Radioactive Contamination Found on “Clean” Vehicles from Hanford Facility

Seattle, WA: A Hanford watchdog group and a scientist today released findings showing 2 out of 5 vehicle filters from vehicles parked at Hanford’s Plutonium Finishing Plant (PFP) that had been tested and released as “clean” in fact contained radiological contamination.

Hanford Challenge collected the filters from Hanford sources and sent them to be analyzed by Dr. Marco Kaltofen, President of Boston Chemical Data Corp, and an affiliate research engineer at Worcester Polytechnic Institute’s Nuclear Science and Engineering Program. The collection took place in the communities of Richland and Pasco, Washington.

The two filters that were determined to have contamination were from two separate vehicles, and contained americium-241. Americium-241 is a highly radioactive element that can be dangerous when ingested and can cause severe illnesses. Since it is not found naturally in the environment, there is little chance that the source of the americium is other than Hanford.

“Americum is a rare radioactive element, and does not belong in anybody’s engine compartment,” said Tom Carpenter, Executive Director of Hanford Challenge. “The fact that vehicles were checked and released to these workers, only to find that they were still contaminated, raises disturbing questions about the credibility of Hanford’s program.”

Dr. Kaltofen said that, “Our initial testing has found that Hanford may be allowing radioactive dusts to leave the Hanford site. Even if the radioactive dust particles we’ve found are microscopic, they could still affect people’s health.”

Hanford Challenge and Dr. Kaltofen are moving on to the next phase of their study in order isolate and photograph any remaining plutonium or americium particles in the vehicle filters.

According to the EPA, americium-241 emits alpha particles, and “poses a significant risk if enough is swallowed or inhaled. Once in the body, americium tends to concentrate primarily in the skeleton, liver, and muscle. It generally stays in the body for decades and continues to expose the surrounding tissues to radiation. This may eventually increase a person’s chance of
developing cancer, but such cancer effects may not become apparent for several years. Americium, however, also can pose a risk from direct external exposure.” July 2002 EPA Factsheet. The half-life of americium-241 is 432 years. It takes ten half-lives for a radioactive element to be considered harmless.

Carpenter said, “The owners of these vehicles are devastated and scared about the health of their families. These vehicles were used by their families, to carry groceries, and to go to and from work. The worry and concern that they have to live with now is gut-wrenching.”

The vehicles had been parked at the plutonium facility, which is being torn down, and driven home by workers. There have been multiple releases of plutonium and americium particles from the facility in 2017 outside the control boundaries, resulting in dozens of workers ingesting plutonium.

Hanford has reported that dozens of vehicles were contaminated in the most recent plutonium/americium releases in December 2017. Seven of those vehicles were private vehicles. Hanford management has said that the vehicles were decontaminated and returned to the workers. One of those contaminated and then declared clean was re-checked at the worker’s insistence. Two more spots of contamination were then detected, according to a February 5, 2018 daily report made public by Hanford.

Multiple stop works have been called at the Plutonium Finishing Plant over the last few months, including this morning in which a stop work was called on the use of PFP project government vehicles until further verification surveys for contamination are performed. The focus of these surveys will be on cabin filters and vehicle interiors.

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Links:

Hanfordchallenge.org

Link to Hanford website

Link to Washington State Department of Health Rad Protection