

## Plutonium Finishing Plant Contamination Spread Timeline

**Updated January 11, 2017 at 6:30 a.m.**

*This version contains updates from earlier versions to include references to applicable radiological survey reports generated when sources of contamination are found as well as adjusting initial radiological readings to more accurate levels after allowing the radiation to decay for seven days to determine the presence (if any) of radon.*

- **Tuesday 11/28/17**
  - 0.45 DAC @ Fixed Air Sample (FAS) #9
  
- **Wednesday 11/29/17**
  - Cookie Sheet #47 80 dpm/100 cm<sup>2</sup> removable alpha. RSR Z-1704440
  
- **Thursday 11/30/17**
  - Cookie Sheet #36 245 dpm/100 cm<sup>2</sup> removable alpha. RSR Z-1704447
  
- **Monday 12/4/17**
  - Cookie Sheet #37 116 dpm/100 cm<sup>2</sup> removable alpha. RSR Z-1704458
  
- **Wednesday 12/6/17**
  - Cookie Sheet #48 166 dpm/100 cm<sup>2</sup> removable alpha. RSR Z-1704480
  - Cookie Sheet #49 59 dpm/100 cm<sup>2</sup> removable alpha. RSR Z-1704480
  
- **Thursday 12/7/17**
  - 0.072 DAC @ FAS #9
  
- **Saturday 12/9/17**
  - Lapels from the D&D workers assigned to the waterdog station on 12/8/17 were >1 DAC-hr. (2.98 and 1.72 DAC-hr on initial count results, 1.93 and 1.15 on 7-day decay results) RSR Z-1704498
  - Bioassay kits ordered.
  - Survey performed in the tent of the waterdog station. No contamination detected.
  
- **Monday 12/11/17**
  - Lapel from D&D worker assigned to SW Load-Out on 12/9/17 was >1 DAC-hr. (6.63 DAC-hr on initial count results, 7.72 DAC-hr on 7 day decay results). RSR Z-1704505.
  - Bioassay kit ordered.
  - 48 dpm/100 cm<sup>2</sup> removable alpha found on zoom boom in the SW RBA/RMA. Area posted as a Contamination Area. RSR Z-1704521
  
- **Wednesday 12/13/17**
  - Lapels from D&D workers assigned to the waterdog station [WD] and waste loadout [WL] on 12/12/17 were >1 DAC-hr (50.6 [WD], 15.8 5[WD], 3.01 [WL] and 2.65 [WL] DAC-hr on initial count results, with 12.01 [WD] and rest at 0.0 DAC-hr on 7-day decay results). RSR Z-1704527

