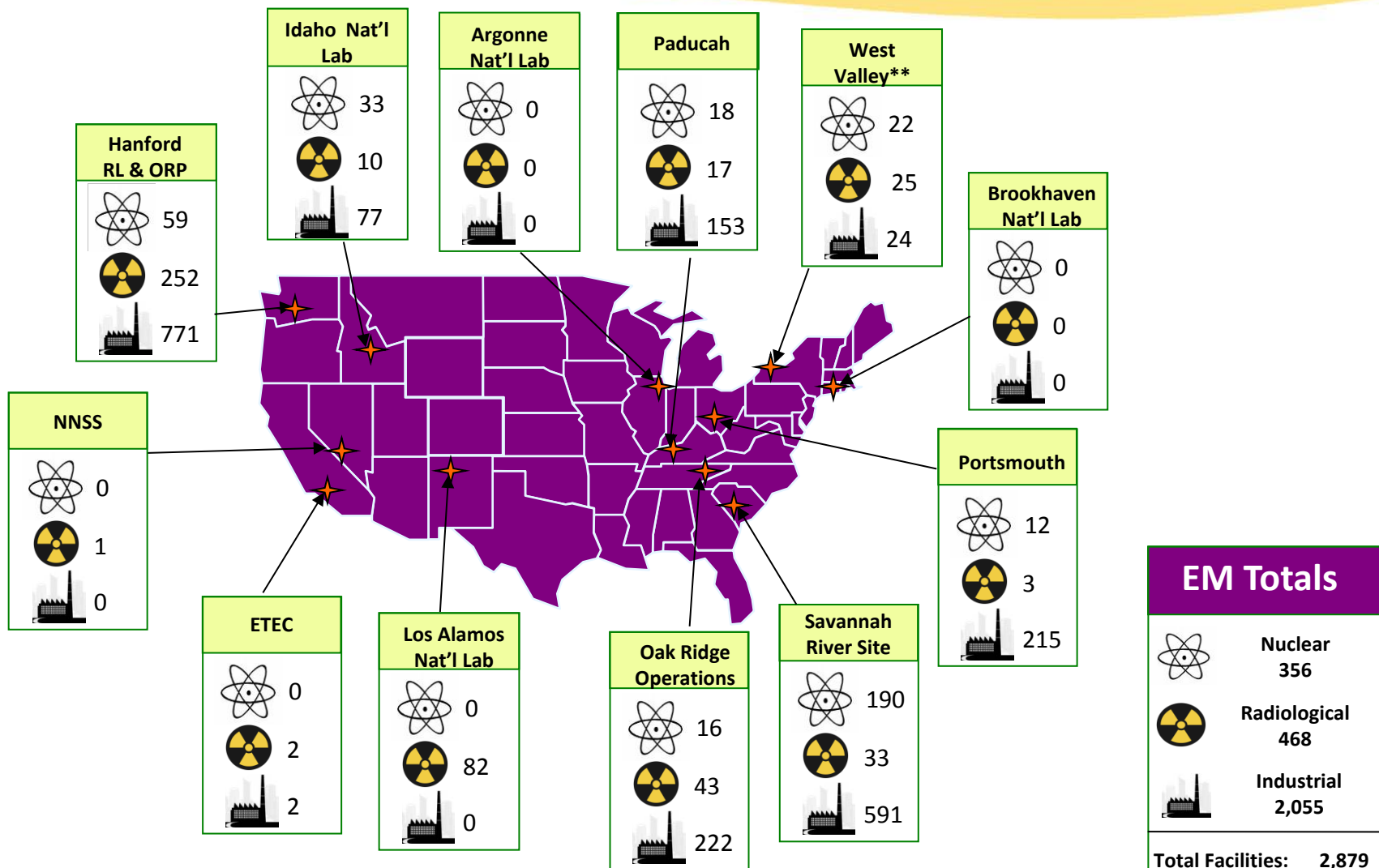


Vit Cell Vacuuming



Vit Cell Wall & Floor Washdown

Remaining Facilities Planned for D&D in Current EM Baseline*



* As of June 2014

** DOE does not own West Valley; however, D&D work is being funded by EM at the site under Congressionally-mandated agreements with the site owner.

