

Building 242-12F, Radcon Trailer Near 2F Evaporator, Request for Removal from Federal Facility Agreement Appendix K.1, D&D Facilities to be Decommissioned

- Radcon trailer was damaged due to an A/C fire (see information below concerning the fire)

Event Summary: On January 21, 2013 at approximately 0500 hours, while reporting into work, a Radiological Control Inspector (RCI) smelled an odor as he went toward the F Tank Farm RCI office. He saw what appeared to be steam coming from the North side of the 16F Evaporator. Having a questioning attitude and knowing that steam to the evaporator was secured, he walked around the building to further investigate and saw smoke coming from a wall type air conditioning (A/C) unit on Building 242-12F (Evaporator RBA entrance and exit building). The employee immediately made the proper notifications to the facility management. The Fire Department arrived at the scene and extinguished the fire which was on the floor and wall beneath the A/C unit. The apparent cause was either a mechanical or electrical malfunction with the A/C unit that spread to the floor and ignited combustible material stored below the A/C unit and building electrical panel.

Fire Dept. Evaluation: Based on this it is believed from talks with the Fire Department that the A/C unit (fan or control panel) malfunctioned and ignited the plastic trim of the A/C unit or a component inside the A/C unit. This caused the plastic trim to fall onto the fire extinguisher and then fall to the floor, igniting combustibles on the floor. The fire then spread to the first aid kit stored underneath the bench resulting in a slow growing fire.

- Radcon Survey for Fire Response at 242-12F
 - Radcon Survey TKFM-M-20130128-7 (1/28/2013) - Fire Response at 242-12F
 - Responded to fire at 242-12F Radcon Building. After Fire Department put out the fire, Radcon surveyed the area around the 242-12F. Trailer was placed on a lockout (i.e., barricaded to prevent entry).
- EC&ACP Asbestos Inspection Report of 242-12F Change Shack (SDD-APG-2014-01052, dated 6/7/2014)
- Notice of Demolition, Asbestos Project License ID: N1407067, 242-12F Change Shack
 - Demolition notification was received 7/8/2014
 - Demolition scheduled to begin 7/7/2014 and be completed 8/5/2014
- Radcon Surveys for Demolition of 242-12F (Fire Damaged Trailer)
 - Radcon Survey TKFM-M-20140721-21 (7/21/2014) – Demolition of 242-12F (Fire Damaged Trailer)
 - Radcon coverage of demolition of fire damaged 242-12F Building. The RBA boundary was increased to create a 20 ft area to move the building away from the evaporator to be demolished and place into the Sealand that was brought in for the demolition. The steps and decks on the sides near the evaporator were removed and placed in front of the Sealand.

Building 242-12F, Radcon Trailer Near 2F Evaporator, Request for Removal from Federal Facility Agreement Appendix K.1, D&D Facilities to be Decommissioned

Seventeen (17) bags of smoke damaged laundry was left in the building.
The rails were taken to the construction area.

- Radcon Survey TKFM-M-20140722-31 (7/22/2014) - Demolition of 242-12F (Fire Damaged Trailer)
 - Radcon coverage of demolition of fire damaged 242-12F Building. Last set of steps were removed from building and placed in front of Sealand. The rails were taken to the construction area. Backhoe (SRSR 00029) was used to pull the building away from 2-F Evaporator and prepared to be demolished.
- Radcon Survey TKFM-M-20140723-23 (7/23/2014) – Demolition of 242-12F (Fire Damaged Trailer)
 - Radcon coverage of demolition of fire damaged 242-12F Building. The top of the Sealand was removed and Building 242-12F was demolished with backhoe (SRSR00029) and put into Sealand #FT14005746. The steps and decks, bagged laundry and two (2) PCM-1Bs were placed into the Sealand.
- SRS Site Housing Building Report Status: Updated on 3/19/2015 to state “Demolished (Archived)”.
- DOE-HQ Approval: Approved for excess on 6/8/2015.
- Since Building 242-12F, Radcon Trailer Near 2F Evaporator, was damaged due to a fire and was demolished, Savannah River Site recommends that it be removed from Appendix K.1.

VSDS Standard Map RSLs

Survey TKFM-M-20130128-7

General Information

Title: FIRE RESPONSE AT 242-12F

Survey Date/Time: 01/28/2013 09:43

Lead Inspector: BOHANNON, JAMES MICHAEL

Survey Type: Other - FIRE SURVEY

Work Order/Task #: N/A

Counted By: Facility Inspector

KCN: Y7876

RWP #: 13-FTF-001

Facility: FTF

Status: Approved by: MOODY, MARK ALEXANDER, 01/29/2013

Ready For Review by: BOHANNON, JAMES MICHAEL, 01/29/2013

Additional Inspectors

Inspector	Cmp Alt	Approve
BROWN, ANDREW LAWSON	G0829	<input checked="" type="checkbox"/>
HURST, PAUL CHRISTOPHER	W8561	<input checked="" type="checkbox"/>
JONES, ROSA M	W7862	<input checked="" type="checkbox"/>

Dose Rate (DR) Object Prefixes/Suffixes

Dose Rates with Prefixes:

E = Extrem
S = Skin

Dose Rates with No Prefixes:

W Body

Default Prefixes:

HS = Hot Spot

Default Suffixes:

"n" = Neutron
"b" = Beta
"c" = Corrected

Postings Legend

RBA=Radiological Buffer Area

RMA=Radioactive Material Area

Instruments Used

#	Instrument Model	Instrument Serial #
1	12-110	CMC003703
2	12-Alpha	CMC006851
3	RO-20	CMC008469
4	HandECount	CMC004638
5	12-110	CMC004228
6	12-Alpha	CMC006952
7	Electra Plus	CMC009032

VSDS Standard Map RSLs

Comments:

