FACILITY STATUS CHANGE FORM
(for DOE/RL-2010-34 Facilities)

1220663

Date Submitted:	Area:	Control #:
May 20, 2013	100-D	D4-100D-003
Originator:	**Facility ID:**	
David Warren	151-D Switchgear Building	
Phone:	**Action Memorandum:**	
539-6040	General Hanford Site Decommissioning Activities	

This form documents agreement among the parties listed below on the status of the facility D&D operations and the disposition of underlying soil in accordance with the applicable regulatory decision documents.

Section 1: Facility Status

☒ All removal actions require by action memo complete.

☐ Removal actions required by actions memo partially complete, remaining operations deferred.

Description of Completed Activities and Current Conditions:

Decontamination and Decommissioning: If present, the following hazardous materials were removed prior to facility demolition: batteries, light bulbs, oils, grease, Regulated Asbestos-Containing Material (RACM), mercury, refrigerant, and polychlorinated biphenyl (PCB) containing equipment. Hazardous material removal and waste disposition was performed in accordance with the *Removal Action Work Plan for River Corridor General Decommissioning Activities*, DOE/RL-2010-034.

Demolition:The 151-D building was demolished in place in the 100-D area in April of 2013, and the waste was loaded out and disposed of at the ERDF. Based on past uses of this facility and radiological scoping survey results (See Attachment 4), radiological contamination was not expected during demolition. Class II non-friable asbestos was the only contaminant of concern for demolition. Accordingly, portions of the demolition were performed under asbestos controls. The below grade structures of the facility to be left behind were visually inspected prior to demolition for staining as was the excavation area following demolition. One stain was observed on the floor of the basement of the southeast end of the facility. The stain was sampled and the results of that sample, as well as documentation of the visual inspection, are included in Attachment 3. The area was surveyed by GPS to delineate the extent of the excavations and identify below grade structures to remain in place.

Description of Deferral (as applicable):

Not Applicable

Section 2: Underlying Soil Status

☐ No waste site(s) present. No additional actions anticipated.

☒ Documented waste site(s) present. Cleanup and closeout to be addressed under Record of Decision.

☐ Potential waste site discovered during removal action. Waste site identification number <to be> assigned.

Cleanup and closeout to be addressed under Record of Decision.

Description of Current/As-Left Conditions:

The 151-D building was demolished in place at the 100-D area and the waste generated was loaded out and disposed of at the ERDF. The portions of the structure, including the basement, 3 feet below grade were left in place. No backfill has been performed as that scope of work is likely to be performed following demolition of the 151-D-A4 Switchyard or remediation of the 100-D-75:1 WIDS site. A GPS survey was performed at the site following D4 activities to delineate the extent of removal and identify below grade structures left in place. See Attachment 4 for GPS survey results. The previous building site is currently posted with a fall protection boundary for the open basement.

100-DR-1

FACILITY STATUS CHANGE FORM
(for DOE/RL-2010-34 Facilities)

Identification of Documented Waste Site(s) or Nature of Potential Waste Site Discovery (as applicable):
100-D-75:1 - 151-D Primary Electrical Substation Yard. The subsite consists of the the fenced gravel yard of the 151-D-A4 electrical switchyard. The WIDS designation is primarily due to the operation and maintenance of PCB containing electrical equipment. The site was impacted by D4 activities as the footprint of the site extends over the Southern portion of the 151-D building, which was removed to 3 feet below grade. The 100-D-75:1 subsite will be recommended for cleanup by remove, treat and disposal under a final action Record of Decision.

Section 3: List of Attachments

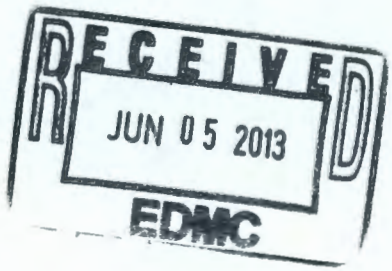
1. Facility Information
2. Map and Photographs of the 151-D Facility
3. CCN 171145, Pre- and Post demolition Inspection of the 151-D Building
4. CCN 169650, DOE Approval of No PTE for the 151-D Facility
5. 151-D GPS Surveys
6. CCN 170115, EPA Approval of 151-D and 151-B Demolition approach

Rudy Guercia _____ 5/30/13

DOE-RL (Lead Agency) Date

DISTRIBUTION:

DOE: Rudy Guercia, A3-04
Document Control, H0-30
Administrative Record, H6-08 (100-DR-1 OU)
SIS Coordinator: Benjamin Cowin, H4-22
D4 EPL: David Warren, X9-08
Sample Design/Cleanup Verification:Theresa Howell, H4-23
FR Engineering: Rich Carlson, N3-30
FR EPL: Dan Saueressig, N3-30



Attachment 1: Facility Information

Introduction

This document provides information regarding the history, characterization, and final status at the completion of deactivation, decontamination, decommissioning, and demolition (D4) activities of the 151-D Switch House located in the 100-D Area.

Facility History

The 151-D Switch House was a one story reinforced concrete and concrete block building, with a sub-level cable pit equipped with a sump pump, located adjacent the 151-D Electrical Switch Yard. All underground electrical ducts in the substation yard terminated at the Switch House. The main floor was comprised of a switch room with a fan room, battery room, and restroom at one end. The cable pit floor slab varied in thickness from 12 inches to 18 inches, while the walls were 12 inches thick. Concrete block walls and concrete brick pilasters support the structural steel roof framing overlaid with concrete tile covered with a tar and gravel surface. Floors were reinforced concrete 12 inch thick over the cable pit and 6 inch thick over the backfill section and were supported by concrete wing walls. A sump with a pump was located in the southeast corner of the original buildings basement. Switchgear was located on the main floor directly above the cable pit. In 1956, as part of the substation expansion to meet increased production, the Switch House received a 50 ft by 35 ft addition to house new 13.8 KV circuit breakers and other electrical equipment. The addition included both a main floor level as well as a partial 12 ft deep basement that connected into the cable pit in the existing portion of the original building. The north and east walls were corrugated asbestos cement siding, while the west and south walls were concrete block. The concrete slab roof was covered with built-up roofing. A 60 foot tall metal Microwave Tower supporting two microwave antennas was located near the northwest corner of the 151-D addition.

The 151-D Primary Substation served as the primary source of electrical power for all facilities in the 100D Area. It was first energized in August 1944, and received 230 kV power from the Midway Substation. From the three main transformers in the 151D Switch Yard, power was transmitted primarily via underground cables to thirteen secondary substations and nine distribution substations located throughout the 100D Area. One 27.5 kVA transformer, located adjacent to the 151D Switch House, provided service for the building. Three oil circuit breakers were also in service to support the switch yard operations. The 151D building continued to be used after the 105D and 105DR Reactors were shut down in the 1960s to provide power for occupied facilities in the 100D Area and backup power to 100N Area. It also provided power for pumping fire water for the 100D and 100F Areas and for backup export water supply to the 200 Area.

See Attachment 2 for a map and photographs of the 151-D facility.

Facility Characterization

The 151-D facility was never posted for radiological conditions. Based on historical research of past uses, radiological contamination was not expected and the radiological scoping surveys found no contamination. The 151-D facility was not listed on the Hanford Site Beryllium Controlled Facilities List. However, the facility was sampled prior to demolition and determined to be a beryllium-clean facility.

Table 1 summarizes the radiological control surveying and asbestos sampling that was performed at the 151-D facility. Table 2 summarizes the contaminants of concern for facility demolition and the Management Practices implemented to minimize the spread of those contaminants.