- Bioassay kits ordered.
- At approximately 9:00 a.m., CHPRC management halted demolition activities before they began, brought the demolition team in from the field, launched additional surveys.
- At approximately 12:30 p.m., the Hanford Atomic Metal Trades Council issued a stop work on all demolition activities.
- Workers at the waterdog station were given whole body surveys and instructed to leave the area while investigative surveys were performed.
- Contamination surveys of the waterdog tent did not detect any contamination. RSR Z-1704538
- 3 air samples taken in the waterdog tent were all <0.30 DAC. RSR Z-1704538
- Contamination surveys performed south of the south fence discovered the following removable contamination levels:
  - 4900 dpm/100 cm<sup>2</sup> alpha direct/total contamination was detected on the BDI container along the south fence. A smear was not taken. 4200 (instrument CF = 7) dpm/100 cm<sup>2</sup> direct/total alpha and 160 dpm/100 cm<sup>2</sup> removable alpha on Jersey barrier. 1080 alpha direct/total dpm/100 cm<sup>2</sup> on air sampler lid and 1200 dpm/100 cm<sup>2</sup> direct/total alpha contamination on wood valve box SW corner. RSR Z-1704539.
  - Removable alpha contamination >20 dpm/100 cm<sup>2</sup> but <100 dpm/100 cm<sup>2</sup> measured on man lift and concrete bollard. RSR Z-1704538
- At that time the decision was made to post portions on the east and south dirt road outside of the PFP fence as a Contamination Area (CA).
- On swing shift Radiological Control Technicians (RCT) discovered removable contamination on the following (RSR Z-1704541):
  - Cookie Sheet #78 419 dpm/100 cm<sup>2</sup> removable alpha
  - Light plant near Cookie Sheet #78 546 dpm/100 cm<sup>2</sup> removable alpha
  - Black pipe near Cookie Sheet #78 250 dpm/100 cm<sup>2</sup> removable alpha
  - A spider box had total contamination of 3521 dpm/100 cm<sup>2</sup> alpha and 3950 dpm/100 cm<sup>2</sup> beta/gamma. A smear was not taken initially, but RCT returned later with appropriate PPE and measured 1203 dpm/100 cm<sup>2</sup> removable alpha.
- On swing shift RCTs discovered removable contamination on the following (RSR Z-1704521):
  - Light Plant outside the SW fence 65 dpm/100 cm<sup>2</sup> removable alpha
  - Exterior surface of Port-O-Let, south of the south fence, 158 dpm/100 cm<sup>2</sup> removable alpha
  - Electrical box south of the south fence 240 dpm/100 cm<sup>2</sup> removable alpha
- The CA along the south fence was extended west to encompass the Port-O-Let, electrical box, and SW light plant.
- A CA was established along the inside of the west fence and around the light plant near Cookie Sheet #78.
- When the contamination was discovered near Cookie Sheet #78 the RCT checked their boots and had counts above background for alpha and beta/gamma. Both boots had direct contamination with the highest being 2370 dpm/100 cm<sup>2</sup> alpha. No removable contamination. The boots were bagged and tagged as radioactive material. The RCT was given a whole body survey with no other contamination detected.

- Most of the smears documented here were analyzed in the alpha spec and confirmed to have counts within the region of interest for plutonium (Pu) and americium (Am).
- **Thursday 12/14/17**
  - RSR Z-1704549
    - Wood box near CAM35 had 4725 dpm/100 cm<sup>2</sup> total alpha (not smeared)
    - Dirt near Cookie Sheet #78 had 1932 dpm/100 cm<sup>2</sup> total alpha (not smeared)
    - Wood electrical cover (for walking driving/over) 2205 dpm/100 cm<sup>2</sup> total alpha (<20 dpm/100 cm<sup>2</sup> removable alpha)
  - Surveys performed in occupied trailers and on vehicles east of Material Balance Area (MBA)—all trailers and vehicles cleared. Some contamination was reported but later decayed. Steps of MO-011 were removed/replaced due to 4200 dpm/100 cm<sup>2</sup> total alpha contamination detected (instrument CF = 7), RSR Z-1704545.
  - Large area radiological survey team dispatched to survey south and west of MBA. During RCT follow-up surveys south of road outside MBA that was posted CA, RCTs found 10,000 dpm/100 cm<sup>2</sup> transferable alpha; RSR Z-1704640. Workers removed themselves from the area, surveyed clear and nasals were <Decision Level (DL). Area posted High Contamination Area (HCA), surrounding desert and access road posted Soil Contamination Area (SCA).
  - Extended CA east of the MBA fence due to prior contamination on Cookie Sheets #47, #48 and #49
  - Radiological Buffer Area (RBA) inside MBA that encompassed south load out area and southwest corner was extended to the north to meet the north road near CAM37
  - 4:30 p.m.: Stop work lifted with the following conditions: (1) only one demolition activity with only those needed in attendance; (2) move center east dust destroyer; (3); Area where water dog operated/located, south and east, was reposted as a CA/Airborne Radioactivity Area (ARA). Personal Protective Equipment (PPE) modified as single set with powered air purifying respirator (PAPR) with air samplers and RCT support.
  - 5:00 p.m.: 43 bioassays requested from CHPRC employees.
  - Swing shift: RCTs perform routine surveys. No cookie sheet or air sample anomalies were reported. No notification of any issues.
- **Friday 12/15/17**
  - 6:45 a.m.: Pre-job begins
  - 9:00 a.m.: The RL Manager sent the CHPRC President an email requesting a meeting on PFP
  - Approximately 9:00 a.m., demolition began
  - 10:30 a.m., Rates of rise noted on CAMs as follows
    - CAM 4A at 10.7 DAC-hr (inner CAM; set at 80 DAC-hr)
    - CAM 6 at 5.7 DAC-hr (inner CAM; set at 24 DAC-hr)
    - CAM 7 at 2.2 DAC-hr (inner CAM; set at 24 DAC-hr)
    - No boundary CAMs (set at 8 DAC-hr) reported to be greater than 1 DAC-hr
  - Applied fixative; changed filters on CAMs 4A, 6, 7
    - CAM 4A had 5 and 7 MeV peaks (indicating radon)
    - CAM 4A stabilized at 2.2 DAC-hr after filter changed