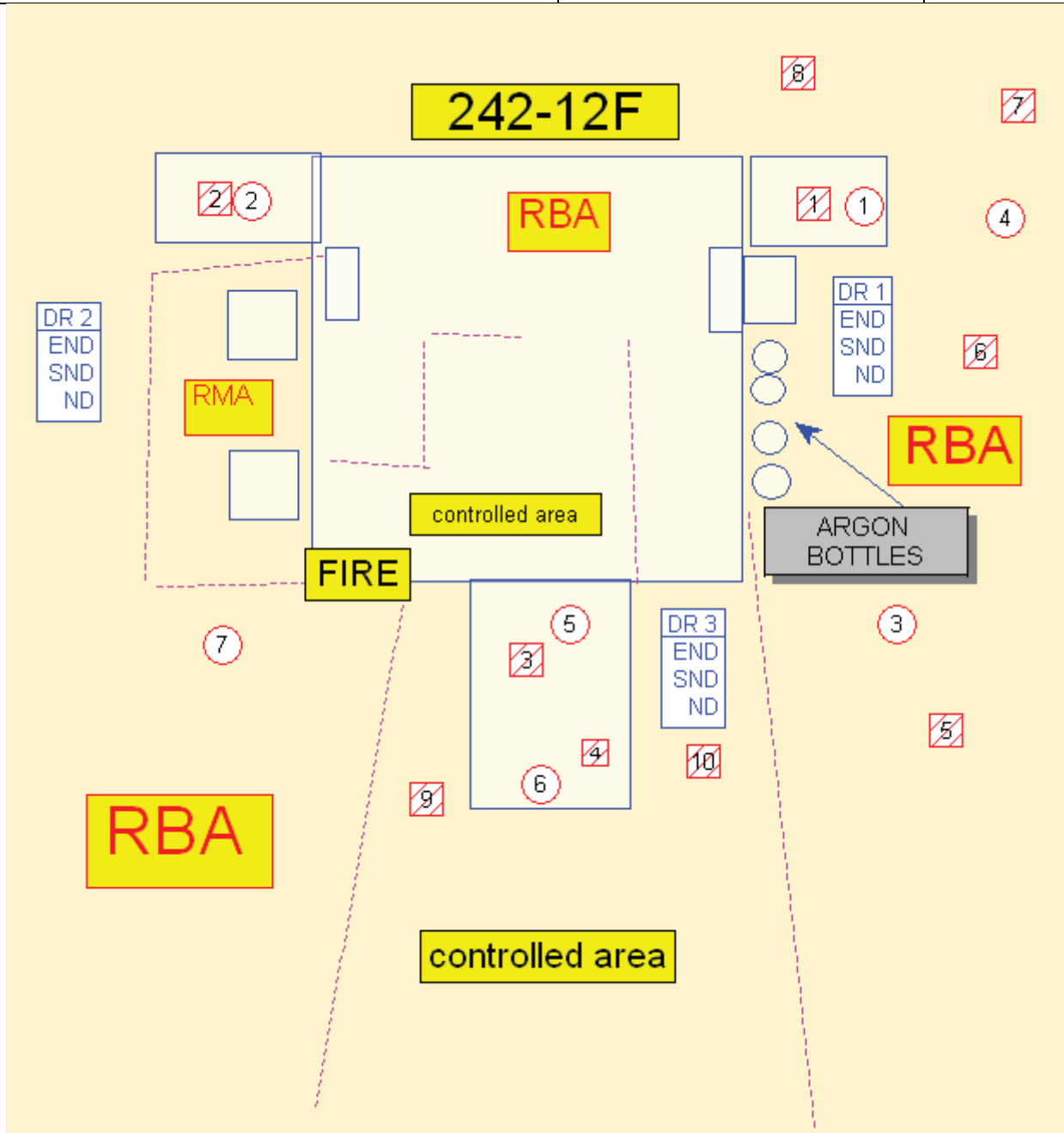
RESPONDED TO FIRE AT 242-12F RADCON BLD. AFTER FIRE DEPARTMENT PUT OUT THE FIRE .RAD CON SURVEYED THE AREA AROUND THE 242-12F ALL LARGE AREA WIPES WERE ND DPM ALPHA AND ND DPM BETA/GAMMA. ALL 100CM2 SMEARS WERE <20 DPM ALPHA AND <200 DPM BETA/GAMMA. ALL DOSE RATES AROUND 242-12F WERE ND mrem/hr/E/S/WB. THE FIREMEN AND THEIR GEAR WAS SURVEYED ALL PROBES WERE ND ALPHA AND BETA/GAMMA.ALL LARGE AREA WIPES WERE ND DPM ALPHA AND BETA/GAMMA ON THE FIRE BUNKER GEAR.ALL SMEARS WERE <20 DPM ALPHA AND <200 DPM BETA/GAMMA. FARMS SAMPLES WERE PROBED WEST OF 242-12FAT TANKS 44,45,46,47 FARMS PROBES WERE 1200 DPM ALPHA AND 2000 DPM BETA/GAMMA. COUNT RATE METER SOURCE WAS REMOVED AND SURVEYED AND RETURNED TO 241-24F. ALL FIREMEN WERE SURVEYED OUT OF 242-12F ALL PERSONEL WERE FOUND CONTAMINATION FREE.NO SMEARS WERE TAKEN INSIDE CHANGE SHACK BECAUSE PERSONEL HAD TO BE ON LOCKOUT TO ENTER SHACK.

RBA area west of Tanks 25/26 was surveyed to enlarge the controlled area north of 242-12F for the new change shack. Total square footage was 800 square feet. All LAW were ND dpm/wipe alpha and beta-gamma and <20 dpm/100cm2 alpha and <200 dpm/100cm2 beta-gamma.

Also performed monitoring of personnal existing the PCM-1B building.

VSDS Standard Map RSLs

Map: 1 BLANK MAP Survey #: TKFM-M-20130128-7 Date/Time: 01/28/2013 09:43



Comments:	Summary of Highest Readings (All available values may not be listed)	
	Smears	Air Samples & Wipes
	7) <20 DPM/100 cm ² α	Wipe 10) ND DPM/Wipe α
	7) <200 DPM/100 cm ² β/γ	Wipe 10) ND DPM/Wipe β/γ
Type: Other - FIRE SURVEY		
Symbol Legend (for example only) RWP #: 13-FTF-001		
Unless otherwise noted, dose rates in mrem/hr.		
Lead Inspector: BOHANNON, JAMES MICHAEL	Status: Approved by: MOODY, MARK ALEXANDER, 01/29/2013	
Location Code: F241900	Bldg/Area Name: GENERAL	
Location Description: BLANK MAP		

