

Hanford Challenge

March 25, 2019

Daina McFadden
Washington Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354

Re: Comments on Perma-Fix Northwest's proposed expanded scoping for a SEPA EIS

Dear Ms. McFadden:

Please find below the comments of Hanford Challenge on the Perma-fix Northwest (PFNW) expanded scoping of a State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS).

Hanford Challenge is a non-profit, public interest, environmental and worker advocacy organization located at 2719 East Madison Street, Suite 304, Seattle, WA 98112. Hanford Challenge is an independent 501(c)(3) membership organization incorporated in the State of Washington and dedicated to creating a future for Hanford that secures human health and safety, advances accountability, and promotes a sustainable environmental legacy. Hanford Challenge has members who work at and live near the Hanford Site. Other members of Hanford Challenge live, work and/or recreate near Hanford, where they may also be affected by hazardous materials emitted into the environment by facilities such as PFNW. All members have a strong interest in ensuring the safe and effective cleanup of the nation's most toxic nuclear site for themselves and for current and future generations, and who are therefore affected by conditions that endanger human health and the environment.

In Ecology's solicitation for comments, Ecology wrote, "PFNW manages and treats both low-level (LLW) and mixed low-level (MLLW) radioactive wastes at its Richland facility. The treatment, storage, and handling of MLLW requires a DWR permit from Ecology. PFNW is currently seeking to renew its WR permit."

Ecology also stated, "As part of the permit renewal process, PFNW submitted a renewal application for its DWR permit to Ecology in 2009. Due to significant changes and updates to the facility and operations since the original permit authorization and EIS in 1998, Ecology, as the lead agency, has determined that there is potential for adverse impacts. Therefore, we have decided to conduct a complete environmental analysis under SEPA to supplement the 1998 EIS."

1. Hanford Challenge supports the Department of Ecology's decision to conduct a full SEPA review of the PFNW permit due to potential adverse impacts.

2. The PFNW facility is situated nearby to residential areas and industrial facilities, food processing facilities, nearby restaurants and bistros. PFNW emits fumes, vapors and emissions into the air resulting from the processing of radioactive and chemically-contaminated materials, most of which are from the Hanford nuclear site.

a. Of particular concern is the presence of a day-care facility (N. Richland KinderCare) located roughly one mile to the southeast from PFNW.

3. The proposed scope of the changes has PFNW potentially treating millions of gallons of Hanford tank waste in the future. This waste is high-level nuclear waste (HLW) as defined by the Nuclear Waste Policy Act, and considered to be extremely high-hazard. HLW has no business undergoing

treatment at PFNW. This proposed treatment was not analyzed in Hanford's 2012 Tank Closure and Waste Management Environmental Impact Statement (TC&WMEIS) and thus a new EIS should be performed to analyze impacts.

a. HLW is defined in the Nuclear Waste Policy Act, 42 U.S.C. § 10101(12):

(A) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and

(B) other highly radioactive material that the Commission [NRC], consistent with existing law, determines by rule requires permanent isolation.

b. According to DOE, the tank side cesium removal process will be creating loaded ion exchange columns in order to create the three million gallons of proposed feed to PFNW. According to the TC&WM EIS, the extracted cesium will have to be treated in the Waste Treatment Plant, although DOE has not yet announced what the disposition path will be for these cesium ion columns.

However, the TC&WM EIS does not evaluate storage, unloading, or vitrification of the newly loaded cesium media. The overall risks and benefits, for the whole, closed flowsheet, need to be addressed. DOE should not be taking steps to implement decisions that are not yet made, including prematurely paying via subcontract for any upgrades to handle/evaporate Hanford tank waste.