- 10:30 a.m.: Contamination found on two government vehicles southeast of MBA fence. RSR Z-1704557
    - Dodge pickup windshield 860 dpm/100 cm<sup>2</sup>
    - Dodge minivan hood 390 dpm/100 cm<sup>2</sup>
    - Vehicles moved into CA east of RMA-044
  - 4 RCTs and 1 Radiological Control First Line Manager (RCFLM) received nasal smears
    - All showed no contamination
  - Several cookie sheets were surveyed mid-day.
    - Contamination was initially found at HCA levels on several cookie sheets in the CA/ARA along the south and east MBA fence but decayed to CA levels (highest was 1800 dpm/100 cm<sup>2</sup>)
  - Approximately 1:30 p.m., demolition restarted
  - Approximately 4:00 p.m., demolition of PRF walls was completed
  - Swing shift survey of Cookie Sheet #S75 had 626 dpm/100 cm<sup>2</sup> (Cookie Sheet #75 located outside posted CA). RSR Z-1704558
  - Investigative surveys performed of surrounding items and area. RSR Z-1704558
    - Suburban (government vehicle) hood 13,600 dpm/100 cm<sup>2</sup>
    - Jersey barriers
      - Southeast of MO-2114; 210 dpm/100 cm<sup>2</sup> removable alpha.
      - Stanchion near MO-2120 7200 dpm/100 cm<sup>2</sup> total alpha.
    - BDI can north of MO2120; 34 dpm/100 cm<sup>2</sup> removable.
    - MO-2114 south stairs; 116 dpm/100 cm<sup>2</sup> removable.
      - Resurvey of south stairs <500 dpm/100 cm<sup>2</sup> total and <20 dpm/100 cm<sup>2</sup> removable.
    - HCA/ARA posted around MO-2114, MO-2115, MO-2116, & MO-2120.
  - Crew attempted to notify RadCon manager by phone
  - Crew ended shift with email to RadCon management
- **Saturday 12/16/17**
    - 9:00 a.m.: Duty Radiological Control Manager (DRCM) called PFP Radiological Control Manager (RCM); PFP RCM dispatched crews to arrive early Sunday, Dec. 17 (2:00 a.m.).
    - Scheduled day off. No activities took place.
  - **Sunday 12/17/17**
    - 1:30 a.m.: RCTs perform investigatory surveys of trailer village. RSR Z-1704560
    - MO-2114 interior surveys, no contamination detected and is ready to be released. No contamination detected on stairs.
    - 3:15 a.m.: PFP RCM directs RCFLM to barricade trailer village parking lot to prevent vehicle parking in this location.
    - 6:15 a.m.: Morning meeting; PFP Shift Operations Manager (SOM) and DOE Facility Representative in attendance. PFP RCM updates attendees on current radiological conditions.
    - All air samples at trailer village were less than 0.30 DAC-hr (ARA posting value)