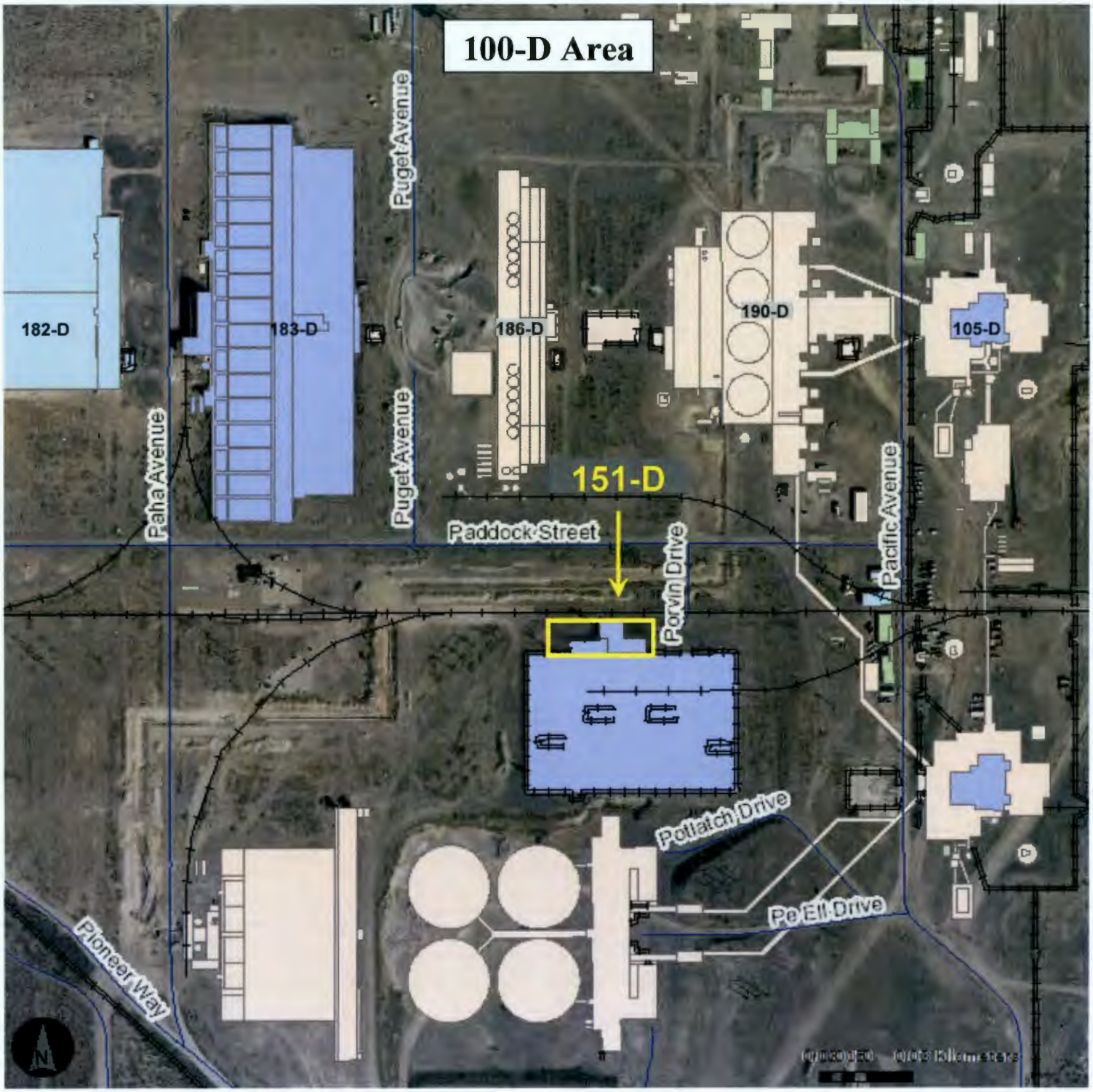
Table 1: Summary of Radiological Surveying and Asbestos Sampling Performed at the 151-D Facility

Type	Quantity	Method Detection Limits	Results
Radiological Scoping Surveys	1 Survey	Beta-gamma: 1,000 removable/ 5,000 fixed [a] Alpha: 20 removable/ 500 fixed [a]	All results were less than the method detection limit. Scoping surveys are included in Attachment 4.
Asbestos – Thermal System Insulation and Miscellaneous Material	37 Samples	1% weight	9 samples contained asbestos concentrations greater than 1%. All other potentially-asbestos-containing materials sampled were below the Method Detection Limit.
[a] – dpm/100 cm^2			

Table 2: Contaminants of Concern for Facility Demolition

Contaminant of Concern	Management Practice
Non-friable Asbestos Containing Material (ACM)	Asbestos Containing Materials (ACM) were the only contaminant of concern for demolition of the 151-D Building. With the exception of 1 type of material on a roof vent, all ACM was abated/removed from the facility prior to demolition. The ACM material on the roof vent was in the form of Class II/Category II materials (non-friable/non-regulated ACM). The roof vent was removed intact under Asbestos controls with an excavator prior to the onset of general building demolition, see Attachment 6 for EPA approval of the Demolition approach. The remainder of the above grade demolition was performed under general demolition controls with the utilization of dust suppression to control nuisance dust. Class II/Category II materials in the form of transite conduit was encountered during demolition of the below grade of the facility. The below grade demolition of portions of the facility where ACM was encountered was performed under asbestos controls as defined in the associated work package #100 12 02 28 012.