(Includes 6 nuclear facilities at NNSA Service Center)

Excess Facilities by PSO

Site	Program	Facilities Remaining	
		No.	D&D ROM Cost Range (\$1,000,000) ^(a)
Argonne National Lab	SC	7	\$221 - \$884.1
Brookhaven National Lab	SC	5	\$30.3 - \$121
Fermi National Accelerator Lab	SC	0	\$0
Idaho National Lab	NE	8	\$33.5 - \$134.1
Los Alamos National Lab	NNSA	1	\$6.3 - \$25.3
Lawrence Livermore National Lab	NNSA	4	\$36.7 - \$146.6
Nevada National Security Site	NNSA	6	\$3.8 - \$15
SLAC National Accelerator Lab	SC	1	\$21.1 - \$84.4
Savannah River Site	NNSA	2	\$34 - \$136
TOTAL NON-IFDP ^(b)		34	\$386.7 - \$1,546.6
Oak Ridge National Lab	SC / NE	72	(c)
Y-12	NNSA / SC / NE	84	

(a) In FY 15 \$.

(b) Does not include liability associated with remaining Waste/Material and ER/Cleanout transfers.

(c) Total CD-1 cost range for IFDP at ORNL and Y-12 is estimated between \$4 - \$8 billion.

Status of Transfers

Status	Facilities	Waste/Mat	ER/Cleanouts	Total
Total Accepted from SC	163	1	7	171
Demolished under ARRA	37	0	2	39
Facility cleanout under ARRA	9	0	1	10
Facility ownership taken back by PSO	0	0	0	0
Demolished post-ARRA ^(a)	30	0	0	30
Total Transfers Remaining from SC	96	1	5	102
Total Accepted from NE	37	3	0	40
Demolished under ARRA	16	0	0	16
Facility cleanout under ARRA	3	0	0	3
Facility ownership taken back by PSO	10	0	0	10
Demolished post-ARRA	1	0	0	1
Total Transfers Remaining from NE	10	3	0	13
Total Accepted from NNSA	91	0	0	91
Demolished under ARRA	1	0	0	1
Facility cleanout under ARRA	2	0	0	2
Facility ownership taken back by PSO	0	0	0	0
Demolished post-ARRA ^(a)	6	0	0	6
Total Transfers Remaining from NNSA	84	0	0	84
Grand Total Remaining ^(b)	190	4	5	199

(a) Facilities no longer listed in FIMS, need to confirm post-ARRA demolition status.

(b) Total does not include 28 facilities nominated at LBNL & LLNL for which formal acceptance has not been made.

- **EM-Operating Facilities as missions complete. Examples include:**
 - T Plant and WESF at Hanford
 - DUF6 at Portsmouth and Paducah
 - 3019 A at Oak Ridge
 - H Canyon at SRS
- **EM Facilities under construction. Examples include:**
 - WTP at Hanford
 - SWPF at SRS
- **Transfers from NNSA, SC, and NE. These include:**
 - Accepted and in EM's baseline
 - Agreed to accept but not in EM's Baseline
 - Not yet proposed by other program

