U.S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT

Idaho Cleanup Project

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Leadership in Nuclear Energy Commission
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Idaho Cleanup Project Priorities and Accomplishments

- Initiating heat-up for next simulant run for Integrated Waste Treatment Unit (IWTU).
- Complete investigation and recovery of Accelerated Retrieval Project V drum incident.
- Complete treatment of Idaho legacy transuranic waste.
- Transuranic waste certification authority has been restored to DOE-Idaho.
- Obtain certification of more TRU waste streams to maintain shipments to WIPP.
- Complete exhumation of buried waste.
- Complete transfer of spent nuclear fuel from wet to dry storage.

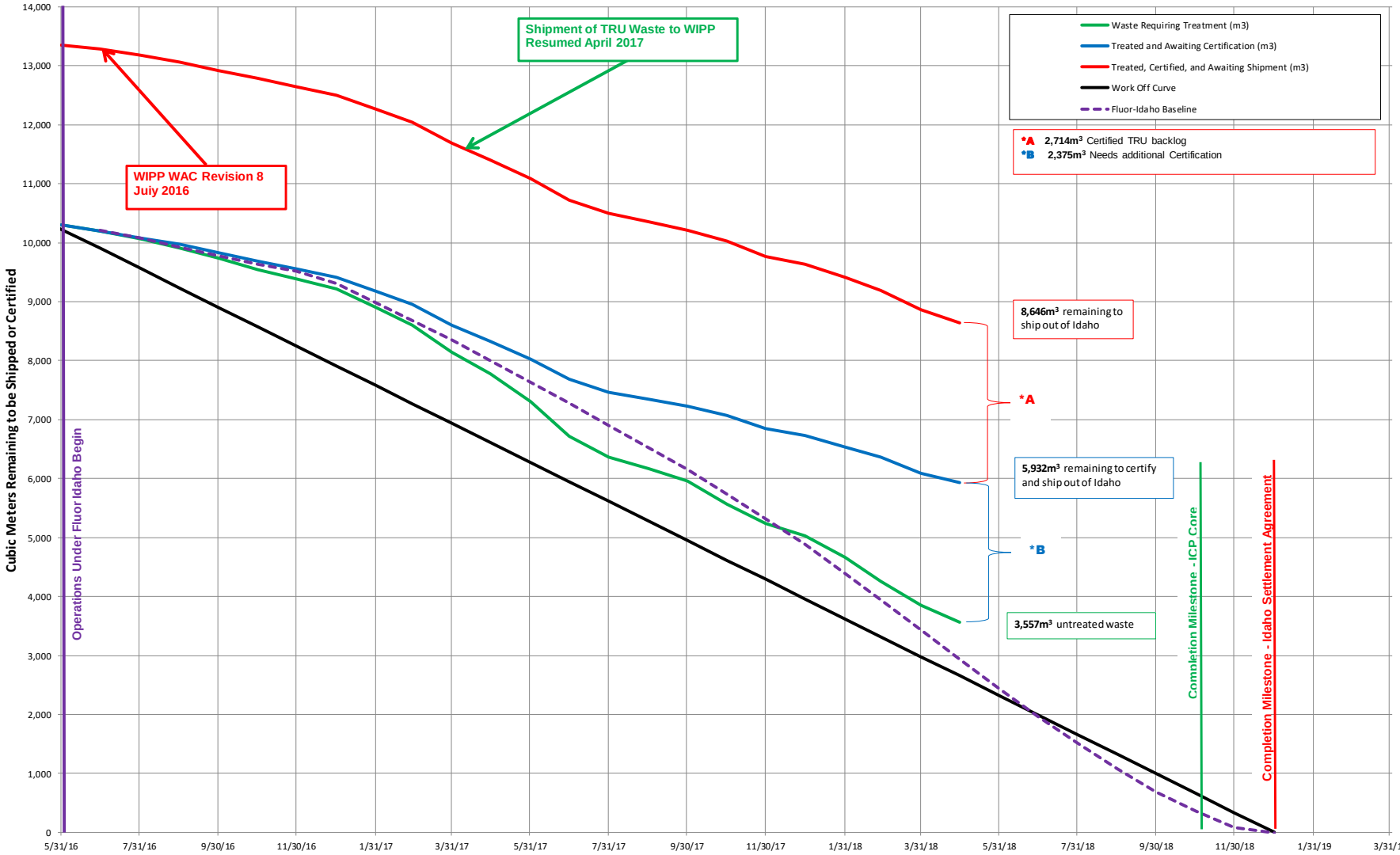
Key Scope: Integrated Waste Treatment Unit