Attachment 2: Map and Photographs of the 151-D Facility



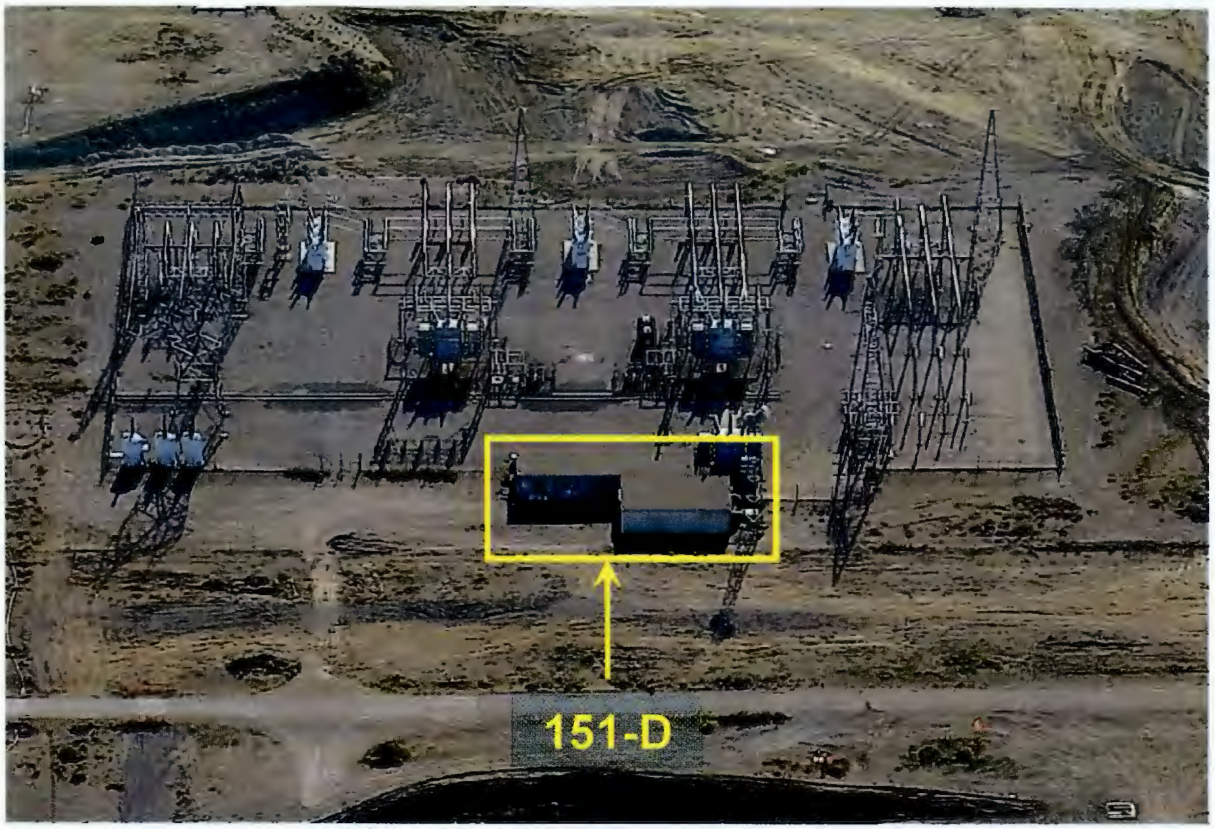


Photo of the 151-D Facility Before Demolition

Photo of the 151-D Facility Before Demolition

Photo of 151-D Facility After Demolition

Attachment 3: CCN 171145, Pre- and Post Demolition Inspection of the 151-D Building

171145

^WCH Document Control

From: Warren, David J
Sent: Wednesday, May 15, 2013 6:35 AM
To: ^WCH Document Control
Subject: FW: Pre- and post-demolition inspections of the 151-D basement and excavation

Attachments: 151-D visual inspection.doc; K4067.pdf

Please CHRON the e-mail below, with opened attachments, as pre- and post-demolition inspection of the 151-D Building. Please advise me of the CHRON number assigned. Contact me with any questions. Thanks.

Dave Warren
539-6040

From: Warren, David J
Sent: Tuesday, May 14, 2013 1:21 PM
To: Flannery, Michael (Mike) D; Allen, Mark E
Cc: Clary, Jeffrey D
Subject: Pre- and post-demolition inspections of the 151-D basement and excavation

All,

At approximately 0745 hours on 4/3/13, the portions of the 151-D basement to be left in place were inspected for signs of staining that would be indicative of chemical or petroleum contamination. As indicated in the first page of the attached visual inspection, one oil stain was identified on the floor of the East end of the 151-D basement. The oil appeared to have leaked from conductor conduit that runs from the building to the switchyard. A sample was taken of the stain (J1RDD2), the results of which are attached and indicate a level of 1.24 and .488 parts per million for PCB's (Aroclor 1016 and 1260). This particular portion of the 151-D building lies within the footprint of WIDS site 100-D-75:1, and will be remediated at a later date. The residual oil from the stain was primarily removed during sampling and an attempt was made during hazmat removal activities to remove the residual staining from the concrete with oil dri.

At approximately 0900 hours on 4/27/13 soils of the excavation(s) for removal of the 151-D Electrical Switchgear Building were visually inspected for signs of staining or anomalous items. The above grade portions of the structure have been demolished and loaded out. The portions of the structures greater than 3 feet below grade have been left behind and were accounted for in the first part of the attached visual inspection. The excavation and surrounding area(s) were observed to be free of any stained soils or anomalies that would be indicative of chemical or petroleum contamination. Please see the attached word file for photographs that were taken during the inspection(s). I'll CHRON this e-mail and attachments for future use as reference for closure documentation. Feel free to contact me if you have any questions. Thanks.

David Warren
100-Area D4 EnvironmentalProject Lead
WCH
539-6040

151-D visual ispection.doc (2.

K4067.pdf (400 KB)

FAX COVER SHEET

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Lionville Laboratory

264 Welsh Pool Road
Exton, PA 19341-1333
Phone: (610) 280-3000
Fax: (610) 280-3041

DATE: 2/20

TIME: _____

NO. PAGES: _____ **(including cover sheet)**

TO: Joan Kessner

OF: _____

FAX #: _____

FROM: Odette

COPY TO:

_____

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_____

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_____

MESSAGE: SDG # K4067 PCB ✓

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130225

264 Welsh Pool Road
Exton, PA 19341
Phone: 610-280-3000
Fax: 610-280-3041

WC-Hanford, Inc.	Project: RC-006	
2620 Fermi Avenue	Project Number: K4067	**Reported:**
Richland WA, 99354	Project Manager: Joan Kessner	02/19/2013 21:52

J1RDD2

1302025-01 (Other Solid)

Analyte	Result and Qualifier		Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
			Lionville Laboratory						
Polychlorinated Biphenyls by SW846 8082									
Aroclor 1016	**1240**		380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1221	380	U	380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1232	380	U	380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1242	380	U	380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1248	380	U	380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1254	380	U	380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1260	**488**		380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1262	380	U	380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Aroclor 1268	380	U	380	ug/kg wet	1	L302102	02/12/2013	02/13/2013	8082
Surrogate: Decachlorobiphenyl	*86 %*		*43-144*			*L302102*	*02/12/2013*	*02/13/2013*	*8082*
Surrogate: Tetrachloro-meta-xylene	*89 %*		*52-141*			*L302102*	*02/12/2013*	*02/13/2013*	*8082*

264 Welsh Pool Road
Exton, PA 19341
Phone: 610-280-3609
Fax: 610-280-3041

WC-Hanford, Inc	Project: RC-006	
2620 Fermi Avenue	Project Number: K4067	Reported:
Richland WA, 99354	Project Manager: Joan Kessner	02/19/2013 21:52

Polychlorinated Biphenyls by SW846 8082 - Quality Control

Lionville Laboratory

Analyte	Result	Qualifiers	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch L302102 - SW 3540C										
Blank (L302102-BLK1)				Prepared: 02/12/2013 Analyzed: 02/13/2013						
Aroclor 1016	13.3	U	13.3	ug/kg wet						
Aroclor 1221	13.3	U	13.3	ug/kg wet						
Aroclor 1232	13.3	U	13.3	ug/kg wet						
Aroclor 1242	13.3	U	13.3	ug/kg wet						
Aroclor 1248	13.3	U	13.3	ug/kg wet						
Aroclor 1254	13.3	U	13.3	ug/kg wet						
Aroclor 1260	13.3	U	13.3	ug/kg wet						
Aroclor 1262	13.3	U	13.3	ug/kg wet						
Aroclor 1268	13.3	U	13.3	ug/kg wet						
Surrogate: Decachlorobiphenyl	*25.9*			*ug/kg wet*	*33.333*		*75*	*43-144*		
Surrogate: Tetrachloro-meta-xylene	*27.1*			*ug/kg wet*	*33.337*		*81*	*53-141*		
LCS (L302102-BS1)				Prepared: 02/12/2013 Analyzed: 02/13/2013						
Aroclor 1016	150		13.3	ug/kg wet	166.67		90	50-138		
Aroclor 1260	168		13.3	ug/kg wet	166.67		100	50-148		
Surrogate: Decachlorobiphenyl	*33.7*			*ug/kg wet*	*33.333*		*101*	*43-144*		
Surrogate: Tetrachloro-meta-xylene	*34.8*			*ug/kg wet*	*33.337*		*104*	*53-141*		
Matrix Spike (L302102-MS2)		**Source: 1302025-01**		Prepared: 02/12/2013 Analyzed: 02/13/2013						
Aroclor 1016	3970		376	ug/kg wet	4717.0	1240	58	50-138		
Aroclor 1260	4130		376	ug/kg wet	4717.0	488	77	50-148		
Surrogate: Decachlorobiphenyl	*766*			*ug/kg wet*	*943.40*		*81*	*43-144*		
Surrogate: Tetrachloro-meta-xylene	*825*			*ug/kg wet*	*943.49*		*87*	*53-141*		
Matrix Spike Dup (L302102-MSD2)		**Source: 1302025-01**		Prepared: 02/12/2013 Analyzed: 02/13/2013						
Aroclor 1016	4400		319	ug/kg wet	4000.0	1240	79	50-138	31	40
Aroclor 1260	3950		319	ug/kg wet	4000.0	488	86	50-148	11	40
Surrogate: Decachlorobiphenyl	*526*			*ug/kg wet*	*800.00*		*66*	*43-144*		
Surrogate: Tetrachloro-meta-xylene	*729*			*ug/kg wet*	*800.09*		*91*	*53-141*		

Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-006-388	Page 1 of 1
Collector: R. Strickland	Company Contact: Bill Rodgers	Telephone No.: 206.251.7439	Project Coordinator: KESSNER, JH	Price Code: 9K — Data Turnaround: 15 Days
Project Designation: 100-N Area D4 - Other	Sampling Location: 151-D Floor Stan		SAF No.: RC-006	
Ice Chest No.: WCH-11-017	Field Logbook No.: EL-1516-21	COA: RD4MCOC2503	Method of Shipment: FEDEX	
Shipped To: EBERLINE SERVICES (JONVILLE)	Offsite Property No.: A120670		Bill of Lading/Air Bill No.: SS OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS
Potential PCB

Special Handling and/or Storage
cool to 4°c

Preservation	Cool to 4C												
Type of Container	AG												
No. of Container(s)	1												
Volume	4 ml.												
SAMPLE ANALYSIS	PCBs - 8082												
Sample No.	Matrix *	Sample Date	Sample Time										
J1RDD2	OTHER	2-6-13	1010	X									

CHAIN OF POSSESSION	Sign/Print Names	SPECIAL INSTRUCTIONS	Matrix *
Relinquished By/Removed From: [illegible] Date/Time: 2/6/13 1300	Received By/Stored In: MO767 FRIDGE Date/Time: 2/6/13 1300		
Relinquished By/Removed From: MO-767 Fridge Tony Manley Date/Time: 2/7/13 1320	Received By/Stored In: Tony Manley Date/Time: 2/7/13		
Relinquished By/Removed From: Tony Manley Date/Time: 2/7/13 1500	Received By/Stored In: FEDEX Date/Time:		
Relinquished By/Removed From: FedEx Date/Time: 2-8-13 0945	Received By/Stored In: Kristi Hackwaert Date/Time: 2-8-13 0945		
Relinquished By/Removed From: Date/Time:	Received By/Stored In: Date/Time:		
Relinquished By/Removed From: Date/Time:	Received By/Stored In: Date/Time:	Custodian unavailable to relinquish samples from MO767 temp storage to Shipper on 02/07/13	

REVIEWED BY JRS DATE 2-7-13

LABORATORY SECTION	Received By:	Title:	Date/Time:
FINAL SAMPLE DISPOSITION	Disposal Method:	Disposal By:	Date/Time:

WCH-EE-011

151-D Visual Inspection Photographs

151-D Basement looking East

151-D Basement looking West

151-D Basement looking West

151-D Basement looking North

151-D Basement looking West

151-D Basement looking East

151-D Basement looking East

151-D Basement looking West

151-D Basement looking East

151-D Basement looking West

151-D Basement looking North

151-D Basement looking South

151-D Demolition Excavation Looking West

151-D Demolition Excavation Looking East

151-D Demolition Excavation Looking South

151-D Demolition Excavation Looking Southeast

Attachment 4: DOE Approval of No PTE for the 151-D Facility

169650

^WCH Document Control

From: Warren, David J
Sent: Thursday, January 31, 2013 8:12 AM
To: ^WCH Document Control
Subject: FW: No PTE for 151D Electrical Substation at the 100-D Area
Attachments: No PTE 151-D.doc

Please CHRON the e-mail below and attachment as: DOE approval of No Potential to Emit for Demolition of the 151-D Building. Please advise me of the CCN number assigned. Thanks.

Dave Warren
100-Area EPL
539-6040

From: Guercia, Rudolph F (Rudy) [mailto:rudolph.guercia@rl.doe.gov]
Sent: Thursday, January 31, 2013 7:39 AM
To: Warren, David J
Subject: No PTE for 151D Electrical Substation at the 100-D Area

After reviewing the data provided on the subject facility (151D), RL concurs with the analysis that the subject facility does not have a radiological inventory to justify calculation of a PTE. RL believes that this facility has no potential to emit either from activities related to operation, demolition, or removal of the slab.

Please chron this email and attachment and place in the project files.

R. F. Guercia, Field Engineering
U.S. Dept. of Energy, Richland Operations Office
PH: (509) 376-5494
Fax: (509) 373-0726

From: Warren, David J [mailto:djwarren@wch-rcc.com]
Sent: Wednesday, January 30, 2013 10:09 AM
To: Guercia, Rudolph F (Rudy)
Subject: No PTE for 151-D Electrical Substation at the 100-D Area

Rudy,
Section 9.0 of the ***Action Memorandum for General Hanford Site Decommissioning Activities***, DOE/RL-2010-22, Rev. 0, establishes the U.S. Department of Energy (DOE) as lead agency for the proposed removal action. This removal action includes scope managed under ***the Removal Action Work Plan for River Corridor General Decommissioning Activities***, DOE/RL-2010-34, Rev. 1.

WCH is currently preparing to demolish the 151-D Electrical Substation at the 100-D Area. This work falls within the scope documented in DOE/RL-2010-34, Rev. 1. The facility was not used for the storage of radioactive materials nor was it ever posted for radiological contamination. Accordingly, a facility history and radiological surveys are attached that establish current conditions based on completed scoping

surveys. DOE's concurrence is requested on the determination that an emissions estimate is not required prior to performing removal actions on these facilities. This request to DOE, as lead agency, is consistent with the methodology established in Section 4.3.2 of the current ***Removal Action Work Plan for River Corridor General Decommissioning Activities***, (DOE/RL-2010-34, Rev. 1).

Please call if you have any questions.
Thanks,

David Warren
100-Area D4 Environmental Project Lead
WCH
539-6040

<<No PTE 151-D.doc>>

151-D Electrical Substation

Facility Description:

The substation consists of a fenced, gravel-bed yard measuring approximately 541 ft on a side with the 151-D Switch House along the northern fence line. A railroad spur enters the yard from the east, and parallels the north fence line. Concrete pads of various sizes protrude from the crushed gravel bed throughout the yard, supporting a variety of electrical equipment, including transformers, circuit breakers, and power line towers and stands. The Midway Station fed 230KV power to the 31,250 KVA transformers located in the 151-D switchyard. From these transformers, power was transmitted via overhead and underground cables to secondary and distribution substations located throughout the 100-D/DR Area. Circuit breakers were also in service to support the switchyard operations. PCB-containing oil was transferred, as needed, from a rail tanker on the railroad spur through over ground hoses and piping to transformers and oil circuit breakers in the yard.