VSDS Standard Map RSLs

Data Point Details

Survey #: TKFM-M-20130128-7

Map: 1 - FTF\GENERAL\Blank Map-001

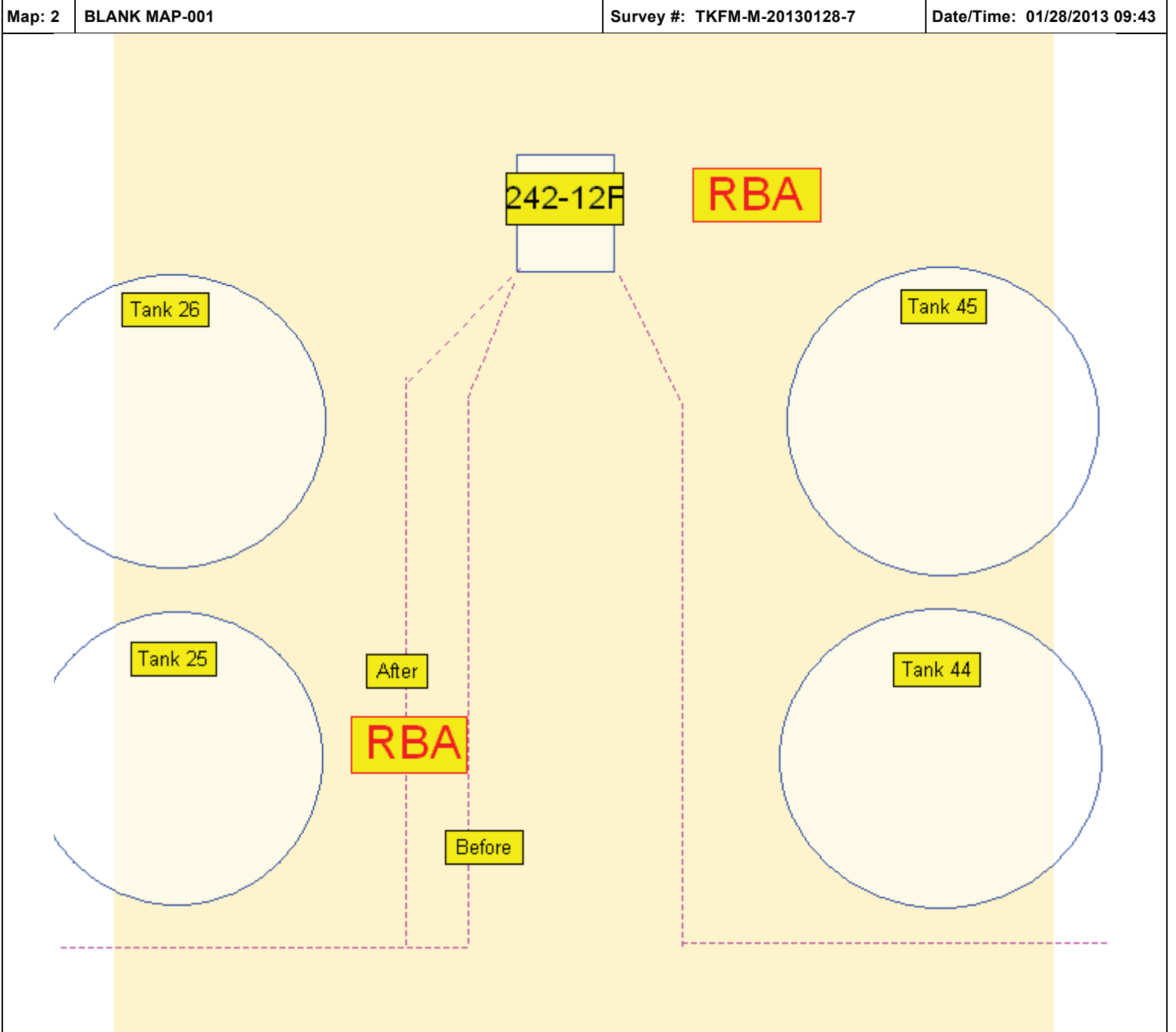
#	Type	Inst.	Value	Units	Position	Notes
1	DR γ	N/A N/A N/A	E ND ----- S ND ----- ND	mrem/hr ----- mrem/hr ----- mrem/hr	WEST OF 242-12F	
2	DR γ	N/A N/A N/A	E ND ----- S ND ----- ND	mrem/hr ----- mrem/hr ----- mrem/hr	EAST OF 242-12F	
3	DR γ	N/A N/A N/A	E ND ----- S ND ----- ND	mrem/hr ----- mrem/hr ----- mrem/hr	OUTSIDE 242-12F	
1	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
2	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
3	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
4	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
5	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
6	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
7	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
1	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
2	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
3	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
4	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
5	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
6	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
7	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
8	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
9	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
10	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
	Text		242-12F			
	Note					ARGON BOTTLES
	Text		controlled area			
	Text		controlled area			
	Text		FIRE			Air conditioner located here
	Posting		RBA			

VSDS Standard Map RSLs

Data Point Details
Survey #: TKFM-M-20130128-7
Map: 1 - FTF\GENERAL\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
	Posting		RBA			
	Posting		RBA			
	Posting		RMA			

VSDS Standard Map RSLs



Comments:	Summary of Highest Readings (All available values may not be listed)	
	Smears	Air Samples & Wipes
Type: Other - FIRE SURVEY		
Symbol Legend (for example only) RWP #: 13-FTF-001		
Unless otherwise noted, dose rates in mrem/hr.		
Lead Inspector: BOHANNON, JAMES MICHAEL	Status: Approved by: MOODY, MARK ALEXANDER, 01/29/2013	
Location Code: H241000	Bldg/Area Name: HTF BLANK MAP	
Location Description: BLANK MAP-001		

VSDS Standard Map RSLs

Data Point Details
Survey #: TKFM-M-20130128-7
Map: 2 - HTF\MISC\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
	Text		Before			
	Text		After			
	Text		Tank 26			
	Text		Tank 25			
	Text		Tank 45			
	Text		Tank 44			
	Text		242-12F			
	Posting		RBA			
	Posting		RBA			

ENVIRONMENTAL COMPLIANCE & AREA COMPLETION PROJECTS

Asbestos Inspection Report Of 242-12F Change Shack



SDD-APG-2014-01052
June 7, 2014



Savannah River
Nuclear Solutions, LLC
A Fluor Daniel Partnership

INTEROFFICE MEMORANDUM

SDD-APG-2014-01052
RSM Track Number 10854

June 7, 2014

TO: Mildred H. Jackson, 241-168H

FROM: William A. Bledsoe, 241-158H

ASBESTOS INSPECTION OF 242-12F CHANGE SHACK

On February 5, 2013 an inspection was performed to determine the presence of any asbestos containing material (ACM) in building 242-12F. The building has served as a work protective uniform change building and was set-up on this location on May 1, 1994. It covers a footprint of approximately 325 square feet. A brief description of construction is that of a typical mobile office type design, lightweight steel beam frame, plywood subfloor, wooden stud framing thru out. The exterior has a light gauge painted metal siding with a galvanized metal roof. The interior has 12 x12 vinyl floor tile glued over the plywood subfloor. The interior walls and ceiling consist of 3/8" gypsum board that is prefinished with vinyl wallpaper. The ceiling has a prefinished textured appearance and is held in place with decorative plastic scones. All joints on the gypsum board is covered by cover strips, no joint compound was used. Four (4) metal exterior doors which have a corrugated paper filler/insulation, and the building is insulated with paper backed fiberglass. The building is supported with (ungROUTED) concrete blocks. All axles, tires, and towing tongue have been removed.

Nine (9) suspect homogenous type materials were identified during this inspection. Please see the attached Inspection Survey Table for information and locations on materials inspected

SUMMARY

All suspect Asbestos Containing Materials (ACM) that could be disturbed was identified in completion of this inspection. The evaluation of the above-described materials is based on facility knowledge, visual inspection, document review, and the collection of bulk samples. It is determined that **no** asbestos containing materials were used in the construction or fabrication of this modular structure. As required by 40 CFR Part 61.145 notification of demolition is required even if no asbestos is present.

The samples were analyzed at the SRNS LLC. Industrial Hygiene Laboratory, which is accredited by the American Industrial Hygiene Association (AIHA) Laboratory Quality Assurance Program (LQAP) in the Field of Testing (FoT)/Polarized Light Microscopy (PLM). The laboratory ID number is 100642. The analysts have attended Course 1608A: Microscopical Identification of Asbestos, presented by McCrone Research Institute or equivalent, and have completed the training qualifications to maintain proficiency. Bureau Veritas completed the Thermal Electron Microscopy (TEM) testing. Their accreditation is included with results, chain of custody and is attached with this report.

