## Plutonium Finishing Plant (PFP)

**Timeline of Contamination Spreads, Surveying of Areas and Workers, and Safety Controls**

Issued by: CH2M HILL Plateau Remediation Company and the Department of Energy’s Richland Operations Office on December 20, 2017

(This document is current as of 2:30 p.m., December 20, 2017)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Friday 12/8/17</td>
<td>- During demolition of the Plutonium Finishing Plant (PFP), located in the 200 West Area of the Hanford Site’s Central Plateau, elevated readings were found on contamination-monitoring lapels worn by two employees performing remote-operated water suppression at the southeast corner of the PFP demolition zone.</td>
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| Saturday 12/9/17 | - An elevated reading was detected on a lapel monitor worn by one employee performing waste removal activities in a tent within a controlled Contamination Area (CA).  
- Radiological Control Technicians (RCTs) performed surveys in the tent for the water-suppression station. No contamination was detected. |
| Tuesday 12/12/17 | - Elevated levels were found on lapel monitors worn by four employees conducting waste removal and remote water suppression; the levels on three of the monitors then decayed to less-than-detectable measurements because the material detected was naturally occurring radon. |
| Wednesday 12/13/17 | - When notified of the lapel monitor detections, CHPRC management stopped demolition work (enter time in PST). A short time later a Hanford Atomic Metal Trades worker called a stop work.  
- Whole body radiological surveys were performed on workers at the water suppression tent, while RCTs performed additional surveys to determine if there was any contamination. No contamination was detected.  
- Surveys of the tent and water supply system did not detect any contamination.  
- Surveys were performed along a southern fence line and detected contamination on a dumpster, water box, and a man lift.  
- On swing shift, the RCTs continued surveys and discovered removable contamination at the northeast equipment area in a controlled radiological buffer area.  
- Management expanded the contamination area to include areas where elevated lapel monitor readings had been recorded.  
- Upon completion of surveys, one RCT discovered contamination on one of his boots. The boots were tagged as radioactive material. The RCT was given a whole body survey, which yielded no additional contamination detection. |
| Thursday 12/14/17 | - Additional surveys were performed in occupied trailers and on vehicles at PFP. All trailers and vehicles were cleared with no additional detections.  
- Management extended the Contamination Area.  
- Stop Work lifted by worker and management based on additional radiological controls |
| Friday 12/15/17 | |
- Final demolition on walls of PFP’s Plutonium Reclamation Facility (PRF) began at 9:30 a.m., with all established safety controls, and was completed at 4:00 p.m.
- No radiological monitoring systems indicated abnormal conditions outside the established control areas.
- Swing shift workers surveyed areas following demolition of PRF and found contamination at a stationary, passive monitoring point (known as a cookie sheet), located northeast and outside of established control areas.
- Additional surveys were performed in that area; they detected contamination at/on the following (workers then secured them):
  - Hood of one vehicle
  - Jersey barrier
  - Near mobile office trailers
  - On the stairs of an office trailer
  - Dumpster near an office trailer

**Saturday 12/16/17**
- Scheduled day off. No activities took place.

**Sunday 12/17/17**
- CHPRC project management was notified that the swing crew had discovered contamination on 12/15/17
- CHPRC initiated an occurrence report to notify DOE Richland Operations Office (RL) of levels detected on Friday swing shift.
- CHPRC called a stop work on demolition activities
- RCTs conducted surveys at posted office trailers and measured no contamination. They conducted large-area surveys to east, south and north of PFP, and of parking areas and PFP’s mobile office village. No removable contamination was found outside posted contamination area.
- PRF debris was covered with soil for stabilization. A fixative known as soil cement was applied on top of the soil.
- Heavy winds were reported in the area throughout Sunday night and early Monday morning.

**Monday 12/18/17**
- A second layer of soil and soil cement were placed on the PRF debris.
- Two vehicles that had been parked near a trailer on Friday, 12-15, were discovered, surveyed, and found to have contamination on hoods.
  - Both were decontaminated and released from the area
- Additional surveys were performed around and between mobile trailers at PFP.
  - Several spots of non-removable contamination were found and marked as areas to affix and cover.
- The shift manager directed all PFP employees to stay in offices while surveys of the trailer village were performed.
- A spot of removable contamination was found outside of a trailer during surveys.
- RCTs went trailer-to-trailer, conducting surveys of workers and insides of trailers, and in a nearby parking lot. No contamination was found.
- They surveyed paths between trailers and parking areas.
- Personnel were released, and all personal vehicles leaving the site were surveyed.
- Surveys were resumed in trailer areas.
- Soil cement was applied to areas around trailers and toward PRF debris pile.
- Crews were directed to begin twice-per-day checking of all cookie sheets.
- Information on the situation was provided to employees and the media.

**Tuesday 12/19/17**
- Surveying of areas around PFP, entry and exit roads, main roads, and trailer areas
- PFP project employees were relocated temporarily to another mobile office.
- So far, 173 workers have requested a bioassay, which requires a fecal sample.
- As of Tuesday, five employees who drove their vehicles home had been offered surveys of their homes.
- Soil cement was again applied around trailers at PFP, up to the PRF debris pile, and to the third-story filter rooms of PFP’s Main Processing Facility, which is also under demolition.

**Wednesday 12/20/17**
- Surveys continued in the vicinity of the PFP
- Two additional employees have requested home surveys, which are pending.