The 151-D Switch House is a one story building, with a sub-level cable pit equipped with a sump pump. All duct lines in the fenced area terminated at the Switch House. The main floor was comprised of a switch room, with a fan room, and a battery room. The cable pit was a completely enclosed reinforced concrete pit with floor slab that extended below grade.

Facility Location:

The 151-D Building and associated switchyard are located approximately 1148 ft southwest of the 105-D Reactor building and 770 ft northwest of the 105-DR Reactor building, in the 100-D area of the Hanford Site.

Facility History:

The 151-D Primary Substation distributed 13.8KV power to transformers located at the 181-D River Pump House, 182 Head Houses, 183 Filter Houses, 184-D Power House, 186-D Water Treatment Plant, 190 Pump Houses, and 105-D/DR Reactors, which in turn distributed power to associated facilities.

Currently the facility is inactive and electrical service to the facility has been disconnected.

Radiological Contaminants of Concern:

Historically, there are no processes that indicate any type of contamination to be associated with the 151-D Switchyard. Scoping survey RSR-100N-13-0053, completed of the 151-D Switch House in January 2013, found no contamination.

Chemical Contaminants of Concern:

The 151-D Switch House contains minor amounts of contaminants of concern associated with lighting and air conditioning service (e.g., lead, mercury, PCBs, and CFCs), as well as multiple types of Asbestos Containing Materials.

An oil spill from one of the 151-D switchyard transformers was remediated in 1995 (100-D-27). This may not have been the extent of transformer leaks and spills, because such events were not consistently recorded before about 1985. There is anecdotal information from power operators that transformer spills and leaks were not uncommon. Therefore, any transformer or circuit breaker pad and surrounding soil may have PCB contamination. For this reason the footprint of the switchyard is designated as WIDS 100-D-75:1.

RADIOLOGICAL SURVEY RECORD

Page 1 of 3

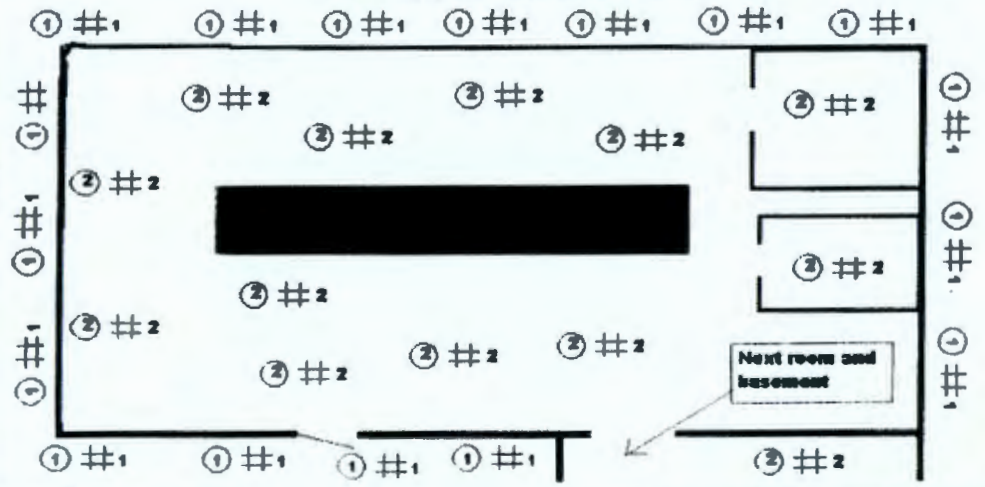
Type of Survey		Survey #
☐ Routine	☒ Work Progress	RSR – 100N-13-0053
RWP # / Rev. # NA	Date 01-09-13 / Time 1300	Location 100N / 151D

Description
Characterization of radiologically unposted building 151D in 100 Area

References: (e.g., SRTA, ASER, LASER, RSP, Work Package)
TA-07-SR-07 / Rev. 7

COPY

Characterization of building 151D in 100 Area no radiological postings present
See other map for next room and the basement



CA	HCA	RBA	APA	[AS]	RMA	RA	HRA	VHRA
Contamination Area	High Contamination Area	Radiological Buffer Area	Airborne Radioactivity Area	Air Sample Location	Radioactive Materials Area	Radiation Area	High Radiation Area	Very High Radiation Area

All radiation readings are in dose rates in units of mR/hr unless otherwise indicated

Instruments

Model	ID #	Cal Due Date	Model	ID #	Cal Due Date
2224-3	SCLL8-0081	09-23-13	NA	NA	NA
43-93	DTLLP 0069	09-23-13	NA	NA	NA
~~NA~~	~~NA~~	~~NA~~	~~NA~~	~~NA~~	~~NA~~

RADIOLOGICAL SURVEY RECORD

Survey # RSR - 100N-13-0053

Contamination Measurement Information[1]

Circled values indicate Removable β contamination in mrad/hr β

No.	Description of Item or Location	Removable (dpm/100 cm²)				Total (dpm/100 cm²)			
		α	α C-F	β-γ	β-γ C-F	α	α C-F	β-γ	β-γ C-F
1	outside building walls	<20	7	<1000	10	<500	7	<5000	10
2	Inside building	<20	7	<1000	10	<500	7	<5000	10
3	Basement	<20	7	<1000	10	<500	7	<5000	10
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[1] Unless stated otherwise in the "References" section, exempted β-γ (i.e., C-14, Fe-55, Ni-59, Ni-63, Se-79, Tc-99, Pd-107, Eu-155) contamination levels are ≤ 10 times the β-γ contamination levels shown above.

