

Meeting Minutes Transmittal

**T Plant Complex, Low Level Burial Grounds,
Central Waste Complex, Waste Receiving and Processing
Project Managers Meeting
825 Jadwin / Room 540S
Richland, Washington**

March 26, 2015

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Project Managers Meeting. Signatures denote concurrence with the content only and are not intended to imply agreement to any commitments.

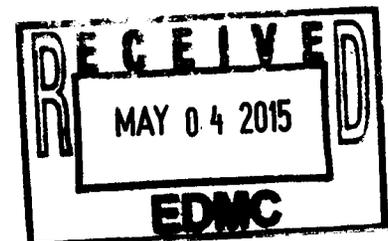

Project Manager Representative, Ecology

Date: Apr 29, 2015


Project Manager Representative, RL

Date: 25 Apr 15

Central Waste Complex Admin Record	H6-08
LLBG Administrative Record	H6-08
T Plant Complex Admin Record	H6-08
Waste Receiving and Processing Admin Record	H6-08
JV Borghese	H8-43
MS Collins	A6-38
BJ Dixon	T4-09
PE Eberlein	H0-57
LC Fearon	H0-57
RH Engelmann	H8-45
SK Johansen	T1-41
SS Lowe	H0-57
PW Martin	H8-45
LC Petersen	T4-06
DG Singleton	H0-57
LC Tuott	H8-43



T PLANT/LLBG/CWC/WRAP
Project Managers Meeting Minutes
825 Jadwin/Room 540S/700 Area
Richland, Washington

March 26, 2015

- I. The January 22, 2015, Project Managers Meeting (PMM) minutes were approved by RL and Ecology representatives and submitted to the Administrative Record (AR). The February 26, 2015, PMM was canceled per RL and Ecology representative agreement.

II. Operational Status

Stephanie Johansen (CHPRC) provided the operational status (see handout). Ms. Johansen noted that overpacking of watch list drums is ongoing at CWC. Deborah Singleton (Ecology) asked if it was possible to go into the database and pull up the watch list drums that have been overpacked. Ms. Johansen responded that the drums are assigned a new container number when they get overpacked. Ms. Johansen clarified that Ms. Singleton was asking about identifying watch list drums in the Solid Waste Information Tracking System (SWITS) that have been overpacked. Ms. Singleton responded that Ms. Johansen was correct, and the purpose for identifying the drums was to address a concern raised during Ecology's compliance inspection that a large number of drums needed to be overpacked. Ms. Johansen stated that she would follow up with operations and the SWITS staff regarding Ms. Singleton's request. Ms. Singleton noted that the goal was to get a mechanism in place for reporting the information to the Ecology compliance team.

Ms. Singleton inquired about the WRAP turnover checklist. Ms. Johansen responded that the turnover checklist was established when there were daily shift operations, and the checklist was filled out by the shift operator in charge and turned over to the next shift operator. Ms. Johansen added that currently there is only one person in charge, but the administrative procedure is still followed. Ms. Singleton noted that there are no activities in WRAP. Ms. Johansen responded that CHPRC is still following the process, and it would be in place if an activity was started up.

Ms. Johansen noted that there were some small changes in the number of containers in CWC during January 2015. Mr. Collins stated that containers are also received from PFP that are added to the inventory for CWC. Mike Collins (RL) noted that the containers at WRAP can be misleading because most of the containers are located in the WRAP warehouse (2404-WB), and occasionally there is waste that would be collected inside WRAP proper as a result of surveillance and maintenance.

Ms. Johansen stated that the two containers of waste that were associated with the maintenance activities on Box 231ZDR-11 were removed from outside storage area A. Ms. Johansen stated that the containers were placed in the outside storage area while the 231ZDR-11 waste was being generated, and the two containers were notated as plus two containers because receipt of new waste in the outside storage area is not allowed. Ms. Johansen noted that the waste was not considered new waste since it was generated in the area. Elis Eberlein (Ecology) asked if there were plans to move Box 231ZDR-11 in the near future. Mr. Collins responded that there are no near-term plans, and a determination on the path forward for the box is needed. Mr. Collins explained that the box assayed out at 250 nanocuries per gram, which is above the transuranic (TRU) waste level for Permafix Northwest, and it cannot be sent to Permafix Northwest because it exceeds their license limits.

Ms. Singleton stated that the latest EPA inspection response to RL had noted the boxes and covering for the boxes. Al Farabee (RL) stated that RL's response to EPA's letter is in progress, and RL will be asking for 60 days to respond. Mr. Collins noted that RL was not sure it would receive an extension, and it is close to finishing its response to EPA. Ms. Johansen stated that RL/CHPRC are working to an April 17, 2015 deadline for the response.

III. Status of Previous Agreements and Commitments

A. There were no previous agreements or commitments to discuss.

IV. New Agreements and Commitments

A. There were no new agreements or commitments established.

V. Near Term Schedules and Ongoing Activities

A. Agreed Order – Implementation

Ms. Johansen stated that there were no items to status for the Agreed Order (AO). Ms. Singleton asked if the AK package was associated with the AO. Mr. Collins responded that the AK package was not explicit in the AO, but it was an outfall since the AO called out for a workshop to develop the AK packages, and the workshop was the deliverable. Ms. Singleton stated that the Ecology compliance section communicates with her project team regarding the progress with moving boxes and what type of documentation is provided by RL for Ecology review. Ms. Singleton stated that as a result, she communicates with the compliance section that another AK package has been received and reviewed, and then it is placed in Ecology's administrative record. Ms. Singleton stated that she is attaching the AK packages as part of the AO. Mr. Collins responded that attaching the AK packages to the AO was reasonable.

B. Hanford Facility RCRA Permit Rev. 9 Update

Ms. Singleton stated that Ecology is not currently holding any meetings or workshops for Rev. 9, and the permitting lead is focused on completing the Conceptual Agreement Packages (CAPs). Rick Engelmann (CHPRC) asked if Ecology's plan is to submit the CAPs as final or if there will be any request for comment. Ms. Singleton indicated that there won't be a request for comment. Ms. Singleton stated that the CAPs are being prepared by the nuclear waste program office, and are being reviewed by the hazardous waste and toxics cleanup programs in Lacey, WA and by the EPA Region 10 office. Ms. Singleton stated that collectively the three offices are presenting the CAPs as what should be in the different addendums, and that there is a checklist citing the regulatory requirement. Ms. Singleton added that legal has decided if there is anything in the CAPs that do not have a stated regulatory requirement, then the regulators would be trying to assert their omnibus authority and would have to state the reasons supporting that and include supporting guidance or documents that were used. Ms. Singleton noted that there are some specific Hanford-related requirements with some supporting guidance and regulatory documentation, but the hazardous waste team is looking at such small dangerous waste management units and treatment, storage disposal (TSD) facilities, that most of the time the information cannot be exactly related to Hanford. Mr. Engelmann asked if the CAPs are intended to be used state wide. Ms. Singleton responded that the CAPs are intended to be used state wide, and will be used for Areva and Permafix Northwest and other onsite units as well.

C. 8C Updates, Closure Plans, Part B Application

Ms. Singleton reported that a meeting was held with RL/CHPRC regarding FS-1, and following the meeting there was a slight break in communication within Ecology regarding the scheduling aspect. Ms. Singleton stated that Ecology has decided it will proceed with

FS-1 without conducting a Data Quality Objective (DQO). Ms. Singleton added that language will likely be included in the decision to clarify that a precedent is not being set about not ever doing a DQO, and that if there is some indication of contamination, a DQO would be done to find out where sampling should have been done. Ms. Singleton stated that when the process with FS-1 is completed, an evaluation will be done to determine what one DQO would look like for all of the other units instead of having a DQO for every operating unit group or every SWOC dangerous waste management unit. Ms. Singleton added that the DQO for SWOC would look at the different media to be sampled. Ms. Johansen stated that the revised FS-1 closure plan was sent to Ecology, and suggested scheduling a meeting next week to discuss the changes that were made to the closure plan and what the path forward will be. Ms. Singleton responded that Suzanne Dahl (Ecology) approved meeting with RL/CHPRC without one of Ecology's permit coordinators present, and that Ms. Dahl will be kept apprised of the status for the FS-1 closure plan. Ms. Singleton stated that an internal meeting will be held next Monday, and that a meeting with RL/CHPRC could be scheduled after that.

Mr. Farabee asked if Ecology was back to the 20-some sites that were identified in the visual sampling plan activity. Ms. Singleton concurred that Ecology was back to those 20-some sites, and it will be utilizing the regulations that require a review of records indicating whether there has been any spill or any indication of cracks in areas where additional sampling may need to be done. Ms. Singleton stated that there will be some discussions regarding the effectiveness of the visual sampling plan and the parameters that were put in place for FS-1. Ms. Singleton added that the visual sampling plan is not considered an inappropriate tool to use.

D. Conceptual Agreement Packages (CAPS)

The CAPs were discussed under Rev. 9 update (see above).

E. Sludge Storage at T Plant

Ms. Johansen stated that Brian Dixon (CHPRC) had an action from the last sludge storage meeting to provide additional information to Ecology. Ms. Singleton stated that an internal meeting is scheduled to discuss sludge storage at T Plant. Ms. Singleton stated that it met with EPA to discuss the best approach regarding the TSCA risk-based disposal approval (RBDA), and asked if RL received EPA's email regarding the TSCA RBDA. Mr. Collins responded that the email was received. Ms. Singleton stated that in order for Ecology to move forward and meet the October 2015 date, a response from RL is needed. Mr. Collins stated that RL will need to respond, and internal coordination will be needed with Roger Quintero, the RL director over sludge. Ms. Singleton stated that Ecology will wait for RL's response, and that there had been communication with EPA about the next steps to take. Ms. Singleton added that the purpose of the email was to share with RL the communications with EPA and what direction EPA considered to be an acceptable approach that both agencies could agree to.

VI. Approved Changes signed off in Accordance with TPA Section 12.2

A. There were no approved changes to sign.

VII. General Discussion

A. There were no topics for general discussion.

VIII. Actions

Unit	Description of Action	Status	Date
CWC	RL will schedule a meeting with Ecology by the end of September 2014 to discuss disposition of tank D-10	New Action	6/26/14
		Mr. Collins sent Ecology information regarding tank D-10 in lieu of scheduling a meeting. Ecology will notify Mr. Collins if the information is satisfactory or if a meeting needs to be scheduled.	10/30/14
		Ecology still evaluating the information	1/22/15
		Ecology will follow up on the information and send an email to RL	3/26/15
LLBG	RL to schedule a tour of trenches 31/34/94 for Ecology	New Action	1/22/15
		CHPRC will follow up to ensure that the tour is scheduled	3/26/15
CWC	Provide Ecology results of surveys done under Box 231ZDR-11	New Action	1/22/15
		CHPRC is in the process of gathering information and will follow up on the status	3/26/15
CWC	Provide Ecology a process for identifying overpacked watch list drums in SWITS	New Action	3/26/15

- IX. Documents for Submittal to the Administrative Record.
 - A. The meeting minutes from today's meeting and the AK package and associated email from EPA (Dave Bartus) were identified for submittal to the AR.