<u>ASBESTOS INSPECTOR</u>	<u>INSTITUTION</u>	<u>CERT. NO.</u>	<u>STATE</u>	<u>EXP. DATE</u>
J.M. Barribeau <i>J.M. Barribeau</i>	Greenville Tech College	132-ROC647-038	SC	03/04/2015
William A. Bledsoe <i>W.A. Bledsoe</i>	Greenville Tech College	123-ROC647-102	SC	06/10/2014

C: C.R.F., 773-52A
Site D&D Correspondence File
Tracy Bryant, 730-4B

INSPECTION SURVEY OF 242-12F CHANGE SHACK

Homogeneous Number	SUSPECT MATERIAL	DESCRIPTION OF MATERIAL and SAMPLE NUMBERS	AMOUNT	TEST RESULTS	FRIABLE-NONFRIABLE
H01OB	Miscellaneous	Description: Roofing Caulk, Black and White Sample Number: 12F130205-1A, 12F130205-1B, 12F130205-1C TEM Sample: A1303035-001A (Black), 12F130205-001B (White)	Approximately 6 Square Feet	Negative	Non-Friable
Location: 242-12F Roof edge					
H02OB	Miscellaneous	Description: Green Floor Tile, 12x12, adhered with Yellow water based adhesive Sample Number: 12F130205-2A, 12F130205 2B, 12F130205 2C *TEM Sample: A1303035-002A (Tile), 12F130205-002B (Yellow Adhesive)	Approximately 320 Square Feet	Negative	Non-Friable
Location: Building Flooring					
H03	Miscellaneous	Description: Caulk from Electrical Pipe Sample Number: 12F130205-3 Note this material was consumed in the sample	Approximately 0 Square Feet	Negative	Non-Friable
Location: Electrical conduit Pipe					
H04	Miscellaneous	Description: Wall Decor Sample Number:12F130205-4	Approximately 2 Square Feet	Negative	Non-Friable
Location: Wall Paneling					
H05	Miscellaneous	Description: Paper from Door filler Sample Number:12F130205-5	Approximately 84 Square Feet	Negative	Non-Friable
Location: Entry Doors					
H06OB	Miscellaneous	Description: Fiberglass Insulation Black Tar Paper Sample Number:12F130205-6A, 12F130205 -6B, 12F130205 -6C *TEM Sample: A1303035-003A	Approximately 750 Square Feet	Negative	Non-Friable
Location: Wall Insulation					

INSPECTION SURVEY OF 242-12F CHANGE SHACK

Homogeneous Number	SUSPECT MATERIAL	DESCRIPTION OF MATERIAL and SAMPLE NUMBERS	AMOUNT	TEST RESULTS	FRIABLE-NONFRIABLE
H07OB	Miscellaneous	Description: Sheetrock with Tan Wallpaper Sample Number: 12F130205-7A, 12F130205 -7B, 12F130205 -7C *TEM Sample: A1303035-004A	Approximately 750 Square Feet	Negative	Non-Friable
Location: Interior Building Walls					
H08OB	Miscellaneous	Description: Brown/Grey Ceiling Tile Sample Number: 12F130205-8A, 12F130205 -8B, 12F130205 -8C *TEM Sample: A1303035-005A	Approximately 320 Square Feet	Negative	Friable
Location: Interior Building Ceiling					
H09	Miscellaneous	Description: Wooden Deck steps anti-skid prevention Sample Number: 12F130205-9	Approximately 42 Square Feet	Negative	Non-Friable
Location: Building Exterior Steps 4 each					

Industrial Hygiene Chain of Custody Lab Report Form

Created by: William02 Bledsoe

Status: Draft

Savannah River Site
Industrial Hygiene Laboratory
Building 735-B, Room 310
Aiken, S.C. 29808
Phone: (803) 952-7449/7459
Fax: (803) 952-7881

Survey # <i>Will be created when saved</i>	Activity Code: JSL20ALFH	Page 1 of ² 1 _{2/11/13} 2
Contaminant(s) Asbestos	Lab Report No. Required <input checked="" type="radio"/> EBL <input type="radio"/> F/H Lab	Lab Method No. and Name NIOSH 9002 (PLM)
Submitted By William02 Bledsoe	EBL-IH	Lab Book and Page No. Disk No. 13-00074-00091
Peer Checked/Self Checked By		Verbal Results Given (To Whom) <input type="radio"/> How <input type="radio"/> Person <input type="radio"/> Voice Mail
Report Results to: Name / Building William02 Bledsoe		Date/Time Verbal Results Given
Email William02.bledsoe@SRS.gov	2013 - 0024 -	

ARRA <input type="radio"/> Yes <input checked="" type="radio"/> No	Sample Condition: Sample received at laboratory in acceptable condition? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Explain all "No" answers in Sample Comments section.	Sample Comments: BLOB 242-2F
--	--	---------------------------------

Sample ID	Sample Media/Size	Requested TAT*	Results/Unit	Reporting Limit	Remarks
12F130205-1A		7	< 1% 18 ASB		Caulking from Roof
12F130205-1B		7	< 1%		Caulking from Roof
12F130205-1C		7	< 1%		Caulking from Roof- TEM
12F130205-2A		7	< 1%		Floor Tile & Glue
12F130205-2B		7	< 1%		Floor Tile & Glue
12F130205-2C		7	< 1%		Floor Tile & Glue-TEM
12F130205-3		7	< 1%		Caulk from Electrical Pipe
12F130205-4		7	< 1%		Wall Decor
12F130205-5		7	< 1%		Paper from Door Insulation
12F130205-6A		7	< 1%		Fiberglass Insulation
12F130205-6B		7	< 1%		Fiberglass Insulation
12F130205-6C		7	< 1%		Fiberglass Insulation- TEM
12F130205-7A		7	< 1%		Sheetrock with Wallpaper
12F130205-7B		7	< 1%		Sheetrock with Wallpaper
12F130205-7C		7	< 1%		Sheetrock with Wallpaper
12F130205-8A		7	< 1%		Ceiling
12F130205-8B		7	< 1%		Ceiling
12F130205-8C		7	< 1%		Ceiling
12F130205-9		7	< 1%		Deck

NOTE: Results relate only to the items tested.
NOTE: Measurement uncertainty will vary, based upon the analysis requested, sample matrix, and the concentration of analyte. Uncertainties specific to this analysis can be obtained upon request.
NOTE: Results are not corrected for contamination based on the field blank or other analytical blank.

Analyst/Signature <i>R. M. Code</i>	Date Analyzed 2-15-13	Reviewed By (Print) Linda Yarron	Signature (Lab Director or Designee) <i>[Signature]</i>	Date 2/18/13
Analyst/Signature <i>[Signature]</i>	Date Report Mailed 2-18-13	Report Received By (Print)	Signature (Field Use Only)	Date Received

page = 12

Comment(s)

Chain of Custody

NOTE: Samples from Radiological Contamination areas must be submitted to 772-F unless free criteria are met.

Relinquished By				Received By			
Name	Signature	Date	Time	Name	Signature	Date	Time
97947 Wm Bledsoe	<i>Wm A Bled</i>	2/11/13	1500	Ray Cooke	<i>Ray Cooke</i>	2/12/13	0845

CHECK HERE IF SAMPLES WERE DEPOSITED IN THE DROPBOX: Yes

*TAT - Turn Around Time. Disc No. - Only applicable to asbestos fiber counting
 Retention - Permanent

Surveyed By	Reviewed By	Additional Reviewer	Notify When Complete
William02 Bledsoe/SRR/Srs			

EBL-IH
 2013-0024-
 page 2 of 2



March 13, 2013

Willie Simon
SAVANNAH RIVER REMEDIATION LLC
Building: 707-20B, Room 6
Aiken, SC 29808

Bureau Veritas Work Order No. A1303035

Reference: SAMPLES FROM BLDG 242-12F

Dear Willie Simon:

Bureau Veritas North America, Inc. received 5 samples on March 05, 2013 for the analyses presented in the following report.