- MO-2116 interior surveys, no contamination detected and is ready to be released. Stairs, no contamination detected.
  - 9:00 a.m.: CHPRC Manager declares stop work at PFP. Access to 4 trailers reestablished, no airborne radioactivity detected.
  - 11 a.m.: email confirming discovery of contamination spread sent to RL FPD and CHPRC President; crew discovered it on 12/15/17, took appropriate actions but did not effectively communicate facility conditions.
  - An occurrence report was initiated.
  - Jersey barrier between MO-2114 and MO-2116 1800 dpm/100 cm<sup>2</sup> alpha, direct no beta/gamma, 40 dpm/100 cm<sup>2</sup> alpha removable.
  - FAH #40, the flat area, 2000 dpm/100 cm<sup>2</sup> alpha direct, 800 dpm/100 cm<sup>2</sup> alpha removable.
  - The asphalt between MO-2114 and MO-2115 spotty areas with contamination ranging from 600 - 17,000 dpm/100 cm<sup>2</sup> alpha direct. The removable contamination was <20 dpm/100 cm<sup>2</sup> alpha. Areas were marked with duct tape. The 17,000 dpm/100 cm<sup>2</sup> alpha direct also had 10,000 dpm/100 cm<sup>2</sup> beta/gamma.
  - South of MO-2120 100 dpm/100 cm<sup>2</sup> removable alpha about a foot outside the boundaries, but decayed to <20 dpm/100 cm<sup>2</sup>.
  - Additional team brought in to survey
    - Kubota surveyed inside MBA along north road and surrounding areas.
    - RCTs surveyed areas flagged by mobile equipment; no contamination found.
    - John Deere tractor surveyed areas outside north and west MBA fence; no contamination found.
    - John Deere tractor and Kubota surveyed around trailer village and parking lots; no contamination found.
    - RCT found one spot at northwest corner of MO-2506 15,000 dpm/100 cm<sup>2</sup> alpha direct, 15,000 dpm/100 cm<sup>2</sup> alpha removable.
  - PRF rubble was covered in dirt to stabilize the area. Fixative/soil cement was applied on top of the dirt.
  - The 200 West Area of the Hanford Site experienced winds of up to 40 miles an hour.
- **Monday 12/18/17**
    - 8:00 a.m.: Critique held
    - Placed second lift of soil, followed by soil cement, on PRF debris pile
    - Additional surveys were performed around mobile trailers.
      - Spots of contamination were found and marked.
      - Paint was applied to the identified areas.
    - 9:50 a.m.: PRF demo south during job CAM (12/17/17 ON: 1245; OFF 1640) G-Z-1704561-1 counted, Total DAC = 0.105.
    - 9:53 a.m.: .PRF demo south CAM 4A (12/17/17 ON: 1245; OFF: 1637) G-Z-1704561-2 counted , Total DAC = 0.088
    - Early afternoon RSR Z-1704565:
      - 12,000 dpm/100 cm<sup>2</sup> direct alpha contamination found outside MO-2118 during follow-up surveys.
      - 2,000 dpm/100 cm<sup>2</sup> removable contamination was found on one worker's boot contaminated outside MO-2118.