- X. Next Project Managers Meeting
 - A. The next PMM was scheduled for April 23, 2015.

Badbada, P S (Sharon)

From: Petersen, Linda C
Sent: Tuesday, April 07, 2015 9:00 AM
To: Williams, Joel F Jr; Collins, Michael S
Cc: Badbada, P S (Sharon); Martin, Paul W - CHPRC; Engelmann, Richard H; Johansen, Stephanie K; Barnes, Brett M
Subject: RE: Actions from this morning's SWOC PMM



SMFM16691150... Fact Sheet for FRP
758DMAF11 (...)

Item 2: Rad surveys from the former Box 11 (231ZDR-11) location are attached.

Item 3: There are currently no drums scheduled to be overpacked. We will have an overpack campaign at some future point and will schedule the drums to be overpacked at that time.

AR Item 1: But I attached the fact sheet for 758DMAF11, just in case you still need it.

From: Engelmann, Richard H
Sent: Thursday, March 26, 2015 11:10 AM
To: Johansen, Stephanie K; Barnes, Brett M
Cc: Badbada, P S (Sharon); Martin, Paul W - CHPRC; Petersen, Linda C; Williams, Joel F Jr; Collins, Michael S
Subject: Actions from this morning's SWOC PMM

Here is what I heard:

1. Arrange for tour of Trenches 31/34/94 for John Temple of Ecology – Action BRETT BARNES, coordinating with Linda Petersen and Mike Collins. Might be good for Paul Martin to accompany.
2. Provide rad surveys from the former ZDR-11 box location – Action Stephanie to provide to Mike for Ecology
3. Provide list of CWC drums scheduled for overpack – Action Stephanie to provide to Mike for Ecology

Additionally, we need to arrange for two things to go to the AR:

1. Waste Package 758DMAF11 Process Knowledge Fact Sheet
2. E-mail from Dave Bartus re: TSCA/RBDA for sludge at T Plant (I don't think I've seen that)

Easiest way to get those into AR would be as attachments to the meeting minutes, but a question is, what about the previous waste package fact sheets? Have they been going into the AR, and if so via what mechanism?

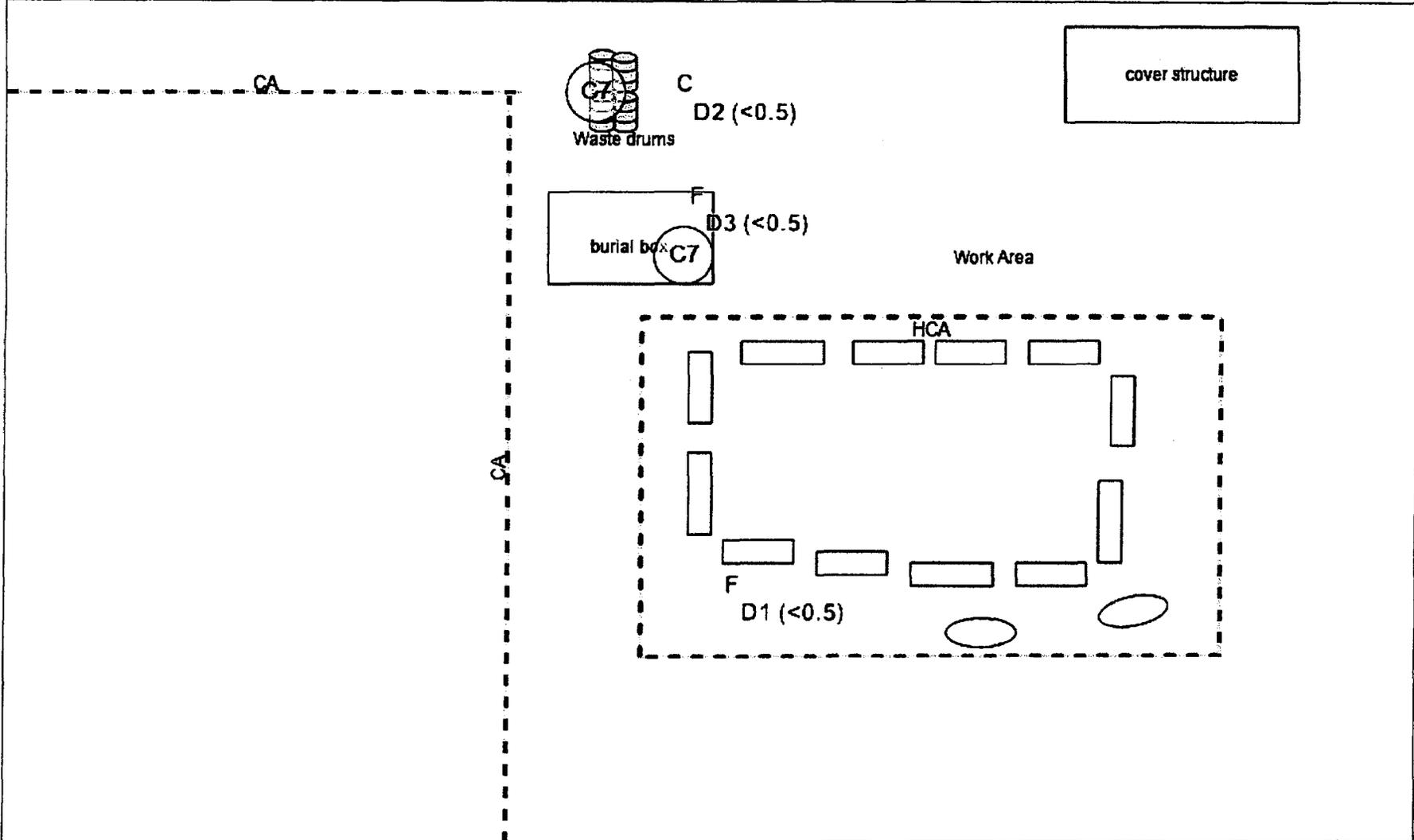
CH2M HILL PLATEAU REMEDIATION COMPANY		RSR No.	Page 1 of 7																								
RADIOLOGICAL SURVEY REPORT (Submitted for Approval)		SW-1500122																									
Date	Start/Stop Time	Area/Location	RWP/Rev.																								
1/21/2015	0900 / 1500	200W / 10 ACRE / NA / CWC	SWP102/Rev . 6																								
Purpose of Survey: <input type="checkbox"/> Material Clearance Number: N/A Cleared to: N/A <input type="checkbox"/> Ram Shipment: N/A <input type="checkbox"/> Required Task: N/A <input checked="" type="checkbox"/> Job Coverage: 2X-12-03385 <input type="checkbox"/> Verification survey $\alpha = <D$ <D=No increase in audible count rate <table style="width:100%; border: none;"> <tr> <td style="border: 1px solid black; width: 100px; text-align: center;">N/A</td> <td style="width: 100px;">Inches/Sec.</td> <td style="border: 1px solid black; width: 100px; text-align: center;">N/A</td> <td style="width: 100px;">Inches Away</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">N/A</td> <td>Count Time (Sec.)</td> <td style="border: 1px solid black; text-align: center;">N/A</td> <td>% Surveyed</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">N/A</td> <td># of Static Counts</td> <td style="border: 1px solid black; text-align: center;">N/A</td> <td>Square Feet</td> </tr> </table> <input type="checkbox"/> Verification survey $\beta \gamma = <D$ <D=No increase in audible count rate <table style="width:100%; border: none;"> <tr> <td style="border: 1px solid black; width: 100px; text-align: center;">N/A</td> <td style="width: 100px;">Inches/Sec.</td> <td style="border: 1px solid black; width: 100px; text-align: center;">N/A</td> <td style="width: 100px;">Inches Away</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">N/A</td> <td>Count Time (Sec.)</td> <td style="border: 1px solid black; text-align: center;">N/A</td> <td>% Surveyed</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">N/A</td> <td># of Static Counts</td> <td style="border: 1px solid black; text-align: center;">N/A</td> <td>Square Feet</td> </tr> </table> <input type="checkbox"/> Other: N/A		N/A	Inches/Sec.	N/A	Inches Away	N/A	Count Time (Sec.)	N/A	% Surveyed	N/A	# of Static Counts	N/A	Square Feet	N/A	Inches/Sec.	N/A	Inches Away	N/A	Count Time (Sec.)	N/A	% Surveyed	N/A	# of Static Counts	N/A	Square Feet	Description of Work / Comments: 231ZDR-11 Associated work HCA/CA Remediation of liquid from metal catch containments and disposal of catch containments and waste jugs. Comments: The area is set up in an RBA and HCA/CA with CA corridor. The work scope was to down post the HCA area as surveys are performed, remove the liquid from the catch pans into jugs, package the waste pans, place the waste jugs into drums and pans into the burial box. Work performed within the RBA. The operators relocated the burial box and removed the lid. The drums were also moved near the HCA. The area was posted as a CA and surveys were begun on the existing HCA. As surveys were performed the area was slowly downposted and entered into for work. The liquid was removed from catch pans that needed it. Conway pads, absorbant pigs were added to the pans and they were wrapped in reinforced bags. The areas under the pans were also surveyed(after removal). Spotty contamination was found throughout the area, but the highest concentrations were just north of the southern pans, especially around the two that were on the south side towards the west. There was smearable on the pans to the south and also on the jersey barrier in the center. After all items were removed. The area was sprayed with invisiblu. The jersey barrier near the center was also sprayed. The chain was reestablished around the original HCA area. The boundary was surveyed to ensure the CA was contained within the boundaries. The waste pans were placed into the burial box, and the waste jugs were placed into the drums. The box and drums were also surveyed. See survey SW-1500023 for material release. RBA work scope to complete job The area was reposted as RBA with the CA boundary around the original HCA area. The drums were removed from the area and placed into Low Flash Point Area (FS-15) for storage. The burial box was relocated to the southern boundary of the RBA.	
N/A	Inches/Sec.	N/A	Inches Away																								
N/A	Count Time (Sec.)	N/A	% Surveyed																								
N/A	# of Static Counts	N/A	Square Feet																								
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Dose Rate Measurements									
No.	Description	Note ¹ : F = Field (≥30cm) C = Contact(≤1 cm)							
		Dist. (cm) Note ¹	WO mR/hr	WC mR/hr	CF Non- Penetrating	CF Penetrating	Neutron Dose mrem/hr	Shallow Dose mrem/hr	Deep Dose mrem/hr
D1	Field readings	F	<0.5	<0.5	2	1	<0.5	<0.5	<0.5
D2	waste jugs/drums (0074019, 0074020, 0074105, 0	C	<0.5	<0.5	2	1	<0.5	<0.5	<0.5
D3	waste jugs/drums (0074019, 0074020, 0074105, 0	F	<0.5	<0.5	2	1	<0.5	<0.5	<0.5