The results apply only to the samples analyzed in this project. Please note that any unused portion of the samples will be discarded after a sixty-day holding period, unless you have requested otherwise.

This material is confidential and is intended solely for the person to whom it is addressed. If this is received in error, please contact the number provided below.

We appreciate the opportunity to assist you. If you have any questions concerning the report, please contact the analyst whose name appears on the report or myself at (770) 499-7701.

Sincerely,

Alan M. Segrave, P.G.

Director, Laboratory Services

Electronic signature authorized through password protection

cc: Ed Kahal
William Bledsoe

Bureau Veritas North America, Inc.

Health, Safety, and Environmental Services
3380 Chastain Meadows Parkway, Suite 300
Kennesaw, GA 30144

Main: (770) 499-7701
Fax: (770) 499-7511
www.us.bureauveritas.com



CASE NARRATIVE

Date: 12-Mar-13

CLIENT: SAVANNAH RIVER REMEDIATION LLC

Project: SAMPLES FROM BLDG 242-12F

Work Order No A1303035

QUANTITATIVE ANALYSIS OF NON-FRIABLE ORGANICALLY BOUND BULK SAMPLES FOR ASBESTOS USING TRANSMISSION ELECTRON MICROSCOPY (TEM) (NY ELAP 198.4)

Approximately 100-500 mg of sample is weighed in a tared silica crucible. The sample is placed in a muffle furnace at a temperature of 480C for at least 5 hours or until the weight has stabilized. The sample is allowed to cool to room temperature and immediately weighed to calculate percent organic loss.

The sample is placed in a tared crucible and ground to disaggregate the residue. Approximately 1 ml of non-dilute HCL acid is slowly added to remove calcite and dolomite from the remaining sample residue. After 15 minutes the sample is immediately diluted with ultra-pure water. The sample is then dispersed in 50 ml of ultra-pure water and filtered onto a pre-weighed 47 mm, 0.4um pore size, polycarbonate filter. The filter is dried on a slide warmer and weighed once again. IF the residue mass is <1% of the subsamples original mass, the analysis is terminated and the result is reported as non-ACM.

A 1 cm² portion of the filter is cut and placed in a clean silica crucible. Approximately 5ml of ethanol are added and ultra-sonicated for 1 minute. Approximately 3 ul of the suspension is drop mounted onto a carbon-coated TEM grid and allowed to dry.

Grids are examined at 3000X for suitability of the prep where >50% intact filter coverage and <25% particle loading is determined. Large bundles of asbestos may be noted during this phase of the analysis. At 10,000 -20,000 X positive confirmation and further visual estimation of asbestos is determined. If there are no other particles on the filter then the asbestos observed is 100% visual estimation. Otherwise, the estimate includes all sizes relative to other particles or fibers. Morphology, selected area electron diffraction, and energy-dispersive x-ray spectroscopy are used to confirm asbestos fibers. From TEM examination as outlined above the final visual area estimation is made of asbestos on the TEM grids and the percent asbestos in the residue is then extrapolated using gravimetric records within LIMS to percent asbestos in the total sample. (NYSDOH -11645)

References

Chatfield Method for Quantitative Analysis of Bulk Samples for Asbestos Using Transmission Electron Microscopy (unpublished).
New York ELAP Method 198.4

NOTE: Some of the samples may have contained inseparable layers which were combined during



CLIENT: SAVANNAH RIVER REMEDIATION LLC

Project: SAMPLES FROM BLDG 242-12F

Work Order No A1303035

preparation.



ANALYTICAL RESULTS

Client: SAVANNAH RIVER REMEDIATION LLC

Client Reference No.: SAMPLES FROM BLDG 242-12F

Work Order No.: A1303035

Date: 12-Mar-13

Analytical Method: NYELAP METHOD 198.4 by TEM

Date Received: 3/5/2013

Sample Type: Bulk

Report Date: 3/12/2013 4:05:57 PM

Reporting Limit (% by Weight): 0.1

Grid Box Identification: 03-12-13A-1

Lab Sample No.	Client Sample Identification	Date Sampled	Analysis Date	Analyst	Sample Description (Morphology)	Asbestos Identification (%)*	Total Asbestos (%)**
A1303035-001A	12F130205-1C	02/05/13 @12:00 am	03/12/13 @3:21 pm	KRP	Black Caulking	None Detected	< 0.1
A1303035-001B	12F130205-1C	02/05/13 @12:00 am	03/12/13 @3:21 pm	KRP	White Caulking	None Detected	< 0.1
A1303035-002A	12F130205-2C	02/05/13 @12:00 am	03/12/13 @3:21 pm	KRP	Green Tile	None Detected	< 0.1
A1303035-002B	12F130205-2C	02/05/13 @12:00 am	03/12/13 @3:21 pm	KRP	Yellow Mastic	None Detected	< 0.1
A1303035-003A	12F130205-6C	02/05/13 @12:00 am	03/12/13 @3:21 pm	KRP	Black Tar Paper and Fibrous Material	None Detected	< 0.1
A1303035-004A	12F130205-7B	02/05/13 @12:00 am	03/12/13 @3:21 pm	KRP	Sheet Rock and Tan Wall Paper	None Detected	< 0.1
A1303035-005A	12F130205-8A	02/05/13 @12:00 am	03/12/13 @3:21 pm	KRP	Brown/Gray Ceiling Tile	None Detected	< 0.1

TEM Microscope Documentation

Accelerating

Instrument	*Magnification	Voltage	Calibration Date
TEM 1/D675	14484x	100 KeV	3/5/2013

*Magnification = Calibrated screen magnification at 15,000X. For ISO Method 10312 the calibrated screen magnification is at 20,000X

<: Result is less than the indicated limit of detection.

--: Present but below the detection limit

*: The visual area estimation of asbestos content in the final residue.