COPY

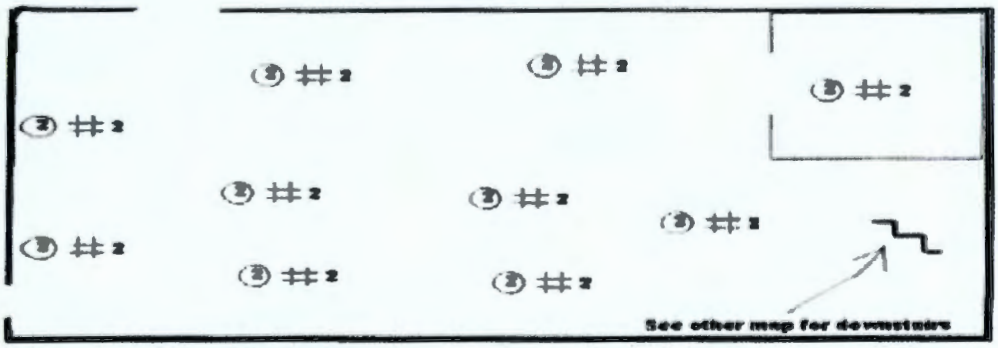
Corrected Dose Rate Calculations

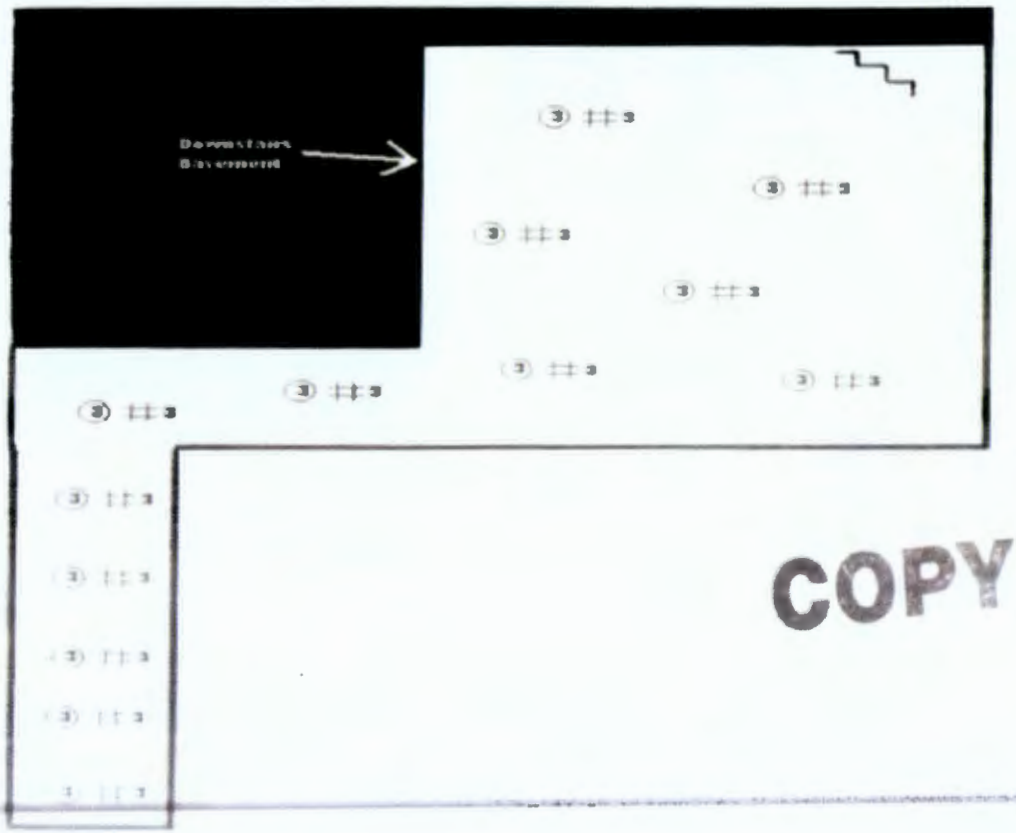
Show all work. CF = 1 unless noted.

Location	Contact Readings		30 cm Readings	
	β (mrad/hr) (WO-WC) X CF = DR	γ (mR/hr) WC X CF = DR	β (mrad/hr) (WO-WC) X CF = DR	γ (mR/hr) WC X CF = DR
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA
NA	NA	NA	NA	NA

RADIOLOGICAL SURVEY RECORD (continuation)	Page: 3 of 3 Survey # RSR-100N-13-0053

Additional Information
(Drawing, Map, Etc.)





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Attachment 5: 151-D GPS Surveys

GPS Post Demo Survey Report for the 151D Building

Project : 151D_postdemo

Job 1257

User name	maaye	**Date & Time**	2:05:57 PM 5/6/2013
Coordinate System	US State Plane 1983	**Zone**	Washington South 4602
Project Datum	(WGS 84)		
Vertical Datum	NAVD88	**Geoid Model**	Not selected
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	Meters		

```
Survey Project Name:        151D Post Demo
Date:                       4/22/2013
Equipment:                  5800
Survey Purpose:             Map the excavation footprint
Requested By:               Dave Warren
Location:                   100D
Charge Code:
Field Surveyor:             Margo Aye
Survey Software Used:       Trimble Survey Controller, and  Geomatics Office V.11
Survey Equipment Used:      5800
Control Monuments Used:     HSWB-044
Survey Method:              RTK/LTI Laser
Horizontal Precision:       .020m
Vertical Precision:         .050m
Fieldwork Start Date:       4/22/13
Fieldwork Completion Date: 4/22/13
Notes: Laser was used around the basement area due to steep slopes.
```

GPS Name	Northing	Easting	Elevation	Feature Code	Time/Date
1	151372.828m	573549.529m	142.778m	top	10:13:38 22 Apr 2013
2	151374.389m	573552.570m	142.674m	top	10:13:53 22 Apr 2013
3	151376.813m	573553.921m	142.654m	top	10:14:13 22 Apr 2013
4	151379.479m	573554.935m	142.577m	top	10:14:36 22 Apr 2013
5	151383.390m	573553.798m	142.645m	top	10:14:53 22 Apr 2013
6	151388.456m	573553.846m	142.719m	top	10:15:11 22 Apr 2013
7	151393.869m	573552.644m	142.695m	top	10:15:32 22 Apr 2013
8	151397.796m	573551.252m	143.027m	top	10:15:50 22 Apr 2013
9	151398.027m	573545.381m	143.030m	top	10:16:13 22 Apr 2013
10	151397.897m	573539.124m	143.050m	top	10:16:33 22 Apr 2013
11	151397.764m	573536.507m	143.035m	top	10:17:02 22 Apr 2013
12	151399.758m	573531.471m	143.204m	top	10:17:27 22 Apr 2013
13	151399.494m	573527.748m	143.102m	top	10:17:50 22 Apr 2013
14	151399.698m	573522.025m	143.151m	top	10:18:09 22 Apr 2013
15	151399.836m	573515.348m	143.150m	top	10:18:32 22 Apr 2013
16	151399.783m	573510.427m	143.121m	top	10:18:48 22 Apr 2013
17	151397.595m	573508.177m	143.025m	top	10:19:04 22 Apr 2013
18	151394.218m	573508.704m	142.836m	top	10:19:28 22 Apr 2013
19	151391.334m	573509.364m	142.685m	top	10:19:43 22 Apr 2013
20	151387.321m	573508.800m	142.648m	top	10:20:01 22 Apr 2013
21	151383.108m	573508.600m	142.668m	top	10:20:21 22 Apr 2013
22	151381.948m	573511.422m	142.841m	top	10:20:38 22 Apr 2013
23	151381.239m	573514.926m	142.744m	top	10:20:53 22 Apr 2013
24	151368.391m	573527.070m	142.658m	top	10:23:07 22 Apr 2013
25	151367.888m	573532.281m	142.654m	top	10:23:54 22 Apr 2013
26	151367.567m	573537.530m	142.705m	top	10:24:14 22 Apr 2013
27	151368.079m	573539.636m	142.705m	top	10:24:31 22 Apr 2013
28	151372.199m	573539.305m	142.816m	top-conc	10:25:03 22 Apr 2013
29	151372.289m	573542.228m	142.799m	top-conc	10:25:14 22 Apr 2013
30	151368.268m	573542.029m	142.765m	top	10:25:41 22 Apr 2013
31	151368.839m	573546.883m	142.786m	top	10:25:58 22 Apr 2013
32	151372.292m	573546.814m	142.846m	top	10:26:12 22 Apr 2013