Contamination Measurements														
† Manually Calculated by RCT														
No.	Description	Background cpm		Direct Gross cpm/100 cm ²		Total dpm/100 cm ²		Correction Factor		Type	Removable Gross (cpm)		dpm/100 cm ²	
		βγ	α	βγ	α	βγ	α	βγ	α		βγ	α		
													βγ	α
C1	highest direct reading on the ground	150	0	1500	5000	13500	50000	10	10	Smear	150	0	<1000	<20
C2	spotty contamination on the ground between 3000 and 6000 dpm	150	0	300	600	1500	6000	10	10	Smear	150	0	<1000	<20
C3	highest direct on the pans	150	0	N/A	4000	N/A	24000	10	6	Smear	150	200	<1000	1200
C4	boundary surveys on the perimeter of the existing area (original HCA posted area) after placement of the chains	150	0	150	0	<5000	<500	10	10	Smear	150	0	<1000	<20
C5	concrete ecoblock (center)	150	0	N/A	40	N/A	400	10	10	Smear	150	20	<1000	200
C6	jugs after filling	150	0	150	0	<5000	<500	10	10	Smear	150	0	<1000	<20
C7	Waste box/drums	150	0	N/A	N/A	N/A	N/A	10	10	Smear	150	0	<1000	<20
C8	periodic work area surveys on personnel	N/A	0	N/A	0	N/A	<500	N/A	10	N/A	N/A	N/A	N/A	N/A

Map/Sketch



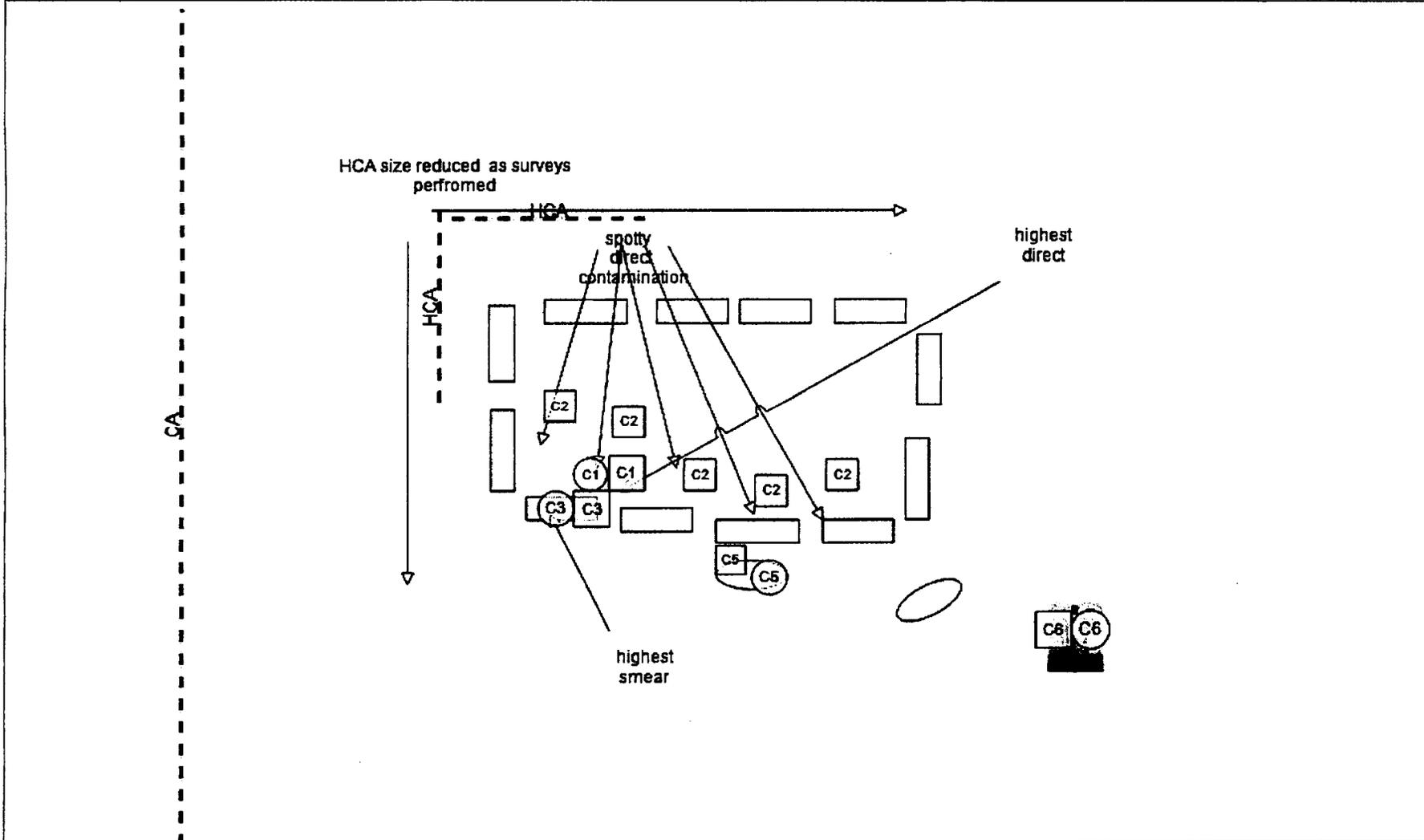
Map Name: Remediation Map Description: start of work

Legend	# Direct Measurement	▲ Air Sample	⊕ Smear	# LAW	◆ Neutron Dose Rate	T# Transferability	F# Field	C# Contact	D# Other Distance	O# Other Measurement
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----- (designation inside) ----- Radiological Area Boundary

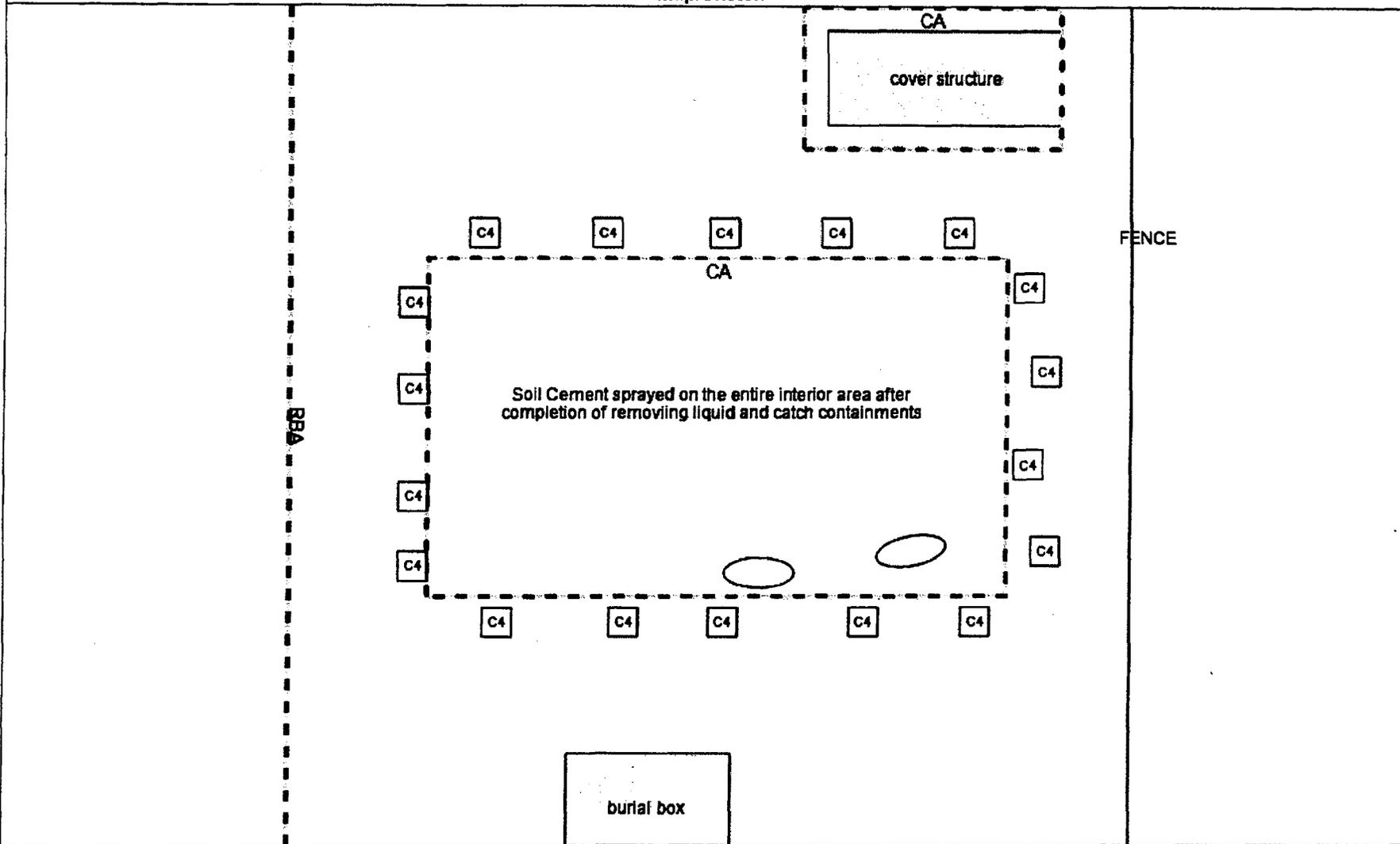
Note: Dose Rates in mrem/hr unless otherwise noted.

Map/Sketch



Map Name: Remediation		Map Description: work area contamination								
Legend	# Direct Measurement	▲ Air Sample	⊕ Smear	# LAW	◆ Neutron Dose Rate	T# Transferability	F# Field	C# Contact	D# Other Distance	O# Other Measurement
	----- (designation inside) ----- Radiological Area Boundary							Note: Dose Rates in mrem/hr unless otherwise noted.		