** : The calculated total percent asbestos in the sample as received.

Analyst(s) Name/Date:

Kuntal Paritich

3/12/2013

A1303035

SRS Chain of Custody / Laboratory Analysis Request

Requested TAT: Rush Routine Other _____ Activity Code _____

Samples received in good condition? Y N

Laboratory

Lab Name: Bureau Veritas
Address 1: 3380 Chastain Meadows Parkway
Address: Suite 300, Kennesaw, GA 30144
POC: _____

Requested by

Name: Ed Kahal
Email / Phone: ed.kahal@srs.gov / 803-2086385
Organization: Industrial Hygiene
Address: Savannah River Site
Aiken, SC 29802
Peer Reviewed / Self Check by
Name (Print): *ESKAHAL*

Return Results / Report To

Name: Willie Simon
Email / Phone: willie.simon@srs
Name: William Bledsoe
Email / Phone: william02.bledsoe@srs.gov/803-952-4113

Sample Remarks

Samples from Bldg. 242-12F

Sample Comments

This Line Laboratory use ONLY Laboratory ID#: _____ Results attached (date): _____ Results Pages (Total): _____

No	Field ID	EISM ID	Matrix	Sample Date Time	Requested Analysis	Sample Media / Size	Time (min)	Vol / Area	Sample Comments
1	12F130205-1C			2/5/13	NIOSH 7402 TEM SEM I-QUANTITATIVE				Caulking from Roof
2	12F130205-2C			2/5/13	NIOSH 7402 TEM SEM I-QUANTITATIVE				Floor Tile & Glue
3	12F130205-6C			2/5/13	NIOSH 7402 TEM SEM I-QUANTITATIVE				Fiberglass insulation with Glue
4	12F130205-7B			2/5/13	NIOSH 7402 TEM SEM I-QUANTITATIVE				Sheetrock w/ Wallpaper
5	12F130205-8A			2/5/13	NIOSH 7402 TEM SEM I-QUANTITATIVE				Ceiling

Relinquished by		
Name	Signature:	Date and Time
Wm A Bledsoe	<i>Wm A Bledsoe</i>	2/28/2013 2:48 PM

Received by		
Name	Signature:	Date and Time
ESKAHAL	<i>ESKAHAL</i>	2/28/2013 2:48 PM
K. Smith	<i>K. Smith</i>	3/5/2013



Catherine B. Templeton, Director

Promoting and protecting the health of the public and the environment

July 08, 2014

NOTICE OF DEMOLITION

ASBESTOS PROJECT LICENSE ID: N1407067

Issued by: James E Hinkle

SAVANNAH RIVER NUCLEAR SOLUTIONS LLC
BLDG 730-4B
AIKEN, SC 29808

RE: Srs - 242-12f Change Shack, ROAD C, Aiken

This license is issued on the basis of information provided in your demolition notification received July 08, 2014. Please refer to the license number above whenever you communicate with DHEC about this project. Use of this license indicates your agreement that the information herein is accurate. This license is non-transferable. The fee for this license is \$50.00. Questions may be directed to the Asbestos Section at (803) 898-4289.

Reportedly, there will be no regulated asbestos-containing materials remaining on the interior or exterior of this facility during demolition. Appropriate arrangements for disposal of the demolition debris should be made directly with the landfill. Open burning requirements outlined within SC Air Pollution Control Regulation No. 61-62.2 shall apply.

Demolition has been scheduled to begin July 07, 2014 and complete August 05, 2014. **If the demolition operation will begin after this date, please telephone the Asbestos Section in Columbia on or before this date.** Additionally, written notice of a new start date must be received by DHEC as soon as possible before, but no later than the original start date referenced above. In no event shall a demolition operation begin on a date other than the date referenced within this acknowledgment unless specified by DHEC.

The SCDHEC Division of Mining & Solid Waste Management also has rules governing the disposal of materials that have come in contact with lead-based paint. Materials which are painted with lead-based paint must be disposed of in a Class Two or Three Landfill. Please contact the Bureau of Land and Waste Management for additional information.

Asbestos Section
Bureau of Air Quality

VSDS Standard Map RSLs

Comments:

RADCON COVERAGE OF DEMOLITION OF FIRE DAMAGED 241-12F BUILDING.
ALL LARGE AREA WIPES WERE ND DPM ALPHA AND ND DPM BETA/GAMMA.
ALL SMEARS WERE <20 DPM ALPHA AND <200 DPM BETA-GAMMA/100CM². ALL DOSE RATES
AROUND 242-12F WERE ND mrem/hr/E/S/WB.

THE RBA BOUNDARY WAS INCREASED TO CREATE A 20FT AREA TO MOVE THE BUILDING AWAY
FROM THE EVAPORATOR TO BE DEMOLISHED AND PLACE INTO THE SEALAND THAT WAS
BROUGHT IN FOR THE DEMOLITION. .

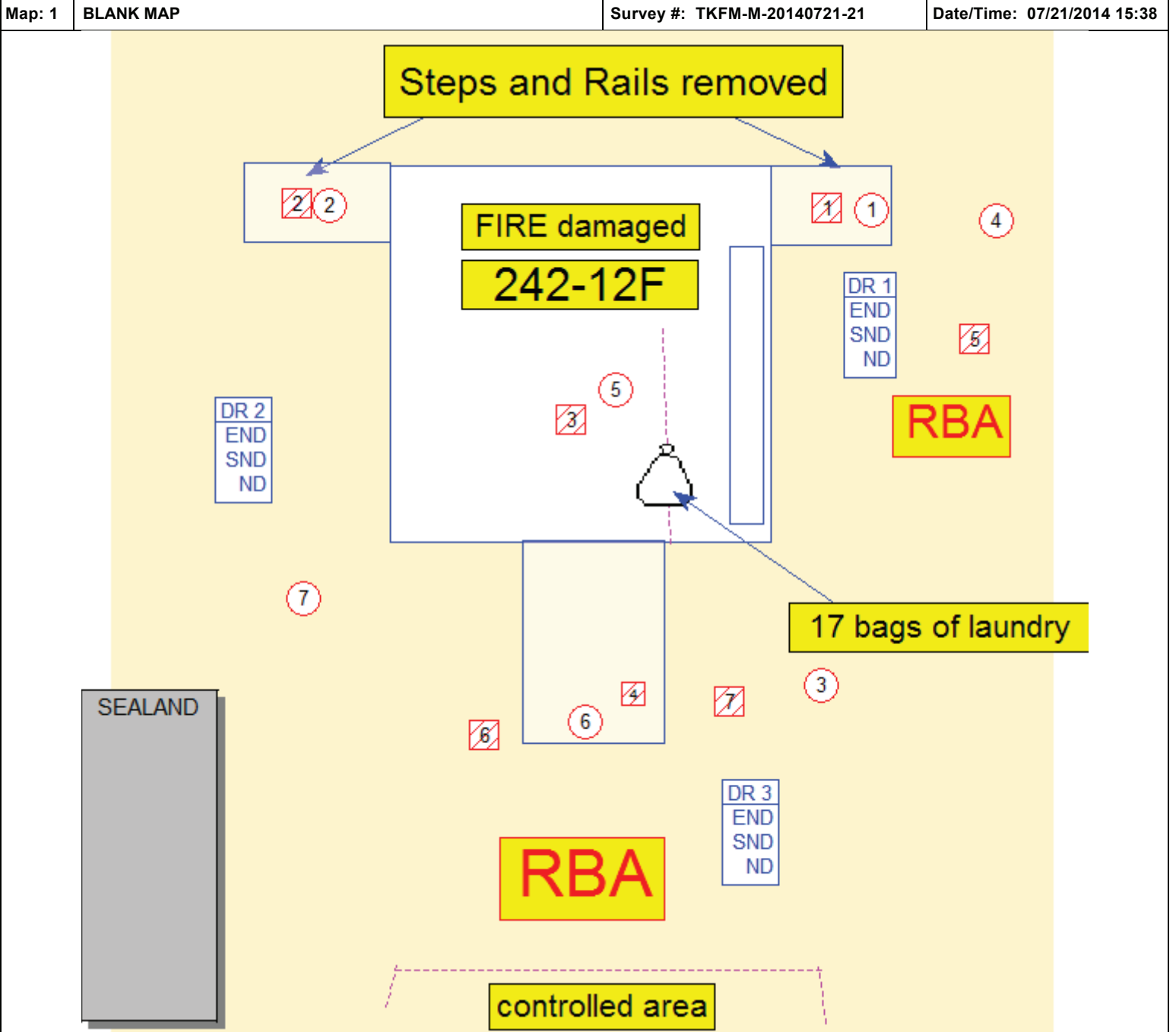
THE STEPS AND DECKS ON THE SIDES NEAR THE EVAPORATOR WERE REMOVED AND PLACED
IN FRONT OF THE SEALAND.