Facility and Project Level Fidelity

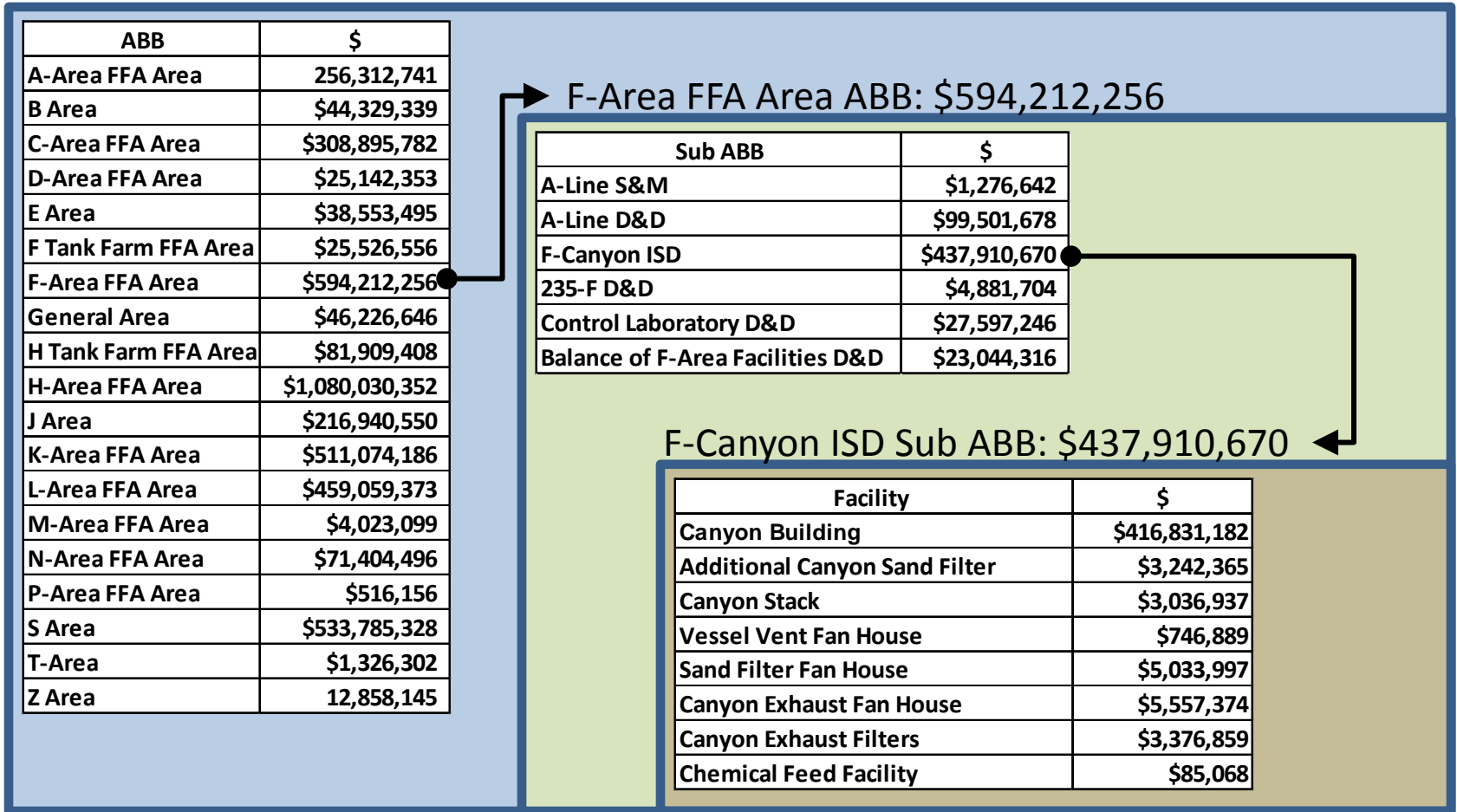
- Cross Complex Integrated D&D Planning: Collaboratively working with the sites to better understand costs at a more detailed level
- Working on getting D&D estimates on a facility and project level
- Updating Data Tools to accurate project level fidelity:

Project Baseline Summaries (PBSs)	Analytical Building Blocks (ABBs)	Sub “ABB”
Highest level of data- not useful at project level	One level more detailed, includes site planning estimates	Greater fidelity
The scope in each PBS varies among sites (e.g., 30, 40)	Used for site budget planning and long term planning	Parsing ABBs for specific D&D projects centered around major facilities

- In many cases ABBs combine D&D, soil/groundwater remediation, and waste disposition
- For D&D planning and prioritization, the scope must be separated
- A Sub ABB the D&D scope an ABB
- A sub ABB is a deactivation or decommissioning project that can consist of several facilities and other physical features related to deactivation and/or decommissioning