Map/Sketch



Map Name: End of job

Map Description: work area at job completion

Legend

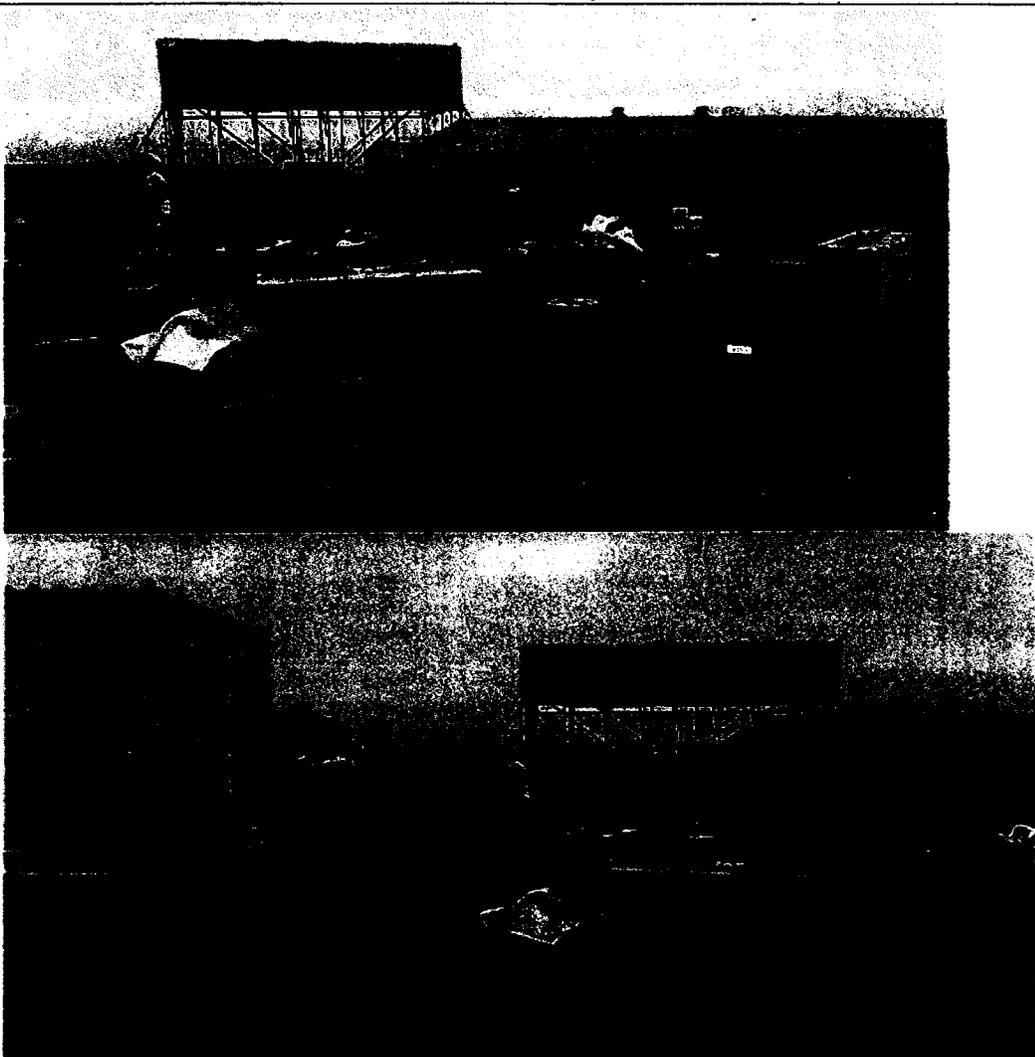
- # Direct Measurement
- ▲ Air Sample
- ⊕ Smear
- # LAW
- ◆ Neutron Dose Rate
- T# Transferability
- F# Field
- C# Contact
- D# Other Distance
- Other Measurement

----- (designation inside) ----- Radiological Area Boundary

Note: Dose Rates in mrem/hr unless otherwise noted.

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Map/Sketch



Map Name: work progress	Map Description: work																				
Legend	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px;"># Direct Measurement</td> <td style="border: 1px solid black; padding: 2px;">▲ Air Sample</td> <td style="border: 1px solid black; padding: 2px;">⊕ Smear</td> <td style="border: 1px solid black; padding: 2px;"> # LAW</td> <td style="border: 1px solid black; padding: 2px;">◆ Neutron Dose Rate</td> <td style="border: 1px solid black; padding: 2px;">T# Transferability</td> <td style="border: 1px solid black; padding: 2px;">F# Field</td> <td style="border: 1px solid black; padding: 2px;">C# Contact</td> <td style="border: 1px solid black; padding: 2px;">D# Other Distance</td> <td style="border: 1px solid black; padding: 2px;">G# Other Measurement</td> </tr> <tr> <td colspan="7" style="text-align: center; border: none;">----- (designation inside) ----- Radiological Area Boundary</td> <td colspan="3" style="border: none; font-size: small;">Note: Dose Rates in mrem/hr unless otherwise noted.</td> </tr> </table>	# Direct Measurement	▲ Air Sample	⊕ Smear	# LAW	◆ Neutron Dose Rate	T# Transferability	F# Field	C# Contact	D# Other Distance	G# Other Measurement	----- (designation inside) ----- Radiological Area Boundary							Note: Dose Rates in mrem/hr unless otherwise noted.		
	# Direct Measurement	▲ Air Sample	⊕ Smear	# LAW	◆ Neutron Dose Rate	T# Transferability	F# Field	C# Contact	D# Other Distance	G# Other Measurement											
----- (designation inside) ----- Radiological Area Boundary							Note: Dose Rates in mrem/hr unless otherwise noted.														

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Instruments			
Instrument Type	Bar Code No.	Probe Bar Code No.	Efficiency (Used)
PAM	ACBC1-0304	DTHN3-0914	0.16
2360	SCLL8-0441	DTLLP-0548	0.10
2360	ACBC1-0084	DTHNE-0008	0.16
RO20	ICEB4-1447	N/A	N/A
RADEYE	NMTC2-0029	N/A	N/A
Unless stated otherwise in the "Comments" section, contamination levels for C-14, Fe-55, Ni-59, Ni-63, Se-79, Tc-99, Pd-107, and Eu-155 are ≤ 10 times the b-g contamination levels shown above (see CHPRC-00073, Table 2-2).			
History			
2015-01-21 16:16:13 - Fish, Cindy - Submitted			
2015-01-26 09:14:06 - Fish, Cindy - UnSubmitted: make corrections			
2015-01-26 09:22:22 - Fish, Cindy - Submitted: fixed instrument, added doserates, changed soil cement to invisiblu			

Date Received for Clearance Process (MM/DD/YYYY) 03/26/2015

INFORMATION CLEARANCE FORM

A. Information Category <input type="checkbox"/> Abstract <input type="checkbox"/> Journal Article <input type="checkbox"/> Summary <input type="checkbox"/> Internet <input type="checkbox"/> Visual Aid <input type="checkbox"/> Software <input type="checkbox"/> Full Paper <input type="checkbox"/> Report <input checked="" type="checkbox"/> Other Environmental Insp		B. Document Number REG-0767 C. Title WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY) REQUEST FOR COPY OF WASTE PACKAGE 758DMAF11 PROCESS KNOWLEDGE FACT SHEET INSPECTION NUMBER: LB2015-017 TOTAL PAGES = 23
E. Required Information (MANDATORY) 1. Is document potentially Classified? <input checked="" type="radio"/> No <input type="radio"/> Yes 3-26-15 Richard H. Engelmann <i>R.H. Engelmann</i> Manager Required (Print and Sign) If Yes ADC Required (Print and Sign) <input checked="" type="radio"/> No <input type="radio"/> Yes Classified 2. Official Use Only <input checked="" type="radio"/> No <input type="radio"/> Yes Exemption No. _____ 3. Export Controlled Information <input checked="" type="radio"/> No <input type="radio"/> Yes OOU Exemption No. 3 4. UCNI <input checked="" type="radio"/> No <input type="radio"/> Yes 5. Applied Technology <input checked="" type="radio"/> No <input type="radio"/> Yes OOU Exemption No. 5 6. Other (Specify) N/A		D. Proposed Internet Address 7. Does Information Contain the Following: a. New or Novel (Patentable) Subject Matter? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", OOU Exemption No. 3 If "Yes", Disclosure No.: _____ b. Commercial Proprietary Information Received in Confidence, Such as Proprietary and/or Inventions? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", OOU Exemption No. 4 c. Corporate Privileged Information? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", OOU Exemption No. 4 d. Government Privileged Information? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", Exemption No. 5 e. Copyrights? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", Attach Permission. f. Trademarks? <input checked="" type="radio"/> No <input type="radio"/> Yes If "Yes", Identify in Document. 8. Is Information requiring submission to OSTI? <input checked="" type="radio"/> No <input type="radio"/> Yes 9. Release Level? <input checked="" type="radio"/> Public <input type="radio"/> Limited

F. Complete for a Journal Article

1. Title of Journal N/A

G. Complete for a Presentation

1. Title for Conference or Meeting N/A

2. Group Sponsoring _____

3. Date of Conference _____ 4. City/State _____

5. Will Information be Published in Proceedings? No Yes 6. Will Material be Handed Out? No Yes

H. Information Owner/Author/Requestor
 Joel F. Williams Jr. *Joel Williams Jr. 3-26-15*
 (Print and Sign) Responsible Manager
 Richard H. Engelmann *R.H. Engelmann 3-26-15*
 (Print and Sign)

Approval by Direct Report to President (Speech/Articles Only) N/A
 (Print and Sign)

I. Reviewers	Yes	Print	Signature	Public Y/N (If N, complete J)
General Counsel	<input checked="" type="checkbox"/>	Raymond T. Swenson	<i>Raymond Swenson</i>	<input checked="" type="radio"/> Y / N
Office of External Affairs	<input type="checkbox"/>	_____	_____	Y / N
DOE	<input type="checkbox"/>	_____	_____	Y / N
Other	<input type="checkbox"/>	_____	_____	Y / N
Other	<input type="checkbox"/>	_____	_____	Y / N
Other	<input type="checkbox"/>	_____	_____	Y / N

J. Comments
Ecology Request

Information Clearance Approval
 APPROVED
 By Janis D. Aardal at 8:58 am, Mar 26, 2015
 Approved for Public Release;
 Further Dissemination Unlimited

WASTE PACKAGE 758DMAF11
PROCESS KNOWLEDGE FACT SHEET

Waste Package 758DMAF11

1 Generation and Management History

Waste package 758DMAF11 was generated in 1975 at the Plutonium Finishing Plant (PFP), also known as the 234-5Z facility. PFP was operated by the Atlantic Richfield Hanford Company (ARHCO) at that time. The waste originated from the decommissioning of process equipment and systems (e.g., hoods, glove boxes, ventilation piping, etc.) from within the PFP facility as part of the U.S. Department of Military Application Decommissioning (DMA) Project. During the DMA decommissioning, components from the Remote Mechanical A (RMA) and C (RMC) Lines were removed and packaged into burial boxes. The RMA Line began operating in 1952 and the RMC Line in the mid-1960s. Based on the original waste record for this DMA waste container, the package contains hoods (aka: gloverboxes), airlocks, miscellaneous ventilation ducting and metal (including valves and pipe).

This waste package was shipped to the 200 West Burial Grounds on August 27, 1975 and placed in the suspect-transuranic (TRU) retrieval burial ground 218-W-3A, Trench 17 and remained at this location until the waste package was unearthed and retrieved in August of 2008. The retrieved waste package was transferred to the Central Waste Complex on September 4, 2008 and placed in Outside Storage Area "A" (was denoted as storage area "FRD" at the time). See Appendix A for photograph of this waste package.

2 Waste Container Type and Contents Description

The container is a fiberglass reinforced plywood (FRP) box. The dimensions of the FRP are 20 ft (L) X 9 ft (W) X 10 ft by 8 inches (H), and has a nominal package volume of 54.4 m³. This waste package has been covered with a heavy protective poly cover and it is located on an iso-pallet type lift base. The gross weight of the waste package is approximately 9,409 kg (\approx 5,204 kg waste weight and \approx 4,205 kg tare weight). The lift pallet and poly covers weight approximately 2,545 kg making the entire package shipping weight total approximately 11,954 kg. See Appendix A for photo of the waste package in storage at CWC.