- Operations immediately locked down all trailers for additional surveys.
  - RCTs went trailer to trailer in the afternoon surveying personnel and inside of trailers. No contamination was found on personnel or inside the trailers.
  - Trailers and parking lot north of 19<sup>th</sup> Street were surveyed and no contamination was found.
  - Paths were surveyed connecting mobile trailers to the parking lots.
    - Personnel were released trailer by trailer at the end of day shift and given clear paths to the parking lots.
    - Where paths had not been surveyed clear (MO-2114 - MO-2117 and MO-2120) personnel donned booties and were escorted by RCTs to the parking lots and surveyed.
  - 2:50 p.m.: RL sent notification of the contamination spread to DOE-HQ.
  - 3:51 p.m.: RL sent DOE-HQ an update notification advising that no emergency had been declared. This was to clarify erroneous media reports.
  - By approximately 6:00 p.m., personnel left the area and surveys were resumed wearing modified PPE with PAPR.
  - Swing shift found the following levels on Cookie Sheet #74 east of MO-2118, RSR Z-1704569:
    - Removable: 12,700 dpm/100 cm<sup>2</sup> alpha and 1870 dpm/100 cm<sup>2</sup> beta/gamma
  - Area around mobile trailers from MO-2120 and MO-2123 on the south and MO-2118 and MO-290 on the north was posted CA.
    - MO-244 was posted Radiological Buffer Area (RBA)/Radioactive Material Area (RMA).
  - Three government vehicles and one personal vehicle near north of 2754W were found to be contaminated (up to 8000 dpm/100 cm<sup>2</sup> removable alpha and 10,000 dpm/100 cm<sup>2</sup> total alpha). RSR Z-1704581
    - Area around these vehicles was posted HCA/ARA.
  - Several spots of direct contamination were found and painted around 2754W.
    - Area around 2754W was roped off to control access.
  - Two spots of 700 - 2100 dpm/100 cm<sup>2</sup> total alpha (RSR Z-1704568 in north parking lot (SW area) were painted and marked with a cone—cleanup up with shovel and bucket 12/19/17
  - 5:30 p.m.: RL Manager letter to CHPRC President on CHPRC work authorization
  - 7:28 p.m.: Principal Deputy Assistant Secretary sent notification to Capitol Hill that management stopped work at PFP
  - Informed all PFP employees, except RCTs, to gather in 200E area 2268 on 12/19
  - Personal Vehicles: Six identified contaminated; three cleared (Total of 6 = 3 found, 3 cleared)
- **Tuesday 12/19/17**
  - 6:41 a.m.: RL Manager email sent to DOE-HQ that no contractor work at PFP is authorized except contamination surveys and contamination control
  - DOE established the Information Center in 2420 staffed by DOE and CHPRC
  - 7:37 a.m.: Counted air sample near MO-244 from 12/18/17 (On: 2304; Off:2314) <DL
  - 26 lapels for 12/15/17, highest lapels were two @ 0.84 DAC-hr, one @ 0.38 DAC-hr, and two @ 0.17 DAC-hr (two at 0.17 DAC-hr later decayed to 0.0 DAC-hr). These lapels were counted

- with a Protection Factor (PF) of 1 with no respiratory protection. All other lapels with PF of 1000 applied for PAPRs worn were 0.00 DAC-hr.
- 8:43 a.m.: Teamsters LAG yard entry with RCTs to spot check, accessing for supplies (e.g., booties and gloves etc.).
  - 9:00 a.m.: Discussed Kubota survey of 212Z and Lag yard.
    - John Deere tractor dispatched to Camden and 19<sup>th</sup> streets
  - 9:39 a.m.: Blocked Camden at south entry to allow mobile equipment surveys to proceed unimpeded.
  - 9:40 a.m.: MO-2754 Jersey barriers along Camden. RSR Z-1704572
    - 1200 dpm total alpha, <20 dpm/100 cm<sup>2</sup> removable alpha, <DL beta/gamma
  - 9:53 a.m.: Between MO-244 & MO-011 on the sidewalk RSR Z-1704574
    - 8890 dpm total dpm/100 cm<sup>2</sup> alpha, <20 dpm/100 cm<sup>2</sup> removable alpha/5400 dpm/100 cm<sup>2</sup> total beta, <1000 dpm/100 cm<sup>2</sup> removable beta
  - 10:00 a.m.: Sidewalk West of MO-244 RSR Z-1704574
    - 930 dpm/100 cm<sup>2</sup> total alpha, 30 dpm/100 cm<sup>2</sup> removable alpha (decayed to <20 dpm/100 cm<sup>2</sup>), <5000 dpm/100 cm<sup>2</sup> total beta, <1000 dpm/100 cm<sup>2</sup> removable beta
    - 8170 dpm/100 cm<sup>2</sup> total alpha, <20 dpm/100 cm<sup>2</sup> removable alpha, <5000 dpm/100 cm<sup>2</sup> total beta, <1000 dpm/100 cm<sup>2</sup> removable
    - 5530 dpm/100 cm<sup>2</sup> total alpha, <20 dpm/100 cm<sup>2</sup> removable alpha, <5000 dpm/100 cm<sup>2</sup> total beta, <1000 dpm/100 cm<sup>2</sup> removable beta
  - 10:10 a.m.: MO2118 RSR Z-1704573
    - <500 dpm/100 cm<sup>2</sup> total alpha, <20 dpm/100 cm<sup>2</sup> removable alpha, <5000 dpm/100 cm<sup>2</sup> total beta, <1000 dpm/100 cm<sup>2</sup> removable beta
  - 10:28 a.m.: Checked previously marked areas around MO-2120 and MO-2123 and found no detectable alpha or beta contamination
  - 10:38 a.m.: MO-2118
    - All tech smears of landing, door and wall E side of MO-2118, <20 dpm/100 cm<sup>2</sup> removable alpha
  - 10:40 a.m.: RSR Z-1704572.: Flagpole near MO-2754, 13,500 dpm/100 cm<sup>2</sup> total alpha, <20 dpm/100 cm<sup>2</sup> removable alpha, <1000 dpm/100 cm<sup>2</sup> total beta, <1000 dpm/100 cm<sup>2</sup> removable beta
  - 12:05 p.m.: MO-2754
    - Crew off mask <20 dpm/100 cm<sup>2</sup> removable alpha on all smears
    - MO-2110 and MO-2118 Staplex = 0.011 DAC
  - 12:25 p.m. Priorities
    - Apply fixative to 236-Z and 234-5Z
    - Cookie Sheets and collect Air Samples
    - Decon/survey personal vehicles
    - Survey area west of MBA fence
  - 1:11 p.m.: CHPRC Chief of Staff email indicating CHPRC Manager briefing was circulated among WRPS employees
  - 1:25 p.m.: PFP decided to pull survey team from trailer village; focus was applying fixative south of 234-5Z; no airborne contamination identified.