Example: PBS to ABB to SubABB (Project)

SRS PBS 30: \$4,312,126,563

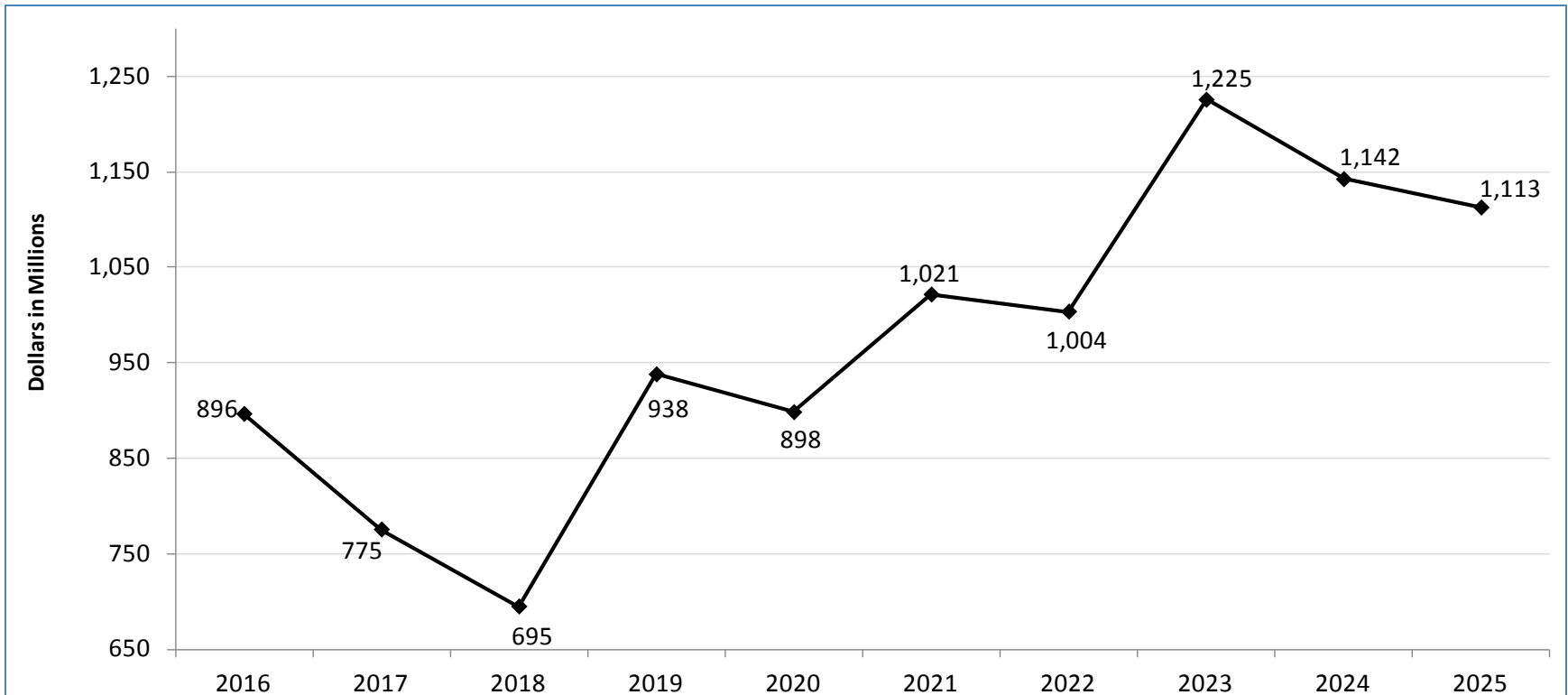


The only costs shown are D&D Activities

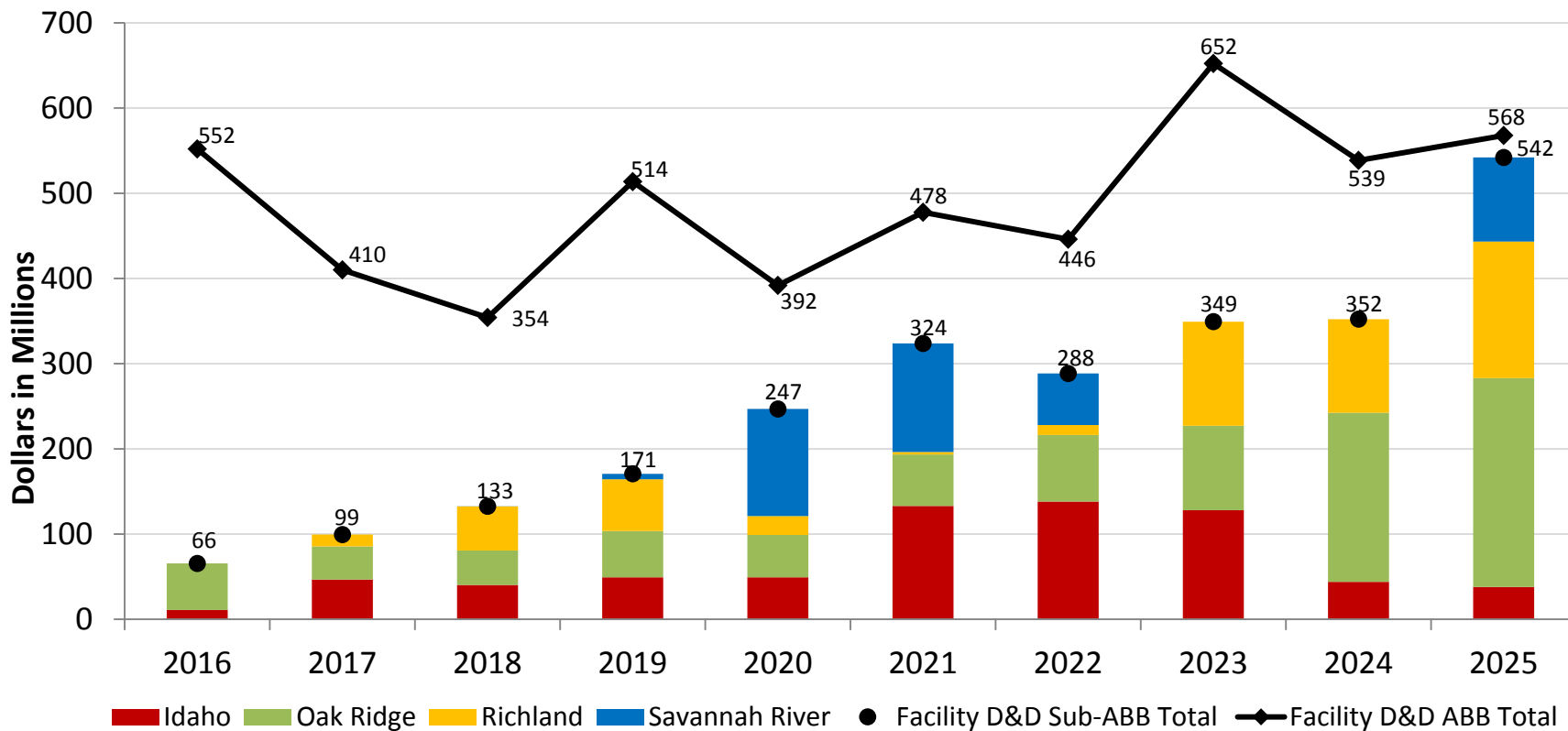
Sub ABB Data

Count	Site	PEC ABB ID	Sub-ABB CD	Sub-Project	Primary Facility	GSF	HAZ Class	Total # Facilities in Sub-Project	Total GSF	Sub-Project D&D Cost (\$1,000)	Start Year	No. Years
1	INL	876	0013B.06.01.02	AMWTP Misc Support Facilities D&D Subgroup 1	multiple			36	30,556	\$1,118	2018	3
2	INL	876	0013B.06.01.02	AMWTP Main Facilities D&D	WMF-636	316,511	NUC-2	2	551,433	\$191,812	2021	4
3	INL	876	0013B.06.01.02	AMWTP Misc Support Facilities D&D Subgroup 2	multiple			24	282,485	\$86,082	2021	4
4	INL	873	0014B.05.02	INTEC Misc Support Facilities D&D Subgroup 1	CPP-684	13,101	NUC-3	13	236,589	\$10,373	2016	5
5	INL	873	0014B.05.02	New Waste Calcine Facility D&D	CPP-659	84,080	NUC-2	5	91,771	\$51,864	2021	2
6	INL	873	0014B.05.02	Rare Gas Plant/Waste Bldg D&D	CPP-604	21,175	NUC-2	6	30,097	\$15,118	2021	2
7	INL	873	0014B.05.02	FDP/FAST Facility D&D	CPP-666	152,388	NUC-2	1	152,388	\$82,286	2023	3
8	INL	873	0014B.05.02	CPP-603 Facility D&D	CPP-603	40,759	NUC-2	1	40,759	\$40,351	2036	2
9	INL	873	0014B.05.02	INTEC Misc Support Facilities D&D Subgroup 2	multiple			138	240,173	\$53,482	2035	2
10	INL	873	0014B.05.02	IWTU D&D	CPP-1696	73,040	NUC-2	1	73,040	\$64,509	2035	2
11	INL	877	0014B.05.03.02	EBR-II Deactivation	MFC-767	18,967	RAD	2	\$3,513	\$20,722	2016	2
12	INL	874	0030B.04.06.01	Waste Retrieval Enclosure D&D	multiple			7	249,628	\$148,614	2017	4