The original waste records (Appendix B) provides a description of the contents which consists of hoods, airlocks, and miscellaneous ventilation ducting from PFP. It should be noted the burial records list the waste package identification as box "75-8-DMA-20F-11," however, to allow entry into the Solid Waste Identification Tracking System (SWITS) data system, the identification number was truncated to "758DMAF11." Based on the FRP container original inventory record for this waste package, the following waste items are in this waste package:

- Hoods HA-28, F, G, H; HC-37 E, F, G, H
- Airlock HC-37-5D
- Misc. stainless steel, steel and aluminum piping and ducting.
- Valves and pipe fittings.

No additional specific information could be located on the contents of this waste package.

The waste package is TRU based on the quantities of transuranic radionuclides in the package. Additionally, since the waste is also considered to be a dangerous waste based on acceptable knowledge (AK), the waste is classified as transuranic mixed (TRUM) waste.

3 Process Knowledge and Waste Designation

The historical review of the processes in which generated the waste package 758DMAF11 are documented in the AK document: *“Acceptable Knowledge Summary Report for Plutonium Finishing Plant Complex Mixed Debris Waste from the Hanford Site Burial Grounds,”* WMP-33208, Revision 1, dated February 4, 2008.

Based on the information provided in the AK report, multiple waste designations have been identified, of which, two (2) waste designations are for F-Listed debris that was generated at the PFP:

- PFP-DES-07, Rev. 0: D004-D011, D022, D030, F001, F002, F003 (State Only) and F005. Waste stream also contains asbestos.
- PFP-DES-08, Rev. 0: D004-D011, D022, D030, F001, F002, F003 (State Only) and F005. Waste stream also contains asbestos and TSCA regulated PCBs at 500 PPM.

The majority of the PFP debris waste containers are assigned to the PFP-DES-07 waste stream/designation based on information from the original waste disposal records. A relatively small population (less than 25 waste packages), are assigned to the PFP-DES-08 waste stream/designation due to waste descriptions identifying discarded equipment that may contain PCBs regulated under TSCA (e.g., vacuum pumps, hydraulic pumps, hydraulic cylinders, etc.).

In early 2011, two (2) additional waste designations were issued to the PFP AK report specifically for the large waste packages being shipped offsite for processing. These were waste designations PFP-DES-09 and PFP-DES-11. These two waste designations contain the same waste codes and regulated waste constituents as identified in PFP-DES-07 and PFP-DES-08 (respectively), however, the number and percentage concentration of the various waste constituents denoted as being in the waste was changed to better reflect the waste composition based on actual processing experience.

- PFP-DES-09: D004-D011, D022, D030, F001, F002, F003 (State Only) and F005. This waste stream also contains asbestos.
 - Waste designation was based on PFP-DES-07 (no changes to the assigned waste codes were made).
 - Changes were made to the percentages of the various waste constituents in the waste based on processing experience.
- PFP-DES-11: D004-D011, D022, D030, F001, F002, F003 (State Only) and F005. This waste stream also contains asbestos and TSCA regulated PCBs at 500 PPM.
 - Waste designation was based on PFP-DES-08 and is for boxes/containers.
 - Changes were made to the percentages of the various waste constituents in the waste based on processing experience.

When waste package 758DMAF11 was selected for offsite processing in December of 2014, an addendum to the waste package record was issued changing the assigned waste designation for the waste package from PFP-DES-07 to PFP-DES-09 (i.e., Mixed Debris). This is the waste designation for which this waste package will be managed going forward unless additional knowledge gained from the actual processing of the waste required the designation to be changed.

4 Waste Package Review and Waste Stream Processing History

The AK report did not specifically discuss this particular waste package other than identifying it as part of the AK waste package population and identifying the waste contents via the waste disposal record. The waste package disposal record information provided the most detailed information on where the waste was generated and from what processes (i.e., the dismantling of the original RMA/RMC processing systems). Based on the AK report, the DMA dismantling project of the RMA/RMC lines has a fairly good record of information for the time period (mid 1970's). The record of information that has been found to be reliable based on actual processing history of waste that was generated from the DMA Project.

A review was performed of previous retrieved PFP debris waste boxes shipped to PFNW that were designated using the PFP-DES-09 designation. There were 21 waste packages (9 MLLW and 12 TRUMJ) totaling ≈ 643 m³. The most recent waste package shipped to PFNW having the PFP-DES-09 waste designation was in December of 2014 (PIN 236Z1018A), shipment # TC119. Note: The Process Knowledge Fact Sheet for waste package 236Z1018A was provided to Ecology on December 4, 2014). Of these 21 waste packages, two (2) of them contained non-conforming waste (NCW):

- **PIN 75DMAIS03** (11-m³ metal box): Approximately 7-gals of hydraulic fluid was drained from a hydraulic tank on one of the equipment pieces in the waste package. Sample analysis of the hydraulic fluid determined that the fluid contained F-listed organics, D009, D039 and PCBs >499-ppm. The hydraulic fluid was determined to be MLLW, and it was shipped to another treatment facility capable of treating the waste. PFNW notified both the U.S Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) by formal letter regarding this NCW. From a review of the documentation for this waste package, TSCA PCBs and the D039 waste codes were not specified, and the AK report did not include these constituents and the presents of liquids.
- **PIN 755-DMA02** (38.6-m³ FRP): a plastic jar was discovered and removed from the package by PFNW that contained ≈ 55 -lbs of magnesium oxide (there was a "MgO" marking on the jar noting the material). Sample analysis determined that there were several F001, F002, F003, and F005 organic constituents above the universal treatment standards. If waste was determined to be MLLW, it was shipped to another treatment facility capable of treating the waste. From a review of the documentation for this waste package, a bottle of magnesium oxide was not listed in the original waste package record, and the AK report did not include this material; however, the regulated dangerous waste constituents were captured in the waste designation.

Conclusion

Based on the waste knowledge associated with waste package 758DMAF11, CHPRC and DOE believe that the knowledge is sufficient in meeting the requirements of WAC 173-303-300 and PFNW's waste acceptance requirements. With the existing waste knowledge for this package, the waste can be safely managed during transporting to, and processing at, PFNW. This takes into consideration added radiological ALARA concerns if additional knowledge were deemed necessary to be obtained prior to shipment to PFNW. The information summarized above regarding prior processing of similar waste streams will be provided to PFNW prior to shipment.

Shipment Information

This FRP has been selected as a candidate for shipment to PFNW during FY2015. The package would be shipped utilizing the Super-7A transport system under the Hanford Site road-closure requirements (ref: Shipment Number TC120). Preparation and loading of the waste package at Hanford would be performed utilizing job specific work packages (ref: Work Package 2X-14-01663 for critical lifts and Work Package 2X-15-00602 for Super-7A loading).

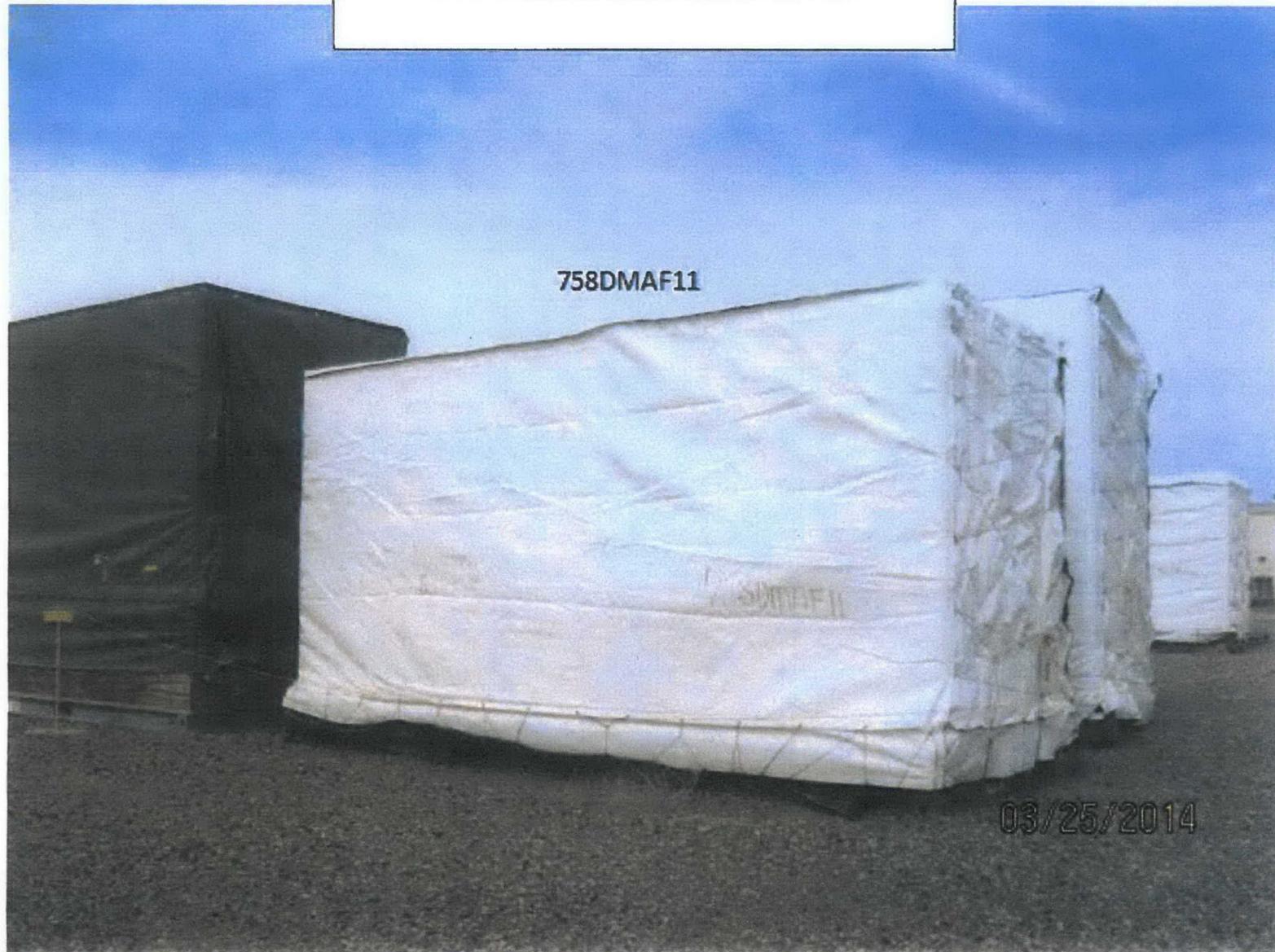
Appendices

- A. Waste Package 758DMAF11 Photograph
- B. Waste Package 758DMAF11 Information
 - Original Solid Waste Burial Record
 - SWITS Container Listing Report - R310 Report