- 2:03 p.m.: CHPRC Manager email indicating no contamination detected on surveys on Camden Ave. and 19<sup>th</sup> St.
  - 2:46 p.m.: documents emailed to Defense Nuclear Facility Safety Board (DNFSB) Hanford Site Representative: timeline, OA report, air sample data, CHPRC condition report form, maps and boundaries
  - 3:12 p.m.: RL email to WDOH informing that a field radiological survey of their sampler and filter housing was performed after the sampling activity to compare before it is sent off to the lab for radon decay measurements. In summary, nothing abnormal.
  - 4:00 p.m.: CHPRC Manger and RL Manager interview with *Tri-City Herald*
  - End of Day: 173 requests for bioassays 48 CHPRC employees, 73 WRPS employees and 52 MSA employees
  - 6:06 p.m.: Personal home radiological surveys begin
  - 10:48 p.m.: Personal home radiological surveys end for the day (2 of 5 homes cleared)
  - Personally Owned Vehicles (POV): Additional POVs discovered, cleared 3 POVs (Total of 7 = 6 found, 1 remaining to be cleared. That vehicle was discovered Monday and has never left the site. It has been sequestered for later clearance.)
  - Government Vehicles: Seven total vehicles currently controlled and awaiting decontamination
- **Wednesday 12/20/17**
    - 9:45 a.m.: Survey teams deployed to three remaining personal residences
    - 10:45 a.m.: 211 requests for bioassays 56 CHPRC employees, 80 WRPS employees and 75 MSA employees.
    - 11:15 a.m.: CHPRC Manager email confirms no additional contamination found, confirmatory surveys underway.
    - 11:30 a.m.: CHPRC Manager and RL Manager update Congressional Committee staff.
    - 1:30 p.m.: Additional home requested to be surveyed (total of 7).
    - 3:35 p.m.: Confirmed six of seven homes surveyed with no contamination found.
    - 4:00 p.m.: RL and CHPRC Managers conduct additional media interviews.
    - 4:30 p.m.: CHPRC/DOE-RL employee communications issued regarding vehicle surveys.
    - 4:52 p.m.: Confirmed seven of seven homes surveyed with no contamination found.
    - 6:38 p.m.: Confirmed Ben-Franklin Transit van (used by ride-share employees for commuting to PFP) surveyed with no contamination found.
  - **Thursday 12/21/17**
    - 10:56 a.m.: CHPRC issued a stop work on the use of government vehicles driven in the vicinity of the PFP between 12/15 and 12/18 until radiological surveys are completed of the vehicle
      - As of 1:30 p.m., four government vehicle surveys complete with none found contaminated
    - 11:30 a.m.: Surveys underway on voluntary personal vehicle surveys
      - As of 1:30 p.m., nine personal vehicle surveys complete with none found contaminated
    - 12:21 p.m.: Confirmed 4,000 gallons of fixative applied to PRF rubble pile and surrounding area