13	INL	874	0030B.04.06.01	ARP Facility D&D	multiple			17	40,955	\$79,483	2017	10
14	INL	874	0030B.04.06.01	Misc Site Wide Facilities D&D	multiple			39	75,398	\$17,137	2031	1
15	INL	874	0030B.04.06.01	Misc TAN Facilities D&D	multiple			4	21,858	\$508	2038	1
1	ORO	947	OR-0040.C001.01	K-25 Facility Demolition	K-25			104	607,700	\$51,785	2015	1
2	ORO	946	OR-0040.A005.02	K-27 Legacy Material Removal & Deactivation	K-27			1		\$104,273	2015	3
3	ORO	942	OR-0040.A001.01	K-1037 Facilities Demolition	K-1037	378,157	RAD	2	380,000	\$54,905	2019	5
4	ORO	943	OR-0040.A002.03	Poplar Creek Facilities Demolition	multiple			40+	148,800	\$35,551	2021	3
5	ORO	943	OR-0040.A002.05	K-31 Facility Demolition	K-31	1,659,628	N/A	33	1,701,807	\$52,182	2018	5
6	ORO	943	OR-0040.A002.06	Central Neutralization Facility Demolition	1407-H	4,000	RAD	42	25,500	\$7,784	2021	3
7	ORO	943	OR-0040.A002.07	TSCA Incinerator Facilities Demolition	1435-D	4,950	RAD	51	51,300	\$11,356	2020	5
8	ORO	943	OR-0040.A002.08	Balance of Site Facilities Demolition	multiple			131	155,200	\$17,545	2017	3
9	ORO	946	OR-0040.A005.02	K-27 Facility Demolition	K-27	1,114,386	NUC-3	32	1,194,800	\$58,129	2018	2
	ORO	1769	OR-0043.A001.02	Centrifuge Facilities Demolition	1210	54,602	RAD	16	197,000	\$60,865	2019	4
					1210-A	23,904	RAD					
					1220	86,128	RAD					
10	ORO	1761	OR-0041.A009.04	9213 and 9401-2 Demolition	9213	23,635	IND	2	37,300	\$18,201	2030	4
					9401-2	13,673	IND					
12	ORO	1761	OR-0041.A009.06	Tank (EM) Facilities Demolition	multiple			7	54,300	\$7,990	2037	4