4. PFNW has an unfortunate history of accidents that raise significant concerns about its operations.

a. An April 25, 2008 Nuclear Regulatory Commission Event Report states, "Tritium (H-3) contamination was found on a trailer in the outside storage area of Perma-Fix Northwest (PFNW), a radioactive material licensee in Richland Washington on April 17. A DOH inspector noticed liquid dripping from a trailer that had just been unloaded. The trailer had hauled empty radioactive waste drums from Atomic Energy Limited Canada (Chalk River facility in Ontario). The transport vehicle entered the United States at Sault Ste. Marie, Michigan under an Nuclear Regulatory Commission (NRC) import license and entered Washington at Spokane. The shipment had arrived at the PFNW facility in late February. It was manifested as a plastic fiber bag with drums inside. Initial surveys on February 28 noted tritium contamination inside the plastic fiber bag, but no contamination was noted outside the bag or on the trailer. Tritium was a primary radionuclide on the manifest. During off-loading of the drums and plastic liner on April 17, liquid was found in and on the drums (one drum is suspected of being at least partially filled with liquid). After off-loading, standing liquids were noticed by the licensee on the inside trailer bed, but not on the outer trailer floor and skin. After the truck was returned to the storage yard, liquid droplets were found dripping from the front of the trailer by the DOH inspector. Initial contamination levels (up to 1.8 million dpm of tritium) on the trailer front were substantially above the U.S. Dept of Transportation limits; but due to the limited quantity (less than one gallon of liquid), do not pose a health risk. There is no indication of leakage during the actual shipment."

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"On March 25, 2009 the licensee informed the Washington State Department of Health [DOH] that further testing by Battelle caused a revision to the original calculated dose and the new calculated dose would exceed the 50 REM CDE limit. The date of exposure (February 3, 2009) was assumed by the licensee, based on air sample data and the use of respiratory protection that may not have provided adequate coverage (use of filtering respirator instead of supplied air). On February 3, the worker was in a containment in which air sample results were about 1e-8 microCi/ml gross alpha activity concentration for several hours and was wearing a Powered Air Purifying Respirator (PAPR, protection factor of 1000). Bioassay results (fecal) from one other worker who was also in the containment showed a small amount of activity, and a dose was assigned to this second worker that did not exceed the legal limit. The second workers lung count was less than detection limits.

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"DOH is conducting an investigation of this incident.

"Corrective action : Curtailment of work in containment, training on removal of anti contamination clothing and respirator, investigation of respiratory protection failure.

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Overexposures: (number of workers/members of public; dose estimate; body part receiving dose; consequence): There was one potential overexposed worker, no members of the public were exposed, estimated dose to the worker is about 100 REM CDE and 5 REM CEDE. This value will change following further measurements, investigation and calculations.

"Worker was removed from the restricted area, work in the area where the intake was assumed to occur was stopped, pending the outcome of further investigation."

c. An April 19, 2012 Washington State Department of Ecology memorandum titled, "Compliance Report," documented PFNW's receipt of a non-complying shipment of plutonium-contaminated waste. The report stated, "At this point in the conversation we were joined by Chuck White, Operations Manager. We asked about a recent shipment of drums from the Hanford Facility that contained sludge. Mr. White explained that they opened the drums, and had pictures and video of the process. He said we could request copies."

"The drums arrived as shipment SB-09 and were placed into a unit at PFNW with "double" containment. We were shown two color print photographs of the shipments arriving on what looked like two separate flat-bed semi-trailers. One container was in a large green overpack drum that looked like an 85 gallon military-type metal container. The second was a metal box that Mr. White said contained the other two containers. The box was big enough to contain two 55-gallon drums. The box was secured on the truck trailer with straps. I could not make out any specific markings or labels from the photographs."

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"The carboy contained nitric acid. They cut the lid off of the carboy after dumping liquid out of it to add absorbent and treat it with the other sludges. They tested the liquid with pH paper and field screening tests were run on it according to Mr. White it was "extremely contaminated" (with radioactivity) and it would be better to handle it when wet. Mr. White stated that the acid was added slowly to the lime slurry to neutralize."

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"Mr. White said that PFNW was asked by the client to allow the waste extra time to "dry out" by keeping the tops off the jars. We were shown a picture of the jars line up together on the floor of the room with their tops off. Mr. White said that Wednesday of next week PFNW plans to seal the jars and pack them into 55 gallon drums. Mr. White stated he was uncomfortable doing this, but he needed to do what the client asked him to do."