- 2:30 p.m.: Confirmed survey of burial grounds west of PFP; no contamination found
- 3:24 p.m.: Confirmed survey of 31 government vehicles and 17 personal vehicles on 12/21; no contamination found
- 5:00 p.m.: Confirmed survey 63 government vehicles and 19 personal vehicles with no contamination found
  - CHPRC lifted stop work on the use of government vehicles driven near PFP, with the exception of PFP-controlled government vehicles.
- **Friday 12/22/17**
  - As of 12:00 p.m.:
    - No additional contamination discovered
    - Applied an additional 18,000 gallons of fixative on contaminated and potentially-contaminated surfaces
    - 257 total requests for bioassays
      - MSA: 102; WRPS: 86; CHPRC: 69
  - One contaminated personal vehicle remains segregated at PFP awaiting decontamination; the other six contaminated vehicles were released to their owners by 12/19.
  - U.S. Senators Maria Cantwell and Patty Murray sent a letter to Acting Assistant Secretary for Environmental Management, regarding the recent events at PFP.
- **Saturday 12/23/17**
  - Surveys discovered one Cookie Sheet #63 (inside the demolition boundary HCA/ARA) had contamination on it, but it decayed away, indicating the presence of radon.
  - Air monitors remained stable.
  - Surveys of additional PFP controlled government vehicles began.
    - Two additional vehicles were found contaminated, in addition to the previous seven vehicles found contaminated immediately after the Dec. 15 contamination spread.
    - One vehicle was decontaminated and released for use.
    - All PFP-controlled government vehicles remained controlled.
- **Sunday 12/24/17**
  - No scheduled work at PFP because conditions remained stable.
- **Monday 12/25/17**
  - No scheduled work at PFP because conditions remained stable.
- **Tuesday 12/26/17**
  - Snow from 12/24/17 presented a challenge for radiological surveying. Surveys were only conducted in areas outside of the Airborne Radioactivity Area (ARA) and High Contamination Area (HCA) where anti-contamination clothing is not required. Such clothing presents a slip-and-fall hazard on ice and snow.
    - No contamination was discovered.
  - Crews focused on snow removal; applying fixative over snow would create slippery and unsafe conditions.
- **Wednesday 12/27/17**
  - Crews continued routine radiological surveys, with no additional contamination discovered.

- Crews continued surveys of PFP controlled government vehicles:
    - 91 total PFP controlled government vehicles at PFP
    - 46 total PFP controlled government vehicles surveyed
      - 1 decontaminated and returned to service
      - 13 contaminated and awaiting disposition (decontamination or radon decay)
      - 32 no contamination found
    - 45 total PFP controlled government vehicles at PFP remaining to be surveyed
  - Conducted interior survey of Office of River Protection (ORP) controlled government vehicle after exterior survey on 12/21/17 did not find contamination. No contamination found on interior of ORP controlled government vehicle.
  - Decontaminated the last of the seven original POVs found contaminated; released to its owner.
- **Thursday 12/28/17**
    - The Hanford Site was closed due to forecasted adverse weather conditions.
  - **Friday 12/29/17**
    - Work scheduled at PFP for Dec. 29 was cancelled due to forecasted ice and snow.
  - **Saturday 12/30/17**
    - Snow and freezing rain continued to present a challenge to crews performing radiological surveys.
    - No contamination was detected (on the 35 cookie sheets outside of HCA/ARA and are safe to access in the snow)
    - Low-level contamination was found on a table located in the west side demolition zone Radiological Buffer Area as of 4:00 p.m. PST 12/30/17. The contamination was isolated to a small area (~1 sq. ft.) and was immediately controlled. Surveys of the adjacent area and personnel identified no spread of contamination.
    - Tallied new requests for bioassays from over the Christmas holiday:
      - 259 total requests for bioassays
        - MSA: 103; WRPS: 87; CHPRC: 69
    - At the request of a PFP employee, a radiological survey was conducted on one personal vehicle on Dec. 30. No contamination found; vehicle returned to owner.
    - Due to snow and freezing rain continuing to present a challenge and safety concerns, government vehicle radiological surveys were postponed until the next scheduled working day, 1/2/18.
  - **Sunday 12/31/17**
    - No work was scheduled
    - RCTs conducted routine surveys of cookie sheets with no contamination found.
  - **Monday 1/1/18**
    - No work was scheduled
  - **Tuesday 1/2/18**
    - CHPRC held a safety pause, consisting of briefings for all employees, to refocus on safety and conduct of work.