13	ORO	1760	OR-0041.A014.01	Alpha 4 Complex Demolition	9201-4	510,218	RAD	4	513,400	\$285,681	2023	9
14	ORO	1214	OR-0041NEW.A006.01	Alpha 2 Complex Demolition	9201-2	324,448	N/A	4	332,600	\$296,981	2028	10
15	ORO	1214	OR-0041NEW.A006.02	Alpha 3 Complex Demolition	9201-3	191,978	N/A	3	196,900	\$185,501	2034	6
16	ORO	1222	OR-0041NEW.A007.01	Beta 1 Complex Demolition	9204-1	210,491	N/A	3	213,200	\$235,741	2033	6
17	ORO	1222	OR-0041NEW.A007.02	9731 Deactivation Only	9731			1	37,200	\$26,568	2037	4
18	ORO	1222		Beta 3 Deactivation Only	9204-3			1	255,700	\$57,921	2038	2
	ORO	1223	OR-0041NEW.A008.01	Biology Complex Demolition/Remedial Action (E	9207	256,660	N/A	8	346,300	\$99,453	2029	8
					9401-01	13,454	N/A					
					9210	64,737	N/A					
20	ORO	1215	OR-0041NEW.A009.01	9206 Complex Demolition	9206	57,812	NUC-2	5	75,700	\$72,443	2027	7
21	ORO	1215	OR-0041NEW.A009.02	9212 Complex Demolition	9212	442,317	NUC-2	26	548,700	\$697,317	2031	10
22	ORO	1215	OR-0041NEW.A009.03	Balance of Facilities Demolition	multiple			6	2,100	\$1,414	2032	3
23	ORO	1215	OR-0041NEW.A009.05	Steam Plant Complex Demolition	9401-3	62,124	N/A	6	69,000	\$73,653	2033	7
24	ORO	1763	OR-0041NEW.A014.02	Alpha 5 Complex Demolition	9201-5	613,642	NUC-3	15	663,000	\$466,329	2022	8
25	ORO	1763	OR-0041NEW.A014.03	Beta 4 Complex Demolition	9204-4	313,771	NUC-2	10	347,100	\$191,328	2021	7
	ORO	1764	OR-0042.A004.01	BV Reactor Area Facilities Demolition	3010	6,024	N/A	16	85,400	\$124,960	2024	10
					3010A	2,132	N/A					