"We asked about the types of containers that arrive at PFNW. Mr. White explained that most are "7 A type packages" (drums). He stated that mixed debris are placed into drums that are bolted metal containers, usually containing macro-encapsulated waste."

"We asked if they ever received liquids in boxes, and Mr. White said that liquids in boxes would be noted as non-conforming waste, waste that does not conform to what is expected on the profile. I asked if they ever rejected any non-conforming waste back to the generator, and Mr. White said "no, there are no rejected shipments." He explained that they figure out a way to deal with the problem, and would not want to risk returning it to the client. I asked if any of the non-conforming wastes triggered the requirement to send a letter to Ecology with notification of a discrepancy. Mr. White replied that PermaFix resolves the problems within the 15 days and therefore PFNW does not send Ecology a letter. I asked about whether receipt of waste that was incompatible with the container in it would be considered non-conforming? He said this hasn't ever happened to his knowledge. Then I asked whether he would consider the corrosive sludge and nitric acid as incompatible since it arrived in metal drums, and wouldn't that be non-conforming waste. Mr. White declined to answer."

This incident, documented in notes by two Ecology inspectors, apparently never resulted in any kind of enforcement or other action by either the Department of Ecology or the Department of Health. Yet the allegations in the report are quite serious. Ecology inspectors claim that PFNW received what appears to be some 500 jars of plutonium nitrate in a liquid form. The inspectors go on to claim that they were told by plant managers that they (PFNW management) left the lids off of the jars in order to allow the materials inside the jars to evaporate, per instructions from their "client". This must have resulted in a serious release of plutonium contamination inside the facility, and in fact this has been alleged to us (at Hanford Challenge) that certain areas inside PFNW were highly-contaminated. Further, the documents obtained by Hanford Challenge through the Open Records Act requests do not indicate that PFNW ever provided any of the records or photos that the inspectors recorded in their notes as having seen. This raises serious concerns and questions about the character and competence of the management of this facility, especially in light of announced plans to further handle and treat millions of gallons of Hanford tank waste.

d. On April 15, 2013, an NRC Event report stated, "PermaFix Northwest received a shipment from Perkin Elmer, Inc. that consisted of 32 packages, 4 plastic drums and 28 metal drums, and was shipped as an exclusive use shipment. Upon receipt, the drums were surveyed and 2 plastic drums were found to exceed the 49 CFR 173.443 non-removable contamination limit of 2,200 dpm/cm² for an exclusive use shipment. The drum survey results were reported as 44,391 dpm/100 cm² H-3 and 18,080 dpm/100 cm² C-14; 20,127 dpm/100 cm² H-3 and 18,508 dpm/100 cm² C-14, and 13,323 dpm/100 cm² H-3 and 10,019 dpm/100 cm² C-14. This most contaminated drum was manifested with only H-3 and C-14, the other 2 drums were manifested with only C-14."

e. A June 28, 2013 Press Release from Hanford Challenge, stated, "On June 19, 2013, a Hanford contractor discovered radiation contamination as they unloaded a shipping container from the Hanford site. The shipment came from a highly contaminated area of the Hanford site and carried two glovebox sections containing plutonium and americium. These gloveboxes were used during plutonium production to safely handle radioactive materials without exposing workers.

The Washington State Department of Health stated that there is no indication plutonium was discovered on the outside of the shipment container, nor did contamination escape in transport.

However, a newly-released Department of Health Inspection Report does reveal radioactive plutonium and americium was discovered on an open-air loading pad at the Perma-Fix facility, as well as on a forklift truck used to move the glovebox sections, the rigging used to lift the glovebox sections, and on one of the glovebox sections.

Department of Health officials also revealed that contamination was found inside the shipping container. This may indicate the shipment was improperly packaged at the Hanford site, improperly handled at Perma-Fix, or both. Investigations are ongoing.

Perma-Fix is an off-site, privately-owned facility in Richland, WA that contracts with Hanford contractors to treat and prepare Hanford waste for shipment and disposal.