Appendix A

Waste Package 758DMAF11 Photograph

FRP 758DMAF11 dated 3/25/2014



Appendix B

Waste Package FRP 758DMAF11

- **Burial Record**
- **SWITS R310 Report**

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234-5-2-ARHCO-75-132

SOLID WASTE BURIAL RECORD
 LOW AREA PLATEAU DISPOSAL SITE OPERATED FOR RL - ABC
 BY ATLANTIC RICHFIELD HANFORD COMPANY

No 1683

DISPOSAL SITE AREA 200West	DISPOSAL UNIT 3A	DISPOSAL POINT 17	ORIGINATOR PACKAGE NO 75-08-DMA-20F-11
DISPOSAL NO 45780	DISPOSAL DATE 77848	DISPOSAL TIME	ORIGINATOR COMPANY ARHCO
DISPOSAL	DISPOSAL	DISPOSAL	DISPOSAL 234-5
DATE 8-27-75	TIME	DATE 8-27-75	TIME 200 West
SIGNATURE <i>[Signature]</i>		SIGNATURE <i>[Signature]</i>	ADDRESS 758DMAF11

PHYSICAL DESCRIPTION
 MATERIAL CONTENTS: HOODS HA-28, F, G, H; HC-37, E, F, G, H
 AIRLOCK HC-37, HI-51, Misc. DUCTS
 PDR-ARM-76-009

BOX	NO.	LENGTH	WIDTH	HEIGHT	WEIGHT
	Hood FRP	20'	9'	10' - 8"	
DRUM					
CONTAINER					
OTHER					
TOTAL VOLUME		1921			

ACTIVITY DESCRIPTION
 Contaminated with Pu.
 PCL Report DMA-75-66, 67, 68, 76, 77, 78, 79, and DUCTS

PLUTONIUM 64	ACTIVITY	DATE	TIME
	21		2
ORIGINATOR	DATE	TIME	INITIALS
			14

Albion Nuclear Fuel Company
RADIATION PROTECTION RECORD
ON-SITE RADIOACTIVE SHIPMENT RECORD

TO	CONTRACTOR AND COMPONENT	BUILDING AND AREA	PHONE
FROM		VEHICLE NO.	

DESCRIPTION
 (ITEM) _____ ON _____ MATERIALS _____
 TYPE OF INNER CONTAINER: _____
 TYPE OF OUTER CONTAINER: _____

RADIATION CONCENTRATIONS
OUTER CONTAINER
 DOSE RATE (μr/h) AT SURFACE _____ WHEN NR. AT 3 FT. _____ WHEN NR.
 * DOSE RATE (μr/h) AT SURFACE _____ WHEN NR. AT 3 FT. _____ WHEN NR.
 MEASURABLE CONTAMINATION _____

* WHEN APPLICABLE
 SHIPPED BY _____ DATE _____
 INSPECTION NOT PERMITTED
 INSPECTION PERMITTED
 RADIATION MONITORING APPROVAL _____ DATE _____

INSTRUCTIONS
 1. AFFIX THE RADIATION SYMBOL TO CONTAINERS.
 2. DO NOT LEAVE SHIPMENT UNATTENDED WHEN NOT IN A DESIGNATED ZONE.
 3. IN CASE OF ACCIDENT OR SPILL, NOTIFY RADIATION SUPERVISOR IMMEDIATELY.
 4. RECEIVERS TO NOTIFY RECEIVING AGENCIES IMMEDIATELY AND KEEPER UPON DELIVERY.

THIS SHIPMENT RECORD IS VALID FOR THE APPROVED DATE ONLY.

APPROVAL TO SHIP	AUTHORIZED SIGNATURE	CLASSIFIED OR NOT CLASSIFIED	SHIPPER DATE
CHECKED OUT BY	AREA	AREA	AREA
PATROLMAN NUMBER			
TIME DATE			

810000-000 11-73
 RADIATION PROTECTION RECORD
 SHIPPER - RECORD COPY TO RADIATION SUPERVISOR AT SHIPPER
 CARRIER - RECORD COPY TO RADIATION SUPERVISOR AT RECEIVER
 REE - SHIPPER COPY
 SHIPPER - RETURN TO SHIPPER

Atlantic Richfield Hazard Company Method, Georgia 30822		RADIATION PROTECTION RECORD ONSITE RADIOACTIVE SHIPMENT RECORD	
TO FROM DATE DESCRIPTION ITEM	RADIATION AND COMPONENTS OR MATERIAL	SHIPPING AREA TIME UP WHEN CONTAINER	PAGES
RADIATION CONDITIONS OUTER CONTAINER DOSE RATES: _____ AT 1 FT. SPACE WHEN HR. AT 3 FT. WHEN HR. DOSE RATES: _____ AT SURFACE WHEN HR. AT 3 FT. WHEN HR. REMOVAL CONTAMINATION: _____			
* WHEN APPLICABLE SUPPLIED BY: _____ DATE: _____ <input type="checkbox"/> INSPECTOR NOT RESPONSIBLE <input type="checkbox"/> RADIATION MONITORING SPECIAL DATE: _____ <input type="checkbox"/> INSPECTOR RESPONSIBLE			
INSTRUCTIONS 1. AFFIX THIS RADIATION SYMBOL TO CONTAINER. 2. DO NOT LEAVE SHIPMENT UNATTENDED WHEN NOT IN A RADIATION ZONE. 3. IN CASE OF ACCIDENT OR SPILL, NOTIFY RADIATION MONITORING IMMEDIATELY. 4. REEVALUATE RECEIVING RADIATION MONITORING RECORD WHEN DELIVERED.			
THIS SHIPMENT RECORD IS VALID FOR THE APPROVED DATE ONLY.			
APPROVAL TO SHIP: _____ AUTHORIZED SIGNATURE: _____		CLASSIFIED: <input type="checkbox"/> NOT CLASSIFIED: <input type="checkbox"/>	
CHECKED BY: _____ DATE: _____ TIME: _____	AREA: _____	AREA: _____	AREA: _____
44-0000-000 12-721 DISTRIBUTION: WHITE - WELDON COPY TO AREA; PINK - WELDON COPY TO AREA; GREEN - COMPANY EQUIPMENT; NO RECORD FOR AREA SECURITY; BLUE - RETURN TO COMPANY			

6-11-76
MUR

OPERATIONS WASTE
TRACKED WITH DMA DATA

<u>MONTH</u>	<u>ITEM</u>	<u>Box No.</u>	<u>PU</u>	<u>TOT</u>
5-75	25 poly bottles	75-5-DMA-20F-03	85	
5-75	24 poly bottles	75-5-DMA-20F-07	84	149
7-75	12 FILTERS	75-7-DMA-20F-09	10	10
8-75	3 Filters (1 approx)	75-8-DMA-20F-13	15	15
12-75	SITE; 659 MAG. GAC.	75-12-DMA-16F-05	110	110V
2-76	HC-98 FILTER	76-2-DMA-18F-12	95	35
?	HC-98 FILTER (AK-297 suppl)	(NCR. Box 100)	96	96
?	HC-46 F. FILTER (PCL-200-2-76-03)	(NCR. Box 100)	2	2
<u>TOTAL</u>				<u>917</u>

PPE LAB WASTE (NSR-DMA)

<u>Report No</u>	<u>ITEM</u>	<u>Box No</u>	<u>PU</u>
75-86	186-33		99
75-87	186-34		4
75-88 Rev.	186-34		34
75-89	186-31A		1
75-90	186-32		10
75-91	186-31		19
<u>TOTAL</u>			<u>167</u>

DMA PU VALUES NOT SHOWN ON PCL REPORTS:

<u>Box No</u>	<u>ITEM</u>	<u>Counted ON</u>	<u>PU</u>
75-3-DMA-20F-03	1 DRUM	DMR, GAC	2
75-5-DMA-20F-07	4 DRUMS	" "	11
75-8-DMA-20F-11	VENT DUCTS (NOT)	NAI	8
<u>TOTAL</u>			<u>21</u>

18

**DNA EQUIPMENT REMOVAL
BOX RECORD**

Date: _____
 Box No. 75-8-DNA-20F-11
 Extension (1-FT or 2-FT) _____
 *Gross Fu _____

Gross Weight 29,000 lbs.
 Lift Frame Wt. 2,000 lbs.
 **Box Tare 9,250 lbs.
 (-) Total Tare Weight 11,250 lbs.
 Net Weight 17,750 lbs.

Itemized List of Equipment Loaded (Show identification number where available).

Conveyer Sections including:

- HA-25A (F136018)
- HA-25B (F136019)
- HA-28A (F136077)
- (F136020)

- HL-37E
- HL-37F
- HL-37G
- HL-37H

AIRLOCK (HL-37-50)

- 4- 10" DIA Elbow w/tees (SS)
- 2- 4" Fisher valves
- 1- 18" x 26" stl plate
- 1- 10" DIA pipe - 3' Lg
- 1- 10" Alum pipe - 30' Lg
- 1- 4" Alum pipe - 25' Lg
- 1- 4" SS pipe - 25' Lg
- 1- 26" x 26" stl plate

- 1- 8" DIA (SS) pipe - 20' Lg
- 1- 3" DIA (SS) pipe - 25' Lg
- 1- 4" " " " - 25' Lg
- 1- 2" " " " - 25' Lg
- 1- 20" x 10" SS duct - 14' Lg

PLC Report DNA-75-6667, 65, 70 }
 77, 78, 79 } 26

Knowl Report - Data

19 705 678
 11

01070130

* To be filled out by Operations Contact Engineer
 ** Box Tare includes lid, and extension when used

WASTE PACKAGE 758DMAF11

SWITS R310 Report

SWITS R310 for 758DMAF11, Page 1 of 6

Solid Waste Information and Tracking System

Container Listing Report

for Package ID: 758DMAF11

Source Facility:

Location Facility:

Shipment #:

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Package ID: 758DMAF11	Secondary Pkg ID:	Accumulation Date: 08/27/1975
Waste Type: D TRU	Phys State Cd: 8	Deadline Date:
Sec Waste Type: TRU	UHC Determination: N	Ship Date: 08/27/1975
Encasement/HIC#:	UHC's Applicable: D	TSD Receive Date:
Profile / Rev#: TRU-RETRIEVAL - 01	NFPA < 93.3C:	TSD Accept Date: 08/27/1975
WSRD / Rev #: -	Storage Category: M	Disposal Date:
CCP Control?:		

Container Type / Descr: CA / 20*10.67*9	Container Empty Tare Wt. (kg): 4204.5500
Container Volume (cu. meters): 54.3970	Waste Weight (kg): 5204.4500
Labpack Flag: N	Container Gross Wt. (kg): 9409.0000
Container Contents: RSW (3A-T17, PFP BOX #31). CONTAINS SEVERAL GLOVEBOXES/HOODS, AIRLOCKS, VENTILATION DUCTING, PIPING, VALVES, AND STEEL PLATES. PFP COMPLEX DEBRIS, LOW GRAN ACTIVITY BOXES. PFP DESIGNATION (PFP-DES-09) APPLIED ON 12-8-14. RJS 2/23/15	
SWO Comments: FISSILE, CPS CONTAINER TYPE A BOX PER CSER 05-018 REV 1.	