Total EM Planning Case Facility D&D (ABB Level)



Planned Facility D&D at Four EM Sites (ABB vs Sub-ABB Level)



- The DOE IG investigation is looking more broadly at the facilities EM identified for future transfer back in 2008 and 2009
- GAO investigation (Engagement #361547) is looking into the process, progress, and status of the transfer of NNSA facilities into the EM program
- GAO investigation (Engagement #542232) is looking at facilities that have gone through the D&D process, with a focus on transfers of DOE land parcels and real property to external entities, such as community re-use organizations and local economic development groups

IG/GAO Recommendations

IG Recommendations

Develop an analysis and report providing critical information on contaminated Department excess facilities that would be useful to policy makers for decisions regarding the path forward for addressing these facilities.

Based on this analysis, reconsider the current approach for disposition of these facilities to ensure the effective expenditure of limited budgetary resources and mitigation of risk to the extent practical.

GAO Recommendations

Take step to ensure data systems provide timely and complete data that supports sound decision making

Develop and document an approach to property transfer - including roles and responsibilities – consistent with its policy to identify and transfer properties for economic development purposes

EM integrate into one prioritized list all NNSA facilities that meet EM's transfer requirements for disposition

Action Towards Recommendations

- The Secretary has issued a memo to establish a Working Group to address the IG recommendations
- The Excess Contaminated Facilities Working Group (ECFWG) will meet periodically and work on D&D Complex integration
- Outcome of the ECFWG will be considered for FY 17 Budget development