33	151381.392m	573526.498m	141.714m	cp	10:27:15 22 Apr 2013
34	151372.315m	573542.316m	141.484m	toe	10:32:16 22 Apr 2013
35	151369.633m	573542.698m	141.820m	toe	10:32:39 22 Apr 2013
36	151370.198m	573545.319m	141.929m	toe	10:32:54 22 Apr 2013
37	151374.701m	573543.158m	141.293m	toe	10:33:13 22 Apr 2013
38	151374.507m	573539.106m	140.969m	toe	10:33:29 22 Apr 2013
39	151375.261m	573535.043m	140.926m	toe	10:33:44 22 Apr 2013
40	151375.629m	573530.301m	140.997m	toe	10:33:58 22 Apr 2013
41	151376.225m	573525.472m	140.838m	toe	10:34:16 22 Apr 2013
42	151377.565m	573520.946m	141.023m	toe	10:34:30 22 Apr 2013
43	151381.253m	573520.692m	140.805m	toe	10:34:47 22 Apr 2013
44	151381.781m	573524.134m	140.991m	toe	10:35:04 22 Apr 2013
45	151378.644m	573528.983m	141.635m	topo	10:35:51 22 Apr 2013
46	151378.472m	573533.414m	141.704m	topo	10:36:04 22 Apr 2013
47	151379.098m	573537.200m	141.905m	topo	10:36:19 22 Apr 2013
48	151377.510m	573539.510m	141.632m	topo	10:36:29 22 Apr 2013
49	151378.137m	573541.552m	141.778m	topo	10:36:40 22 Apr 2013
50	151375.832m	573542.498m	141.476m	topo	10:36:55 22 Apr 2013
51	151378.554m	573545.672m	141.916m	topo	10:37:09 22 Apr 2013
52	151382.424m	573541.030m	142.010m	topo	10:37:26 22 Apr 2013
53	151382.776m	573536.195m	142.170m	topo	10:37:39 22 Apr 2013
54	151383.528m	573530.680m	141.595m	topo	10:37:59 22 Apr 2013
55	151385.421m	573528.090m	141.465m	topo	10:38:15 22 Apr 2013
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61	151395.342m	573522.674m	142.322m	topo	10:39:53 22 Apr 2013
62	151394.206m	573516.341m	142.077m	topo	10:40:13 22 Apr 2013
63	151388.988m	573512.512m	141.999m	topo	10:40:34 22 Apr 2013
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65	151393.783m	573538.661m	142.709m	topo	10:41:40 22 Apr 2013
66	151393.311m	573543.950m	142.388m	topo	10:41:57 22 Apr 2013
67	151388.799m	573546.106m	142.227m	topo	10:42:16 22 Apr 2013
68	151382.431m	573548.567m	142.119m	topo	10:42:33 22 Apr 2013
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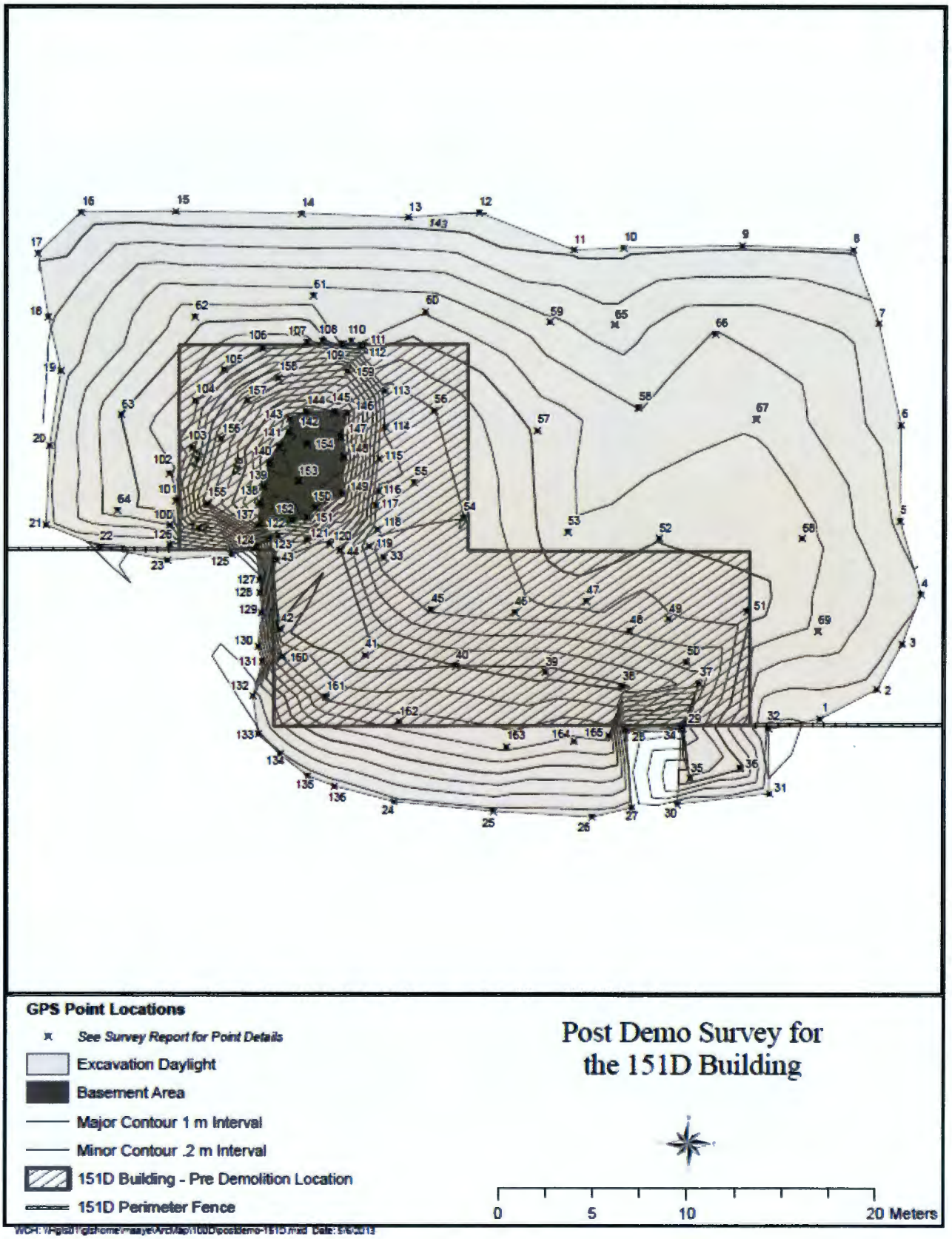
100	151383.083m	573515.075m	142.206m	top	
101	151384.434m	573515.354m	141.843m	top	
102	151385.854m	573515.035m	141.888m	top	
103	151387.213m	573516.197m	141.509m	top	
104	151389.750m	573516.370m	141.659m	top	
105	151391.380m	573517.874m	141.612m	top	
106	151392.501m	573519.973m	141.610m	top	
107	151392.854m	573522.338m	141.733m	top	
108	151392.938m	573523.170m	141.951m	top	
109	151392.785m	573524.255m	142.248m	top	
110	151392.924m	573524.711m	142.354m	top	
111	151392.645m	573525.292m	142.212m	top	
112	151392.638m	573525.329m	142.091m	top	
113	151390.269m	573526.568m	141.529m	top	
114	151388.293m	573526.565m	141.428m	top	
115	151386.650m	573526.227m	141.270m	top	
116	151384.903m	573526.193m	141.436m	top	
117	151384.183m	573526.045m	141.416m	top	
118	151382.864m	573526.126m	141.569m	top	
119	151381.997m	573525.680m	141.535m	top	
120	151382.102m	573523.563m	140.918m	top	
121	151382.326m	573522.358m	140.590m	top	
122	151382.545m	573520.811m	140.524m	top	
123	151382.343m	573520.330m	141.029m	top	
124	151381.938m	573519.631m	141.936m	top	
125	151381.532m	573518.281m	142.762m	top	
126	151382.058m	573515.058m	142.722m	top	