SEVENTEEN (17) BAGS OF SMOKE DAMAGED LAUNDRY WAS LEFT IN THE BUILDING. THE RAILS
WERE TAKEN TO THE CONSTRUCTION AREA.

TWO FORK TRUCKS (SRSR 00129 AND SRSR 00128) WERE SURVEYED TO EXIT RBA. ALL
PROBES ON THE FORKS AND TIRES WERE ND ALPHA AND BETA/GAMMA. ALL LARGE AREA
WIPES WERE ND DPM ALPHA AND BETA/GAMMA.

ALL PERSONEL SURVEYED AND PASSED THE PCM-1B.

VSDS Standard Map RSLs



Comments:	Summary of Highest Readings (All available values may not be listed)	
	Smears	Air Samples & Wipes
	7) <20 DPM/100 cm ² α	Wipe 7) ND DPM/Wipe α
	7) <200 DPM/100 cm ² β/γ	Wipe 7) ND DPM/Wipe β/γ
Type: Job Coverage		
Symbol Legend (for example only) RWP #: 14-FTF-001		
Unless otherwise noted, dose rates in mrem/hr.		
Lead Inspector: PONTOO, EVAN	Status: Approved by: MOODY, MARK ALEXANDER, 07/21/2014	
Location Code: F241900	Bldg/Area Name: GENERAL	
Location Description: BLANK MAP		

VSDS Standard Map RSLs

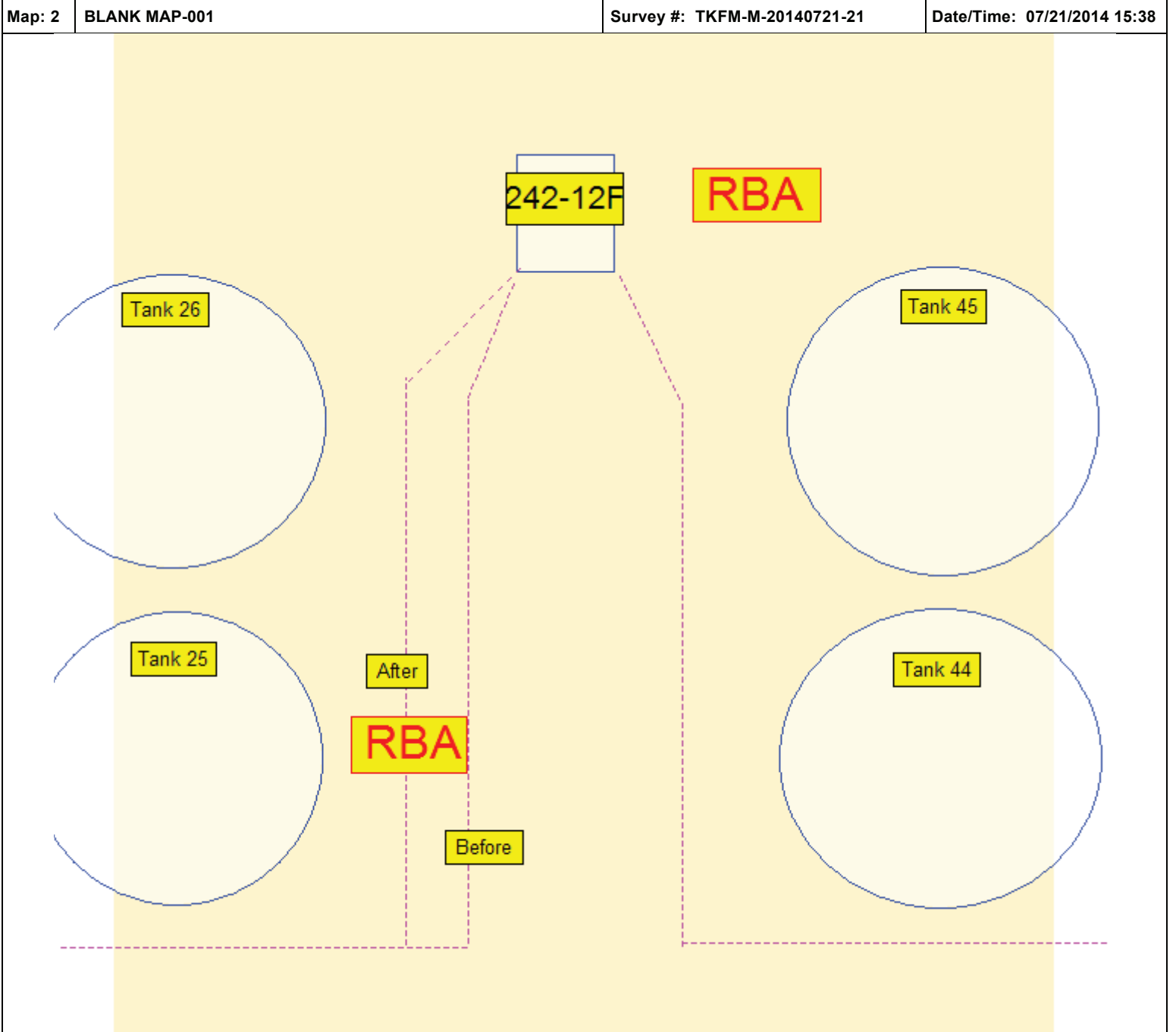
Data Point Details

Survey #: TKFM-M-20140721-21

Map: 1 - FTF\GENERAL\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
1	DR γ	N/A N/A N/A	E ND ----- S ND ----- ND	mrem/hr ----- mrem/hr ----- mrem/hr	WEST OF 242-12F	
2	DR γ	N/A N/A N/A	E ND ----- S ND ----- ND	mrem/hr ----- mrem/hr ----- mrem/hr	EAST OF 242-12F	
3	DR γ	N/A N/A N/A	E ND ----- S ND ----- ND	mrem/hr ----- mrem/hr ----- mrem/hr	OUTSIDE 242-12F	
1	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
2	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
3	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
4	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
5	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
6	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
7	Smear	N/A N/A	$\alpha < 20$ ----- $\beta/\gamma < 200$	DPM/100 cm ² ----- DPM/100 cm ²		
1	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
2	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
3	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
4	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
5	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
6	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
7	Wipe		α ND ----- β/γ ND	DPM/Wipe ----- DPM/Wipe		
	Text		242-12F			
	Note					SEALAND
	Text		controlled area			
	Text		FIRE damaged			Air conditioner located here
	Text		17 bags of laundry			Smoke damaged laundry to be put in sealand.
	Text		Steps and Rails removed			
	Posting		RBA			
	Posting		RBA			