In a June 20, 2013 notice to the Washington State Department of Ecology released by Hanford Challenge, Perma-Fix asserted that "no personnel were exposed" to dangerous waste and "no visible materials or dangerous wastes/residues" were "spilled or released. . . into the environment," nor were any "radiological contaminants" released. (2013-LTR-1028).

However, the Washington Health Department report states that workers were inside the shipping container without personal protective equipment as they hooked up rigging in order to move the glovebox sections out of the container. The shipping container was subsequently found to contain small amounts of radioactive contamination, including removable contamination (potentially able to go airborne). No contamination was found on the workers, according to the Department of Health, based on external scans, although no bioassays were performed. Nevertheless, "important protective principles were violated by sending workers into a closed container with highly-contaminated equipment," said Tom Carpenter, Executive Director of Hanford Challenge.

This is the second such incident in the past year. A recent Open Records Act request made by Hanford Challenge to the Washington State Department of Ecology revealed serious issues regarding Hanford contractor practices for removal, characterization, and shipment of containers of chemical and radioactive materials on public roads.

The Hanford site is shipping Transuranic Waste in less protective Class A shipping containers rather than the legally-required Class B containers which raises questions about how shipments are

conducted, said Carpenter.

Hanford Challenge has called upon the Washington State Departments of Health and Ecology to continue and make public their full investigations of the recent incident, and ensure waste is properly characterized, packaged, transported, and treated to adequately protect public health and the environment.

The newly-released information provided by the Department of Health contrasts with the initial notice provided by Perma-Fix to the Washington Department of Ecology. That notice made no mention of contamination found on the open-air loading pad, in the shipping container, or on the forklift truck.

"When plutonium and americium is found on an open-air loading pad, in a shipping container, and on equipment used to move the glovebox sections into the facility, I have to question the statement by Perma-Fix that this was not an environmental release," stated Carpenter.

"This incident highlights systemic issues relating to the retrieval, characterization, packaging, transporting, receiving and handling of highly dangerous radioactive and chemical substances at Hanford," concluded Carpenter. "It is pretty clear that incidents like these are kept quiet unless uncovered by groups like ours. We call on Hanford entities to be more transparent and communicative, and we will continue to strive to do our job to push for a more safe and effective cleanup at the Hanford nuclear site."

5. PFNW's RCRA permit has not been updated since 2009. This is of concern due to the licensee's apparent inability to satisfy Washington State Department of Ecology permit requirements and should raise concerns about the appropriateness of PFNW as a site that should be allowed to treat high-level nuclear waste in close proximity to residential communities.

Thank you for the opportunity to submit these comments.

Tom Carpenter, Executive Director
Hanford Challenge
See PDF Attachment



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emissions into the air resulting from the processing of radioactive and chemically-contaminated materials, most of which are from the Hanford nuclear site.

- a. Of particular concern is the presence of a day-care facility (N. Richland KinderCare) located roughly one mile to the southeast from PFNW.
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¹ Graber, K. and Beibesheimer, J., Compliance Report, Washington State Department of Ecology Hazardous Waste & Toxics Reduction Program, re: PermaFix Northwest Richland, RCRA ID# WAR00010355, April 19, 2012, Attachment 1.

of them with residual liquids in them. A third drum had the sludgy mess at the bottom, about 8 liters, with floor dry, vermiculite, and pads. Mr. White was told that the Hanford Facility had tried to treat the sludge by adding baking soda. PFNW performed field screening and then formulated a stabilization recipe in the form of lime slurry. Richard Grondin performed this task. He is the President of PFNW.”

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at the Perma-Fix facility, as well as on a forklift truck used to move the glovebox sections, the rigging used to lift the glovebox sections, and on one of the glovebox sections.

Department of Health officials also revealed that contamination was found inside the shipping container. This may indicate the shipment was improperly packaged at the Hanford site, improperly handled at Perma-Fix, or both. Investigations are ongoing.

Perma-Fix is an off-site, privately-owned facility in Richland, WA that contracts with Hanford contractors to treat and prepare Hanford waste for shipment and disposal.