- Based upon extensive testing at a pilot plant and other facilities, extensive modifications to the facility were completed in April, 2018.
- Complete "IWTU Technical Issues Resolution - Phase 2" Simulant Runs
  - Readiness reviews are complete, facility is preparing to heat-up for Simulant Run 2
- Complete Simulant runs 2 and 3
  - Simulant Run 2 (30 days on simulant feed) is expected to complete in June; Simulant Run 3 will commence upon successful completion of Simulant Run 2
- Develop Plan for Phases 3 (Confirm Readiness) and 4 (System Performance Test)

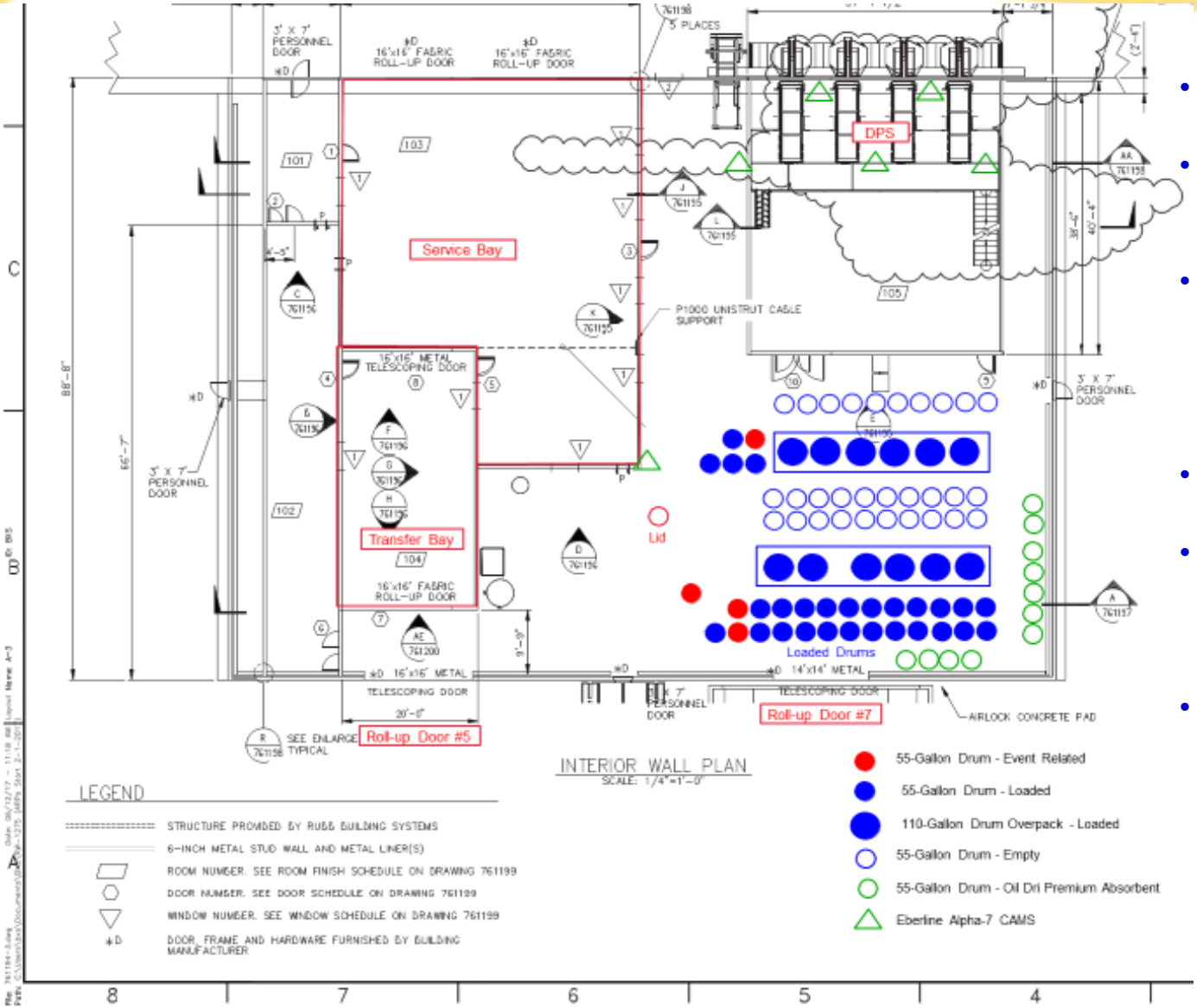
Process Off-Gas Blowers restored