- Crews applied additional fixative to the PRF debris pile and surrounding areas of demolition zone.
  - 35 cookie sheets located outside of HCA/ARA were deemed safe to access in the snow and ice. One of the 35, located in a posted Contamination Area, had low-level contamination.
  - Talled new requests for bioassays from over the New Year holiday:
    - 262 total requests for bioassays
      - MSA: 104; WRPS: 87; CHPRC: 71
  - Continued surveys of PFP controlled government vehicles:
    - 91 total PFP-controlled government vehicles at PFP
    - 53 total PFP-controlled government vehicles have been surveyed
      - 1 decontaminated and returned to service
      - 13 contaminated and awaiting disposition (decontamination or radon decay)
      - 39 no contamination found
    - 38 total PFP controlled government vehicles at PFP remaining to be surveyed
  - United Steel Workers (USW) Local 12-369 sent a letter offering radiation detection equipment to union members for personal use.
- **Wednesday 1/3/18**
    - 46 cookie sheets were surveyed
      - One cookie sheet with low-level contamination was located on the eastside of the MBA fence in a posted High Contamination Area
      - One cookie sheet was found with low-level fixed contamination on the northwest side of the MBA fence
    - Additional fixative was applied to the PRF rubble pile and surrounding areas of the demolition zone.
    - Department of Energy Undersecretary for Science visited PFP for a briefing on the contamination spread and recovery efforts.
    - Received two additional requests for bioassays, for a total of 264:
      - MSA: 104; WRPS: 89; CHPRC: 71
  - **Thursday 1/4/18**
    - 60 cookie sheets surveyed during swing shift with no contamination found.
    - Continued surveys of PFP controlled government vehicles:
      - 91 total PFP controlled government vehicles at PFP
      - 68 total PFP controlled government vehicles have been surveyed
        - 1 decontaminated and returned to service
        - 14 contaminated and awaiting disposition (decontamination or radon decay)
        - 53 no contamination found
      - 28 total PFP controlled government vehicles at PFP remaining to be surveyed
    - Received three additional requests for bioassays, for a total of 267:
      - MSA: 105; WRPS: 91; CHPRC: 71
  - **Friday 1/5/18**
    - 46 cookie sheets surveyed during day shift and all 60 surveyed during swing shift with no contamination found.
    - Continued surveys of PFP controlled government vehicles:

- 91 total PFP controlled government vehicles at PFP
    - 78 total PFP controlled government vehicles have been surveyed
      - 1 decontaminated and returned to service
      - 14 contaminated and awaiting disposition (decontamination or radon decay)
      - 63 no contamination found
    - 23 total PFP controlled government vehicles at PFP remaining to be surveyed
  - RL sent a letter to CHPRC reiterating the sole focus at the PFP should be ensuring the health and safety of the workforce and site stabilization. No demolition work is to be done without RL concurrence.
- **Saturday 1/6/18**
  - 46 cookie sheets surveyed during day shift and all 60 surveyed during swing shift with no contamination found.
- **Sunday 1/7/18**
  - Installed barricades and signage to support expanded work control zone surrounding the PFP to limit access to only government vehicles and personnel granted permission through the PFP shift office.
  - Issued all-site communication announcing the expansion of the work control zone.
  - Directed all PFP employees to report to a conference room in 200E area of the Hanford Site on 1/8 for a pre-job briefing.
- **Monday 1/8/18**
  - PFP management held a pre-job briefing for all PFP employees to explain expectations for the new work control zone.
  - CHPRC announced the current Vice President for CHPRC's Waste and Fuels Management Project, as the PFP Recovery Manager to assist the PFP leadership team in understanding and recovering from the recent contamination spread.