In a June 20, 2013 notice to the Washington State Department of Ecology released by Hanford Challenge, Perma-Fix asserted that “no personnel were exposed” to dangerous waste and “no visible materials or dangerous wastes/residues” were “spilled or released. . . into the environment,” nor were any “radiological contaminants” released. (2013-LTR-1028).

However, the Washington Health Department report states that workers were inside the shipping container without personal protective equipment as they hooked up rigging in order to move the glovebox sections out of the container. The shipping container was subsequently found to contain small amounts of radioactive contamination, including removable contamination (potentially able to go airborne). No contamination was found on the workers, according to the Department of Health, based on external scans, although no bioassays were performed. Nevertheless, “important protective principles were violated by sending workers into a closed container with highly-contaminated equipment,” said Tom Carpenter, Executive Director of Hanford Challenge.

This is the second such incident in the past year. A recent Open Records Act request made by Hanford Challenge to the Washington State Department of Ecology revealed serious issues regarding Hanford contractor practices for removal, characterization, and shipment of containers of chemical and radioactive materials on public roads.

The Hanford site is shipping Transuranic Waste in less protective Class A shipping containers rather than the legally-required Class B containers which raises questions about how shipments are conducted, said Carpenter.

Hanford Challenge has called upon the Washington State Departments of Health and Ecology to continue and make public their full investigations of the recent

incident, and ensure waste is properly characterized, packaged, transported, and treated to adequately protect public health and the environment.

The newly-released information provided by the Department of Health contrasts with the initial notice provided by Perma-Fix to the Washington Department of Ecology. That notice made no mention of contamination found on the open-air loading pad, in the shipping container, or on the forklift truck.

“When plutonium and americium is found on an open-air loading pad, in a shipping container, and on equipment used to move the glovebox sections into the facility, I have to question the statement by Perma-Fix that this was not an environmental release,” stated Carpenter.

“This incident highlights systemic issues relating to the retrieval, characterization, packaging, transporting, receiving and handling of highly dangerous radioactive and chemical substances at Hanford,” concluded Carpenter. “It is pretty clear that incidents like these are kept quiet unless uncovered by groups like ours. We call on Hanford entities to be more transparent and communicative, and we will continue to strive to do our job to push for a more safe and effective cleanup at the Hanford nuclear site.”

5. PFNW’s RCRA permit has not been updated since 2009. This is of concern due to the licensee’s apparent inability to satisfy Washington State Department of Ecology permit requirements and should raise concerns about the appropriateness of PFNW as a site that should be allowed to treat high-level nuclear waste in close proximity to residential communities.

Thank you for the opportunity to submit these comments.



Tom Carpenter, Executive Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000

711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

August 23, 2012

Chuck White, Operations Manager
PermaFix Northwest Richland, Inc.
2025 Battelle Boulevard
Richland, WA 99354

SUBJECT: Report of Compliance Inspection for ID: WAR00010355

Dear Mr. White:

The Washington Department of Ecology is currently completing its report of an inspection of the US Department of Energy Hanford Facility, Central Waste Complex (CWC) and associated dangerous waste management units. The Ecology compliance inspectors assigned to the CWC inspection also evaluated PermaFix Northwest (PFNW), with respect to waste containers previously sent from the Hanford Facility to PFWN, and waste containers that could potentially be sent from Hanford to PFWN.

Enclosed you will find a copy of Ecology's narrative inspection report for PFWN. This report will be entered into the US EPA RCRA Info database. A copy of the report with the PFWN information submittals will be provided to EPA Region X

If you have any questions, please contact me at (360) 407-0241.

Sincerely,

Kerry Graber
Hazardous Waste Inspector
Hazardous Waste and Toxics Reduction Program
Kgra461@ecy.wa.gov

Enclosure: PFWN Inspection Report

cc: Cheryl Williams, US EPA
Adam Baron, US EPA
Steve Weil, US DOE

**Washington Department of Ecology
Hazardous Waste & Toxics Reduction Program
Compliance Report**

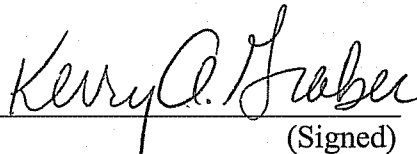
Site: PermaFix Northwest Richland
RCRA ID#: WAR00010355
Inspection Date: April 19, 2012
Site Contacts: Kevin McCallum, Chuck White
Phone: Office (509) 375-7001
Cell (509) 366-2492