Carbon Monoxide Monitors updated

Settlement Agreement TRU Production Status



ARP V Drum Incident



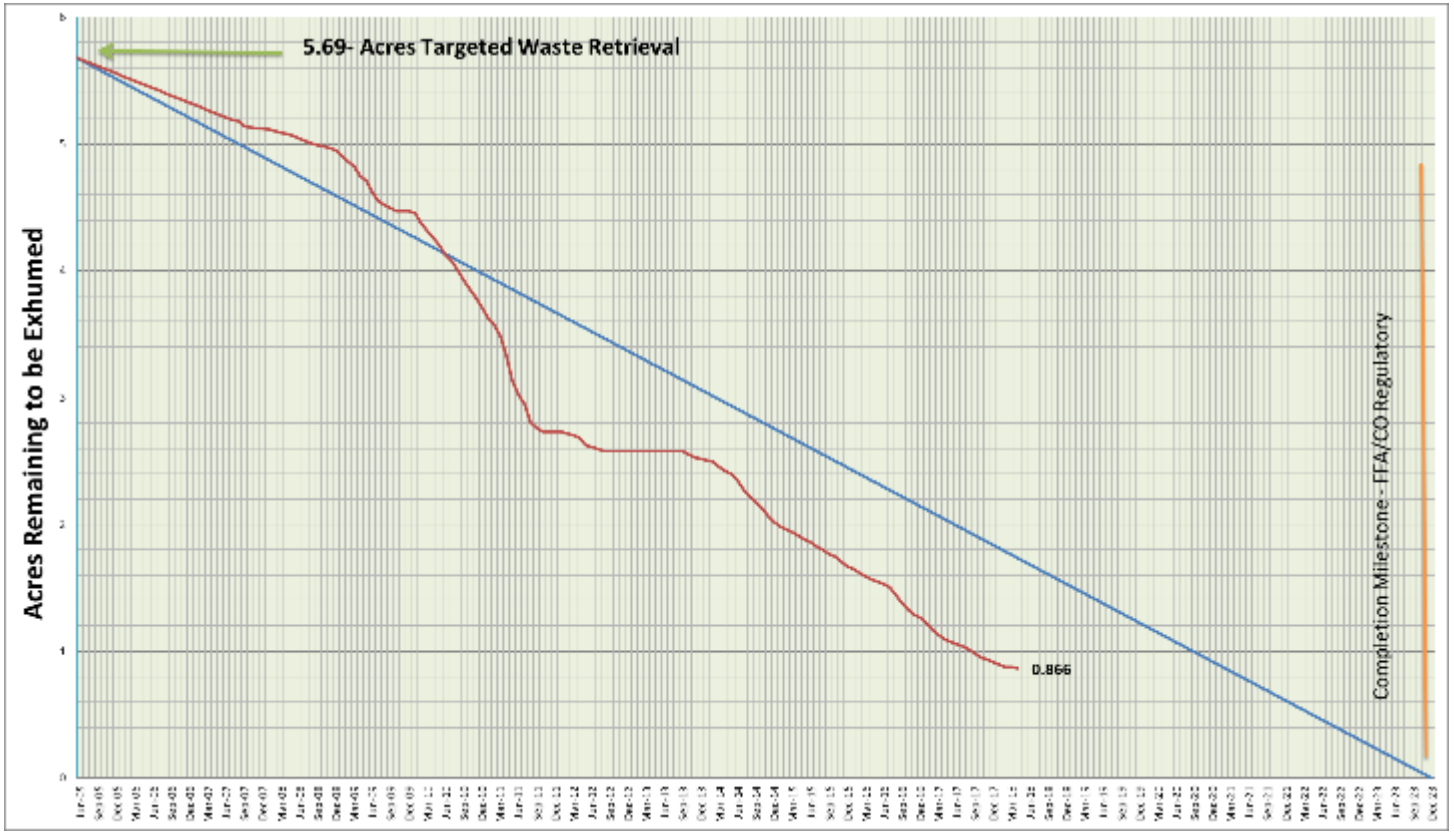
- Firefighters responded to an alarm in ARP V on April 11.
- They observed smoldering contents from a waste drum, and applied retardant.
- After exiting facility they were decontaminated and are now undergoing further testing to determine if they had internal uptakes.
- No contamination left the facility.
- Upon re-entry eight days later, three more drums were found to have their lids removed by excessive pressure.
- The waste likely originated at Rocky Flats in Colorado, and was sent to Idaho in the 1960s.