127	151380.224m	573519.816m	142.714m	top
128	151379.493m	573519.837m	142.749m	top
129	151378.460m	573519.914m	142.767m	top
130	151376.644m	573519.715m	142.788m	top
131	151375.845m	573519.951m	142.793m	top
132	151373.996m	573519.448m	142.510m	top
133	151371.981m	573519.740m	142.628m	top
134	151370.921m	573520.914m	142.631m	top
135	151369.761m	573522.405m	142.703m	top
136	151369.219m	573523.839m	142.700m	top
137	151383.089m	573519.767m	139.937m	toe
138	151384.331m	573519.806m	139.503m	toe
139	151385.149m	573520.038m	139.542m	toe
140	151386.404m	573520.313m	139.357m	toe
141	151387.298m	573520.842m	139.395m	toe
142	151388.067m	573521.369m	139.391m	toe
143	151388.748m	573521.426m	139.428m	toe
144	151389.166m	573522.297m	139.662m	toe
145	151389.161m	573523.813m	139.819m	toe
146	151389.039m	573524.498m	139.714m	toe
147	151387.814m	573524.180m	139.551m	toe
148	151386.734m	573524.326m	139.497m	toe
149	151384.756m	573524.234m	139.778m	toe
150	151384.042m	573522.817m	139.465m	toe
151	151383.486m	573522.377m	139.493m	toe
152	151383.315m	573521.571m	139.753m	toe
153	151385.449m	573521.904m	139.416m	topo-conc
154	151387.434m	573522.367m	139.414m	topo-conc
155	151384.249m	573516.999m	140.442m	topo
156	151387.701m	573517.731m	140.622m	topo
157	151389.719m	573519.150m	140.563m	topo
158	151390.948m	573520.800m	140.789m	topo
159	151391.329m	573524.506m	140.759m	topo
160	151376.108m	573521.034m	141.384m	topo
161	151373.975m	573523.385m	141.344m	topo
162	151372.663m	573527.311m	141.479m	topo
163	151371.319m	573532.979m	141.540m	topo
164	151371.628m	573536.541m	141.652m	topo
165	151371.889m	573538.375m	141.535m	toe

Back to top


GPS Point Locations
See Survey Report for Point Details
Excavation Daylight
Basement Area
Major Contour 1 m Interval
Minor Contour .2 m Interval
151D Building - Pre Demolition Location
151D Perimeter Fence
Post Demo Survey for
the 151D Building
0
5
10
20 Meters

Attachment 6: CCN 170115, EPA Approval of 151-D and 151-B Demolition approach

170115

^WCH Document Control

From: Warren, David J
Sent: Tuesday, March 05, 2013 1:46 PM
To: ^WCH Document Control
Subject: FW: Building Demolitions under River Corridor General Facilities Decommissioning CERCLA work plan

Please CHRON this email as it represents a regulatory agreement. Title: EPA approval of 151-D and 151-B demolition approach. Please advise me of the CHRON number assigned. Thanks.

Dave Warren
539-6040

From: Guzzetti, Christopher [mailto:Guzzetti.Christopher@epa.gov]
Sent: Tuesday, March 05, 2013 8:42 AM
To: Warren, David J
Subject: FW: Building Demolitions under River Corridor General Facilities Decommissioning CERCLA work plan

David,

Looks like you are good to go.

From: Pavitt, John
Sent: Thursday, February 28, 2013 3:00 PM
To: Guzzetti, Christopher
Subject: RE: Building Demolitions under River Corridor General Facilities Decommissioning CERCLA work plan

Hello Chris.

The asbestos NESHAP allows building owners and operators (contractors) to leave certain materials in place during demolition. (40 CFR 61.145(c)(1)) The two materials identified by Mr. Warren (asphalt roofing products and caulking) are examples of what can be left in place.

Asphalt roofing products meet the definition of Category I nonfriable asbestos material and EPA expects these materials as a group to stay nonfriable during demolition. Caulking meets the definition of Category II nonfriable asbestos (this group includes all other nonfriable materials which are not specifically named in the Category I group). Based on my experience, and also described in EPA's Guide to Demolition Practices, we do not expect caulk to become friable during a demolition.

Thank you,

John Pavitt
EPA R10, Alaska Operations Office
(907) 271-3688

From: Guzzetti, Christopher

Sent: Thursday, February 28, 2013 12:46 PM
To: Pavitt, John
Subject: FW: Building Demolitions under River Corridor General Facilities Decommissioning CERCLA work plan

John,

I would like you to take a look at this. It's a little different than what we've seen before so I thought I'd ask for your input. Remember, we revised all the workplans to include the language that was passed around about following NESHAPS.

Thanks,
Chris

From: Warren, David J [mailto:djwarren@wch-rcc.com]
Sent: Tuesday, February 26, 2013 3:02 PM
To: Guzzetti, Christopher
Subject: Building Demolitions under River Corridor General Facilities Decommissioning CERCLA work plan

Chris,

Greetings. I'm looking for some clarification, guidance really, regarding demolition of facilities that fall under the scope of the Removal Action Work Plan for River Corridor General Decommissioning Activities (DOE/RL-2010-34 Rev. 1). Specifically, my interest is with respect to demolition of facilities with Asbestos NESHAP Category 1 non-friable Asbestos Containing Materials (ACM) in place. As I'm sure you're aware, the RAWP was recently revised (now rev. 1) and the text regarding removal and management of asbestos materials was recently modified.

WCH has 2 facilities in the 100-Areas, 151-D and 151-B, that fall under the scope of this CERCLA work plan. A comprehensive asbestos inspection has been performed by an AHERA accredited inspector and the findings are documented in the respective Asbestos Inspection Summary reports for each facility, these are available for your review if you would like to see them. WCH is currently in the process of removing all Regulated Asbestos Containing Materials (RACM) from these facilities, which includes friable ACM (thermal systems insulation [TSI]), as well as Category 2 materials (e.g. Cement Asbestos Boards and cable trays [transite]) that have a high probability of becoming friable (thus RACM) during demolition. Both facilities contain small quantities of Category 1 non-friable materials associated with roofing products. The material on the 151-D facility is approximately 5 sq. ft. of black asphaltic mastic material on a roof air vent. The materials on the 151-B facility are non-friable caulking material between the concrete roof panels and asphaltic/composite sheeting around the base of a roof air intake. The fact the materials are on the rooftops of each of the facilities complicates safe access for abatement. Additionally, the caulking material between the roof panels of the 151-B is physically impossible to access. WCH believes that these materials can be left in place for demolition as this practice is allowed under the asbestos NESHAP and shearing is described as an acceptable method that will generally not render non-friable materials friable. WCH proposes to:

1. Surgically remove with an excavator the portion of the 151-D roof vent with the ACM intact (Cat 1 non-friable ACM), manage that material as asbestos waste accordingly, have an asbestos competent person visually inspect the roof to verify that the ACM materials were completely removed, and then proceed to demo the rest of the facility as non-asbestos.

2. Demolish the 151-B facility with the small quantities of caulking between the roof panels and asphaltic/composite sheeting (Cat 1 non-friable ACM) left in place with the determination that the demolition methods (shearing) will not render the material friable. The quantity of asbestos material to be left for demolition is likely below the threshold quantity of 48 sq. ft. for the asbestos NESHAP.

I apologize for the length of this e-mail. Again, just looking for guidance or agreement from EPA that what WCH

proposes is an acceptable practice, and also that it fulfills the intent of the excerpts from the RAWP listed above. Thanks for your time. Feel free to call or e-mail with any questions.

Dave Warren
100-Area EPL
WCH
539-6040