Site Location: 2025 Batelle Boulevard
Richland, WA 99354

Current Site Status: TSD Facility/Mixed Waste

Ecology

Lead Contact: Kerry Graber **Phone:** 360-407-0231
Other Representatives: Joannette Biebesheimer **Phone:** 509-372-7898
Report Date: August 22, 2012
Report By: Kerry Graber


(Signed) 8/23/12
(Date)

Facility Background:

The PermaFix Northwest Richland (PFNW) facility is located on 35 acres near the United States Department of Energy (USDOE) Hanford Site. This facility manages and treats both low-level radioactive waste (LLW) and mixed low-level radioactive wastes (MLLW). Because of the PFWN's close proximity to the Hanford Site USDOE is a primary customer. The facility also receives transuranic mixed waste (TRUM) containers from the Hanford Site, and removes items from containers that are not in compliance with the Waste Isolation Pilot Project (WIPP) waste analysis plan.

MLLW are treated via non-thermal processes including macroencapsulation and stabilization. PFWN's macroencapsulation process is specifically designed to treat hazardous debris and radioactive lead solids in compliance with 40CFR268.45 (Alternative Treatment Standards for Hazardous Debris) and 40CFR268.40 (Hazardous Waste Treatment Standards) in preparation for disposal at a mixed waste Subtitle C landfill. The LDR treated MLLW from Hanford are shipped back to Hanford Trenches 31 and 34 for final disposal. The macroencapsulation process involves sorting, segregating and supercompaction of mixed debris wastes thus resulting in a volume reduction ratio of approximately 2.5:1.

TRUM waste containers are opened at PFWN and then the WIPP non-compliant items are removed and sometimes treated. After the non-compliant items are removed or treated the TRUM waste is shipped back to Hanford to be stored at the Central Waste Complex (CWC) until the waste can be certified to be shipped to WIPP in New Mexico.

This inspection report focuses only on the MLLW side of PFNW that manages both Hanford TRUM and MLLW. Currently the facility is under permit renewal, as the permit expired July 7, 2009.

Inspection Summary:

We arrived at the facility and asked to meet with Chuck White if he was available. We were met by Kevin McCallum, Regulatory Compliance Officer.

We explained that we were told PFNW may be tasked to manage a concrete box (231-Z-DR-11) from the CWC at the Hanford Facility, and we wanted to gain a better understanding of what this means. Mr. McCallum said that Mr. White was not available at the moment, but he would see if he could come and meet with us. Mr. McCallum offered to sit down with us and try to answer our questions while we wait.

Mr. McCallum told us the facility is authorized to take radioactive mixed (MLLW and TRUM) waste for storage and treatment. Originally the permit included a vitrification treatment process, but they are closing that line right now. Currently the facility is under permit renewal, as the permit expired as of July 7, 2009. The application was turned in, and Ecology's completeness review has been done.

I requested from Mr. McCallum a list of restricted waste, waste that PFNW is not authorized to receive. I also asked for descriptions of active units with their process descriptions. He provided me with a copy of their Part A that contains a list of waste codes.

At this point in the conversation we were joined by Chuck White, Operations Manager. We asked about a recent shipment of drums from the Hanford Facility that contained sludge. Mr. White explained that they opened the drums, and had pictures and video of the process. He said we could request copies.

The drums arrived as shipment SB-09 and were placed into a unit at PFNW with "double" containment. We were shown two color print photographs of the shipments arriving on what looked like two separate flat-bed semi-trailers. One container was in a large green overpack drum that looked like an 85 gallon military-type metal container. The second was a metal box that Mr. White said contained the other two containers. The box was big enough to contain two 55-gallon drums. The box was secured on the truck trailer with straps. I could not make out any specific markings or labels from the photographs.