ARP V Recovery Actions

- Six entries into the area.
- Samples have been collected and shipped to Savannah River National Laboratory and Southwest Research Institute for analysis.
- Facility recovery plans have been finalized and cleanup efforts have started.
- Exhumation of potentially similar waste was suspended.

Key Scope: FY 18 Buried Waste Exhumation Performance

- Waste Exhumation (Acres) (FYTD) as of April 30, 2018
  FY-18 Target: 0.26
  FY-18 Actual: 0.114
  Buried Waste Exhumation (84.8% complete) was intentionally delayed so exhumation crews can support AMWTP ISA waste processing in the ARPs. Exhumation is on hold until it can be verified that an event similar to ARP-V is not possible. The project remains about two years ahead of the regulatory schedule.



ARP VIII Buried Waste Exhumation Grid Completions
(89.8% complete as of 4/30/18)

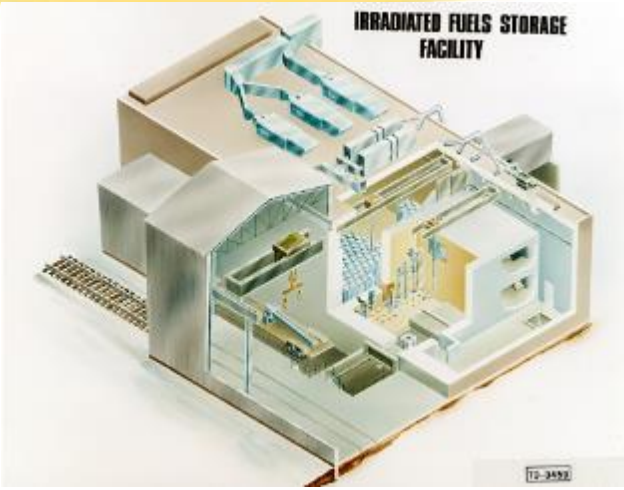
ARP IX is the last facility required to complete exhumation.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
A																													12	40	69	94	A
B																					9	37	65	94	122	151	180	208	225	225	225	210	B
C																	28	148	176	205	224	225	225	225	225	225	225	225	225	225	225	197	C
D																	36	225	225	225	225	225	225	225	225	225	225	225	225	225	225	184	D
E								3	15	27	38	50	62	74	85	97	121	225	225	225	225	225	225	225	225	225	225	225	225	225	225	171	E
F	85	157	169	181	193	204	216	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	158	F
G	122	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	145	G
H	113	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	132	H
I	104	225	225	225	225	225	225	221	211	201	191	180	170	160	150	140	130	120	110	100	90	80	69	59	71	225	225	225	225	225	225	119	I
J	28	56	46	36	26	16	6																	10	59	225	225	225	225	225	225	106	J
K			2	15	24										40	112	128	144	160	175	190	205	220	225	225	225	225	225	225	225	225	93	K
L			124	225	222	60	33	49	64	79	95	110	126	141	184	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	80	L
M			138	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	67	M
N			153	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	55	N
O			167	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	42	O
P			5	20	37	53	69	85	102	118	134	151	167	183	199	216	225	225	225	225	225	225	225	225	225	225	225	225	225	225	225	29	P
Q																	7	17	27	40	55	70	84	99	114	129	143	158	175	192	211	16	Q
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	

Remaining -SQ FT

Exhumed -SQ FT

Spent Nuclear Fuel Status



Progress continues in moving remaining spent fuel from the CPP-666 storage pools (above) into dry storage facilities like CPP-603 (right).

- DOE is on target to meet the Idaho Settlement Agreement requirement to remove all stored spent nuclear fuel from wet storage to dry by 2023.
- The transfer of 3,240 EBR-II spent fuel bottles to the Materials and Fuels Complex for treatment or dry storage is about 12 percent complete.
- The transfer of 1,000 Advanced Test Reactor fuel elements from wet storage to dry is about 19 percent complete.