Generator Information

Generating Company: CHPRC CH2M HILL PLATEAU REMEDIATION CO.	Generator ID: 0092501	Generator Group: TRURET
Source Facility: 23452	Generator: RJ SWAN	
Generator Comments: THE ORIGINAL PFP HAS THE FOLLOWING NOMINAL DIMENSIONS: 20'(L) X 9'(W) X 10'-8"(H). UPDATED PER NDA REPORT CH-TRP-049-CNC REV. 2 (BASED ON PFP 6% DISTRIBUTION). MEL 12/30/14.		

Billing Detail

<u>Charge Code</u>	<u>COA</u>	<u>Company</u>	<u>Group ID</u>	<u>Percent</u>
302489	JPRC	CH2M HILL PLATEAU REMEDIATION CO.	TRURET	100.00
				100.00

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Solid Waste Information and Tracking System
Container Listing Report
for Package ID: 758DMAF11
Source Facility:
Location Facility:
Shipment #:

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Hazardous Package Detail

Container Status: Full Flashpoint: NA pH Value: >2-<12.5 Subpart CC Flag: NA
DW Numbers: D004 D005 D006 D007 D008 D009 D010 D011 D022 D030 F001 F002 F003 F005

RCRA Reporting

ADWR Stream Description: TRU Project Debris - Solvents, Organics, Metals
Designation Code: DW
Source Code: G49 Other Remediation
Comment: Burial Ground Remediation
Form Code: W002 Contaminated Debris, paper, cloth, rags, wood, empty fiber or plastic containers, glass,
piping, or other solids
Comment:
Origin Code: ii Non-recurrent waste stream.
Residual Mgmt Method:
Comment:
Management Method:
Comment:
Certification Group:
Reportable CERCLA?:

Pre-2007 Reporting

Waste Stream: Offsite TSD Waste Stream: RCRA Designated Date:

PCB Package Detail:

PCB Type: PCB Source Concentration (PPM):
PCB Subtype: PCB Waste Weight (kg):
PCB Contents: Removed from Service:

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**Solid Waste Information and Tracking System
Container Listing Report**

for Package ID: 758DMAF11

Source Facility:

Location Facility:

Shipment #:

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Radioactive Package Detail

Waste Category: WC3	snm Waste?:	Thermal Power (w/cu.m.):	4.93513E-03
Combustible Flag:	Shielding: None	Neutron Dose Rate (mrem/hr):	
Exceeds ISB Limit: C	Handling: C	Contact Dose Rate (mrem/hr):	7.00000E-01
NRC Class: >C	RSWIMS Container Cnt: 1	Tot Pe-Ci:	8.81612E+00
	Excluded from DE-Ci:	ICRP 71 DE-Ci:	8.54796E+00

VOC/Hydrogen Gas Diffusion Detail

H2 Diffusion Release Date: VOC Hold?: VOC Resample Date:

Current Location Information

Facility ID: CWC	Tier Level: 1	Loc Beg Coordinates - N:
Trench / Unit: Z02	Tier Position: A9	W:
Module:	GPS Data Flag:	Loc End Coordinates - N:
		W:

Location History

<u>Location Date</u>	<u>Facility ID</u>	<u>Unit</u>	<u>Module</u>	<u>Tier Level</u>	<u>Tier Posn</u>	<u>Outermost Pkg ID</u>
08/22/2011	CWC	Z02				
10/12/2010	CWC	FRG				
09/04/2008	CWC	FRD				
09/04/2008	TRANSIT					
08/29/2008	218W3A	Z11				
08/28/2008	218W3A	Z9C				
08/27/1975	218W3A	T17				

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Solid Waste Information and Tracking System
Container Listing Report
for Package ID: 758DMAF11
Source Facility:
Location Facility:
Shipment #:

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Isotope Information

<u>Isotope Number</u>	<u>Isotope Name</u>	<u>Isotope Activity (Ci)</u>
3	Sr-90	1.43000E-06
8	Cs-137	1.54000E-06
21	Np-237	1.90000E-05
26	Am-241	1.55000E+00
41	Pu-238	4.64000E-01
97	Pu-240	1.23000E+00
98	Pu-241	2.05000E+01
99	Pu-242	7.14000E-05
100	Pu-239	5.22000E+00

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Solid Waste Information and Tracking System

Container Listing Report

for Package ID: 758DMAF11

Source Facility:

Location Facility:

Shipment #:

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Waste Component Records

<u>Component ID</u>	<u>Component Text</u>	<u>PPM</u>	<u>Weight (kg)</u>	<u>Weight %</u>
10378-23-1	EDTA ACID TETRASODIUM		0.5204	.01
121-14-2	2,4-DINITROTOLUENE		0.0007	.000013
126-73-8	TRIBUTYL PHOSPHATE (TBP)		0.5204	.01
1330-20-7	XYLENE (MIXED ISOMERS)		0.5204	.01
1332-21-4	ASBESTOS		0.5204	.01
56-23-5	CARBON TETRACHLORIDE		0.5204	.01
60-29-7	DIEETHYL ETHER		0.5204	.01
67-64-1	ACETONE		0.5204	.01
67-66-3	CHLOROFORM		0.5204	.01
71-36-3	BUTYL ALCOHOL		0.5204	.01
71-43-2	BENZENE		0.5204	.01
7439-92-1	LEAD		0.0260	.0005
7439-97-6	MERCURY		0.0010	.00002
7440-02-0	NICKEL		0.5204	.01
7440-22-4	SILVER		0.0260	.0005
7440-38-2	ARSENIC		0.0260	.0005
7440-39-3	BARIUM		0.5204	.01
7440-41-7	BERYLLIUM		0.5204	.01
7440-43-9	CADMIUM		0.0052	.0001
7440-47-3	CHROMIUM		0.0260	.0005
75-09-2	DICHLOROMETHANE		0.5204	.01
7697-37-2	NITRIC ACID		0.5204	.01
7722-64-7	POTASSIUM PERMANGANATE		0.5204	.01
7782-49-2	SELENIUM		0.0052	.0001
GCM055	INERT MATERIAL (PAPER, WOOD, PLASTIC, ETC.)		5196.0075	99.837767
			5204.4500	

SWITS R310 for 758DMAF11, Page 6 of 6

Solid Waste Information and Tracking System

Container Listing Report

for Package ID: 758DMAF11

Source Facility:

Location Facility:

Shipment #:

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Manifest / Shipping Information

Shipment Type	Document#	Item	RSR #	RSR Type	DOT Spec	DOT Cat	REQ Num	Shipment Scheduled	Date Shipped	Shipment Arrived	Manifest Returned	Tran Cmpny	Dest Cmpny	Dest Type	Receiving Facility	Rtn
SR	TRURT0678	1		CN					09/04/08	09/04/08						CWC

Package Review Notes

Review Code

Print
on
Receipt
Rpt?

Comments

CRITICALITY REVIEW

Y FISSILE, CPS CONTAINER TYPE A BOX PER CSER 05-018 REV 1.

Badbada, P S (Sharon)

From: Martin, Paul W - CHPRC
Sent: Thursday, April 16, 2015 11:21 AM
To: Badbada, P S (Sharon)
Cc: Dittmer, Lorna M; Engelmann, Richard H
Subject: FW: K-Basin sludge meeting

From: Bartus, Dave [<mailto:Bartus.Dave@epa.gov>]
Sent: Wednesday, January 21, 2015 4:59 PM
To: Dixon, Brian J
Cc: Quintero, Roger A; Martin, Paul W - CHPRC; Balone, Steven N; Clark, Clifford E (Cliff)
Subject: RE: K-Basin sludge meeting

Thanks, Brian.

I'm in agreement about your forum thoughts, and will be glad to accommodate a separate conversation. Since there are more of you than me, please feel free to propose a time for doing so – I think this approach will be more efficient than if I try to guess schedules on your end.

I'm also generally in agreement with the arguments you present below concerning compliance with the technical standards of 40 CFR 761.65(b). What I'd like to focus on in our planned conversations are whatever other requirements that would apply under TSCA for storage for disposal. Another angle that I'd like to explore is how having a written approval from EPA, even if there is an argument that authorization might be available on a self-implementing basis, would facilitate Ecology's willingness to get on-board with the proposal. I'll explain more when we talk.

Dave

From: Dixon, Brian J [mailto:Brian_J_Dixon@rl.gov]
Sent: Wednesday, January 21, 2015 2:26 PM
To: Bartus, Dave
Cc: Dixon, Brian J; Quintero, Roger A; Martin, Paul W - CHPRC; Balone, Steven N; Clark, Clifford E (Cliff)
Subject: RE: K-Basin sludge meeting

Dave,

We have reviewed the requirements for storage of PCB remediation waste at T Plant. While we are still considering the flexibility an RBDA may provide, we think we will be able to meet all applicable requirements for storage. For example, T Plant provides adequate walls and roof. The secondary containment liner and storage rack assembly provides for a suitable floor and curbing to contain leaks. The leak detection system provides a mechanism to check for leaks at least every 30 days (letter from EPA Region 10 dated March 20, 2002). The leak removal system provides for prompt removal of any spilled material. The Sludge Transport and Storage Containers are very robust and would meet the requirements for containers (per 2002 EPA letter).

We would like to discuss these requirements with you but the meeting may not be the right forum due to the time the existing agenda items will take.

Thanks,
Brian

From: Bartus, Dave [<mailto:Bartus.Dave@epa.gov>]

Sent: Monday, January 12, 2015 11:10 AM

To: Dixon, Brian J; Skorska, Maria; Singleton, Deborah; Clark, Clifford E (Cliff); Quintero, Roger A; Lobos, Rod; Balone, Steven N; Garelo, Paul R

Cc: Skinnarland, E R (Ron); anca461_ecy.wa.gov; 'Bartus.Dave@epamail.epa.gov'; Alexander, Debra (ECY); Johansen, Stephanie K; Martin, Paul W - CHPRC; Petersen, Linda C; Davis, Mike; McKarns, Anthony C (Tony); Boone, Darren M; Cawrse, Allan E; Erpenbeck, Eric G

Subject: RE: K-Basin sludge meeting

One question that probably needs to be addressed is the question of whether DOE-RL and CHPRC believe a case can be made that all applicable requirements of 40 CFR Part 761 applicable to storage for disposal of PCB remediation can be met (including but not limited to the technical requirements of 40 CFR 761.65(b)) such that the proposed storage can occur without written approval from EPA, or whether for this or other reasons it makes more sense to provide the necessary TSCA approval pursuant to a risk-based disposal approval under 40 CFR 761.61(c).

I don't know that the January meeting is the right forum to work through these issues, but I thought I'd put the issue on the table. If memory serves me correctly, we touched on this issue during a previous meeting at Ecology, but left it for future consideration and resolution. My personal feeling is that the risk-based disposal approval is far better suited to this case, and provides exactly the sort of flexibility needed to help ensure full integration of TSCA requirements with all other applicable requirements. This may be an issue where it makes sense to do some preparation and have a discussion separately at a later time.