When opened PFNW Mr. White stated that personnel found about 2,500 ml of liquid in one carboy inside one of the drums, and sludge and debris in the bottom of the drum, still damp. The drum inside the overpack had a hole in the bottom, with a "sludgy mess." He said that a second container held 10 ml vials – about 500 of them with residual liquids in them. A third drum had the sludgy mess at the bottom, about 8 liters, with floor dry, vermiculite, and pads. Mr. White was told that the Hanford Facility had tried to treat the sludge by adding baking soda.

PFNW performed field screening and then formulated a stabilization recipe in the form of lime slurry. Richard Grondin performed this task. He is the President of PFNW.

The carboy contained nitric acid. They cut the lid off of the carboy after dumping liquid out of it to add absorbent and treat it with the other sludges. They tested the liquid with pH paper and field screening tests were run on it – according to Mr. White it was "extremely contaminated" (with radioactivity) and it

would be better to handle it when wet. Mr. White stated that the acid was added slowly to the lime slurry to neutralize.

He went on to add that once the slurry was formulated it was used to neutralize the sludge waste and left for seven days. The waste mixed with the slurry was placed into 1000 ml. plastic wide-mouthed jars.

Mr. White said that PFNW was asked by the client to allow the waste extra time to "dry out" by keeping the tops off the jars. We were shown a picture of the jars line up together on the floor of the room with their tops off. Mr. White said that Wednesday of next week PFNW plans to seal the jars and pack them into 55 gallon drums. Mr. White stated he was uncomfortable doing this, but he needed to do what the client asked him to do.

We asked about the types of containers that arrive at PFNW. Mr. White explained that most are "7A type packages" (drums). He stated that mixed debris are placed into drums that are bolted metal containers, usually containing macro-encapsulated waste.

We asked if they ever received liquids in boxes, and Mr. White said that liquids in boxes would be noted as non-conforming waste, waste that does not conform to what is expected on the profile. I asked if they ever rejected any non-conforming waste back to the generator, and Mr. White said "no, there are no rejected shipments." He explained that they figure out a way to deal with the problem, and would not want to risk returning it to the client. I asked if any of the non-conforming wastes triggered the requirement to send a letter to Ecology with notification of a discrepancy. Mr. White replied that PermaFix resolves the problems within the 15 days and therefore PFNW does not send Ecology a letter.

I asked about whether receipt of waste that was incompatible with the container in it would be considered non-conforming? He said this hasn't ever happened to his knowledge. Then I asked whether he would consider the corrosive sludge and nitric acid as incompatible since it arrived in metal drums, and wouldn't that be non-conforming waste. Mr. White declined to answer.

Ms. Biebesheimer asked about shipments from the Hanford Facility received over last summer. Mr. White estimated they received about 1,200 drums, and about 2% were non-conforming due to the contents not matching the profile. We asked for examples of boxes from CW C that would be non-conforming, and Mr. White explained sometimes hydraulic oil will still remain in a piece of equipment. He described other examples of non-conformance problems are containers with more than 50% soil, jars, and small containers of liquids.

I asked Mr. White, how PFNW might try to manage the concrete box (231-Z-DR-11) we are concerned about from CWC. He said they would take a core drill and make a hole in order to place a camera inside to look at the contents before opening the box. He thought they would have to do this inside one of the buildings, he wasn't sure where would be appropriate at the facility.

I asked how the box could be safely transported to PFNW. Mr. White said that USDOE would handle the transportation to the facility, and that the USDOE inspectors look at everything. I asked what it

meant to have something transported under "special arrangement." He said it would be done under the USDOE road closure.

We discussed how to request from PFNW the non-conformance list for the last few years, and it was agreed we would send an email request specifying the information we need. We agreed we would request a CD of photos of the drum management process, as we understood the project was filmed. We talked about getting a copy of the certification that D002 was treated for characteristics (under land disposal restriction (LDR) regulations). Mr. McCallum said this would not be available until the waste was ready to return to the Hanford Facility.

I asked what happens once a waste is LDR treated and returns to the Hanford Facility. Mr. White said it is land disposed in one of the trenches.

I reiterated that we would be in touch by email requesting the additional information. I thanked them for their time and we left the site.