Dave

From: Dixon, Brian J [mailto:Brian_J_Dixon@rl.gov]

Sent: Monday, January 12, 2015 11:01 AM

To: Skorska, Maria; Singleton, Deborah; Clark, Clifford E (Cliff); Quintero, Roger A; Lobos, Rod; Balone, Steven N; Garelo, Paul R

Cc: Skinnarland, E R (Ron); anca461_ecy.wa.gov; 'Bartus.Dave@epamail.epa.gov'; Alexander, Debra (ECY); Johansen, Stephanie K; Martin, Paul W - CHPRC; Petersen, Linda C; Davis, Mike; McKarns, Anthony C (Tony); Boone, Darren M; Dixon, Brian J; Cawrse, Allan E; Erpenbeck, Eric G

Subject: RE: K-Basin sludge meeting

As noted by Maria, during our meeting on this topic in November, we agreed to have a follow up meeting in January to discuss technical aspects. DOE and CHPRC will be prepared to discuss topics such as hydrogen generation rates, potential changes in the waste matrix during storage, design of sludge transport and storage container, physical changes to T Plant and how the waste will be managed while in storage. Ultimately, all of these questions are related to safe and compliant storage at T Plant and how that storage impacts T Plant dangerous waste management. The upcoming meeting would have the overall objective of facilitating understanding so that consensus can be reached for any permit modification needed for managing sludge at T Plant. With that in mind, the draft agenda includes the following:

1. Safe management of sludge for longer term storage (hydrogen generation rates and management, physical and chemical changes during storage, design of STSCs);
2. Physical and operational changes proposed at T Plant.
3. Impact of sludge management on systems necessary for dangerous waste management (ventilation, emergency equipment, crane, canyon deck, etc.)
4. Process for obtaining Ecology approval of T Plant modifications. If the T Plant modification request is submitted in FY15 before the current SWOC class 3 modification request is acted upon, what process would be followed and what information would be provided in the request? (The permittees can be prepared to propose an approach.)

If Ecology or EPA would like additional agenda items or would like specific information please let me know as soon as possible so that the appropriate person/information is available.

Thanks,
Brian

From: Skorska, Maria (ECY) [<mailto:mako461@ECY.WA.GOV>]
Sent: Friday, January 09, 2015 8:19 AM
To: Singleton, Deborah
Cc: Skinnarland, E R (Ron); Carlson, Annette (ECY); Dixon, Brian J; 'Bartus.Dave@epamail.epa.gov'; Alexander, Debra (ECY)
Subject: RE: K-Basin sludge meeting

Subjects for discussion during this meeting are listed in the attachment included with the Outlook invitation. DOE has proposed these subjects based on participants questions/requests during the previous meeting and the MAST tour that followed.

Maria (Marysia) Skorska, PhD, PE
Nuclear Waste Program
Washington Department of Ecology
Richland, WA
(509) 372-7891

From: Singleton, Deborah (ECY)
Sent: Thursday, January 08, 2015 7:11 PM
To: Skorska, Maria (ECY); Skinnarland, Ron (ECY); Carlson, Annette (ECY); Dixon, Brian J; 'Bartus.Dave@epamail.epa.gov'; Alexander, Debra (ECY)
Cc: Lowe, Steven (ECY)
Subject: RE: K-Basin sludge meeting

Does this meeting have an agenda? Is it specifically addressing permitting related issues and will there be discussions regarding sludge treatment?

Deborah

-----Original Appointment-----

From: Skorska, Maria (ECY)
Sent: Wednesday, December 31, 2014 9:41 AM
To: Skorska, Maria (ECY); Skinnarland, Ron (ECY); Singleton, Deborah (ECY); Alexander, Debra (ECY); Carlson, Annette (ECY); Dixon, Brian J (Brian_J_Dixon@rl.gov); Bartus, Dave (Bartus.Dave@epa.gov); 'Lobos.Rod@epamail.epa.gov'
Subject: K-Basin sludge meeting
When: Wednesday, January 21, 2015 12:30 PM-2:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Ecology

At Brian's request start time is being changed to 12:30

Waste Disposition Performance

Facility	Status as of 3-24-2015
CWC	<ul style="list-style-type: none"> • Performing waste storage activities • Updating procedures to reflect AO requirements is ongoing • Mining, segregating, and overpacking watch list drums is ongoing <ul style="list-style-type: none"> • All Priority 1 drums have been overpacked • Continuing to receive waste from onsite and offsite generators • Completed roof repairs for 2403-WA, 2403-WB, 2403-WC, and 2403-WD • Continue to track new roof repair needs in RCRA open item list.
LLBG	<ul style="list-style-type: none"> • Continuing receipt of waste shipments at Trench 31/34. • Continuing leachate collection & removal system operation at Trenches 31 & 34 • Continuing LLBG housekeeping activities* <ul style="list-style-type: none"> • Applied pre-emergent herbicide in all LLBGs
WRAP	<ul style="list-style-type: none"> • Completed roof repairs for 2336W & 2404-WB • Continue to track new roof repair needs in WRAP turnover checklist • Continuing surveillance and maintenance activities. • Continuing floor maintenance activities at 2404-WB when resources & weather permit. No mixed waste containers with free liquids will be stored in this building without replacement secondary containment until the floor is repaired.
T Plant	<ul style="list-style-type: none"> • Continuing surveillance and maintenance activities.
<p>* Housekeeping in LLBGs includes tumbleweed monitoring & removal, control of vegetation growth, contamination control activities</p>	

RCRA-Regulated Container Inventory

of Containers and Volume

as of 3-24-2015

Facility	Drum/Small Container ¹	Medium Container/Box ²	Large Container ³	Total Volume
CWC (Jan)	5494 (1327 m ³)	475 (815m ³)	383 (6640 m ³)	8,782 m ³
CWC (Mar)	5502 (1329 m ³)	485 (833m ³)	383 (6640 m ³)	8,802 m ³
T-Plant (Jan)	4 (1 m ³)	3 (4 m ³)	2 (44 m ³)	49 m ³
T-Plant (Mar)	3 (0 m ³)	3 (4 m ³)	2 (44 m ³)	48 m ³
WRAP (Jan)	5 (1 m ³)	0 (0 m ³)	0 (0 m ³)	1 m ³
WRAP (Mar)	5 (1 m ³)	0 (0 m ³)	0 (0 m ³)	1 m ³

Footnotes regarding volumes:

1. 0.485 m³ (110 gallons; 17.1 ft³) or less
2. Greater than 0.485 m³ (110 gallons; 17.1 ft³) & less than 1.812 m³ (64ft³) (Standard Waste Box)
3. Greater than 1.812 m³

Waste Package Inventory in CWC Outside Storage Areas

CWC DWMU ^[1]	Number of Waste Packages in storage (1/24/2014)	Number of Waste Packages in storage (1/19/2015)	Number of Waste Packages in storage (3/24/2015)	Notes/Comments in Inventory Change from Previous Month
Outside Storage Area A	173	164 + 2	164	Two containers of waste generated from box 231ZDR-11 activities were removed from Outside Storage Area A
Outside Storage Area B	11	11	11	
Tank D-10 Outside Storage Area	1	1	1	
East Outside Storage Area	0	0	0	
Shipping and Receiving Area	0	0	0	
Total =	185	176 + 2	176	

[1] DWMUs are based on those listed in the Agreed Order, exhibit B.

**T PLANT, LLBG, WRAP, AND CWC
Project Managers Meeting
825 Jadwin / Room 540S
Hanford, Washington**

March 26, 2015

ATTENDEE LIST

Name	Organization	Phone Number
1. <i>A. Cawise</i>	<i>CHPRC</i>	<i>576-3143</i>
2. <i>John Temple</i>	<i>Ecology</i>	<i>372-7940</i>
3. <i>J. Bonghese</i>	<i>CHPRC</i>	<i>373-3804</i>
4. <i>Al Farabee</i>	<i>DOE</i>	<i>376-8089</i>
5. <i>Rick Engelmann</i>	<i>CHPRC</i>	<i>376-7485</i>
6. <i>Stephanie Johansen</i>	<i>CHPRC</i>	<i>373-1031</i>
7. <i>Michael Collins</i>	<i>DOE</i>	<i>376 6536</i>
8. <i>Deborah Singleton</i>	<i>Ecology</i>	<i>372-7923</i>
9. <i>Els Eberlein</i>	<i>Ecology</i>	<i>372-7906</i>
10. <i>P. Badbada</i>	<i>CHPRC</i>	<i>373-9792</i>
11. <i>Michael Turner</i>	<i>MSA</i>	<i>6-2872</i>
12. <i>Kathy Knox</i>	<i>Knox Court Reporting</i>	<i>946-5535</i>
13. <i>Paul W. ...</i>	<i>CHPRC</i>	<i>376-6620</i>
14.		
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T PLANT, LLBG, WRAP, AND CWC PROJECT MEETING
825 Jadwin / Room 540S
Hanford, Washington
March 26, 2015

10:00 A.M. TO 11:00 A.M.

Agenda

- I. The January 22, 2015, Project Managers Meeting (PMM) Minutes were approved by RL/Ecology representatives and have been submitted to the Administrative Record. The February 26, 2015, subject PMMs were canceled per RL/Ecology representative agreement.
- II. Operational Status
- III. Status of Previous Agreements and Commitments
- IV. New Agreements and Commitments
- V. Near Term Schedules and Ongoing Activities
 - A. Agreed Order - Implementation
 - B. HF RCRA Permit Rev. 9 Update
 - C. 8C updates, closure plans, Part B application
 - D. Conceptual Agreement Packages
 - E. Sludge Storage at T Plant
- VI. Approved Changes Signed Off in Accordance with TPA Section 12.2
- VII. General Discussion
- VIII. Actions

Unit	Description of Action	Status	Date
CWC	RL will schedule a meeting with Ecology by the end of September 2014 to discuss disposition of tank D-10.	New Action	6/26/14
		Mr. Collins (RL) will schedule the meeting regarding tank D-10. Ms. Singleton (Ecology) stated that EPA needs to be involved in the discussion.	7/24/14
		Mr. Collins will schedule the meeting to be held before the October 30, 2014, PMM.	9/25/14
		Mr. Collins sent Ecology information regarding tank D-10 in lieu of scheduling a meeting. Ecology will notify Mr. Collins if the information is satisfactory or if a meeting needs to be scheduled.	10/30/14
		Ecology is still evaluating the information that was provided.	12/4/14
		Ecology is still evaluating the information that was provided.	1/22/15
LLBG	RL to schedule a tour of trenches 31/34/94 for Ecology.	New Action	1/22/15
CWC	Provide Ecology results of surveys done under Box 231ZDR-11.	New Action	1/22/15

- IX. Documents for Submittal to the Administrative Record
- X. Next Project Managers Meeting