VSDS Standard Map RSLs



Comments:	Summary of Highest Readings (All available values may not be listed)	
	Smears	Air Samples & Wipes
Type: Job Coverage		
Symbol Legend (for example only) RWP #: 14-FTF-001		
Unless otherwise noted, dose rates in mrem/hr.		
Lead Inspector: PONTOO, EVAN	Status: Approved by: MOODY, MARK ALEXANDER, 07/21/2014	
Location Code: H241000	Bldg/Area Name: HTF BLANK MAP	
Location Description: BLANK MAP-001		

VSDS Standard Map RSLs

Data Point Details

Survey #: TKFM-M-20140721-21
Map: 2 - HTF\MISC\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
	Text		Before			
	Text		After			
	Text		Tank 26			
	Text		Tank 25			
	Text		Tank 45			
	Text		Tank 44			
	Text		242-12F			
	Posting		RBA			
	Posting		RBA			

VSDS Standard Map RSLs

Comments:

RADCON COVERAGE OF DEMOLITION OF FIRE DAMAGED 242-12F BUILDING.

LAST SET OF STEPS WERE REMOVED FROM BUILDING AND PLACED IN FRONT OF THE SEALAND.
THE RAILS WERE TAKEN TO THE CONSTRUCTION AREA.

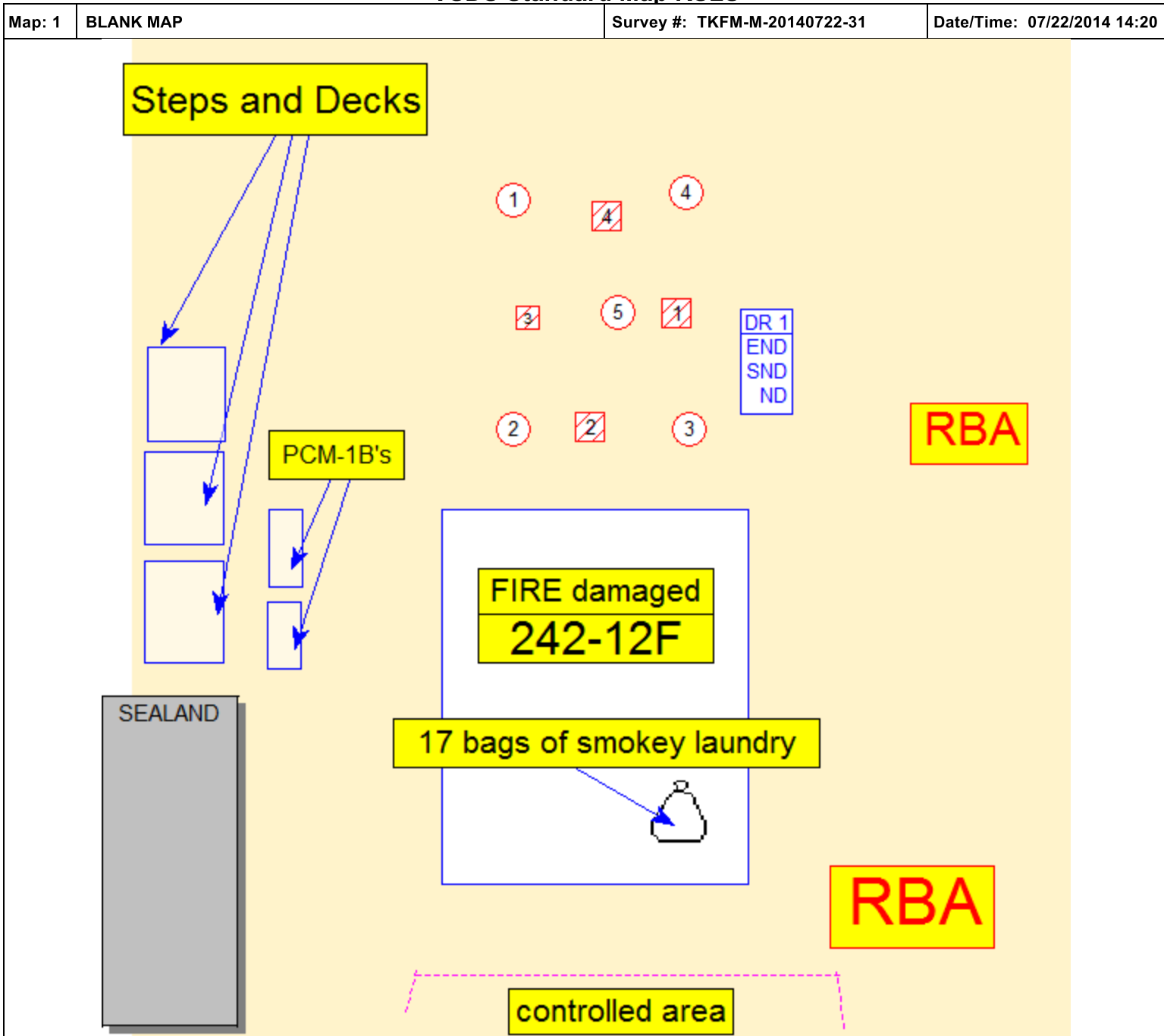
BACKHOE (SRSR 00029) WAS USED TO PULL THE BUILDING AWAY FROM 2-F EVAPORATOR AND
PREPARED TO BE DEMOLISHED.

THE GROUND WHERE 242-12F ONCE WAS LOCATED WAS SURVEYED.
ALL LARGE AREA WIPES WERE ND DPM ALPHA AND ND DPM BETA-GAMMA.
ALL SMEARS WERE <20 DPM ALPHA AND <200 DPM BETA-GAMMA/100CM2.
ALL DOSE RATES AROUND 242-12F WERE ND mrem/hr/E/S/WB.

FORK TRUCK (SRSR 00128) AND BACKHOE (SRSR 00029) WERE SURVEYED TO EXIT RBA.
ALL PROBES ON THE FORKS AND TIRES WERE ND ALPHA AND BETA-GAMMA.
ALL LARGE AREA WIPES WERE ND DPM ALPHA AND ND BETA-GAMMA.

ALL PERSONEL SURVEYED AND PASSED THE PCM-1B.

VSDS Standard Map RSLs



Comments:	Summary of Highest Readings (All available values may not be listed)	
	Smears	Air Samples & Wipes
	5) <20 DPM/100 cm ² α	Wipe 4) ND DPM/Wipe α
	5) <200 DPM/100 cm ² β/γ	Wipe 4) ND DPM/Wipe β/γ
Type: Job Coverage		
Symbol Legend (for example only) RWP #: 14-FTF-001		
Unless otherwise noted, dose rates in mrem/hr.		
Lead Inspector: PONTOO, EVAN	Status: Approved by: LEMMON, ROBIN WILLIAMSON, 07/23/2014	
Location Code: F241900	Bldg/Area Name: GENERAL	
Location Description: BLANK MAP		

VSDS Standard Map RSLs

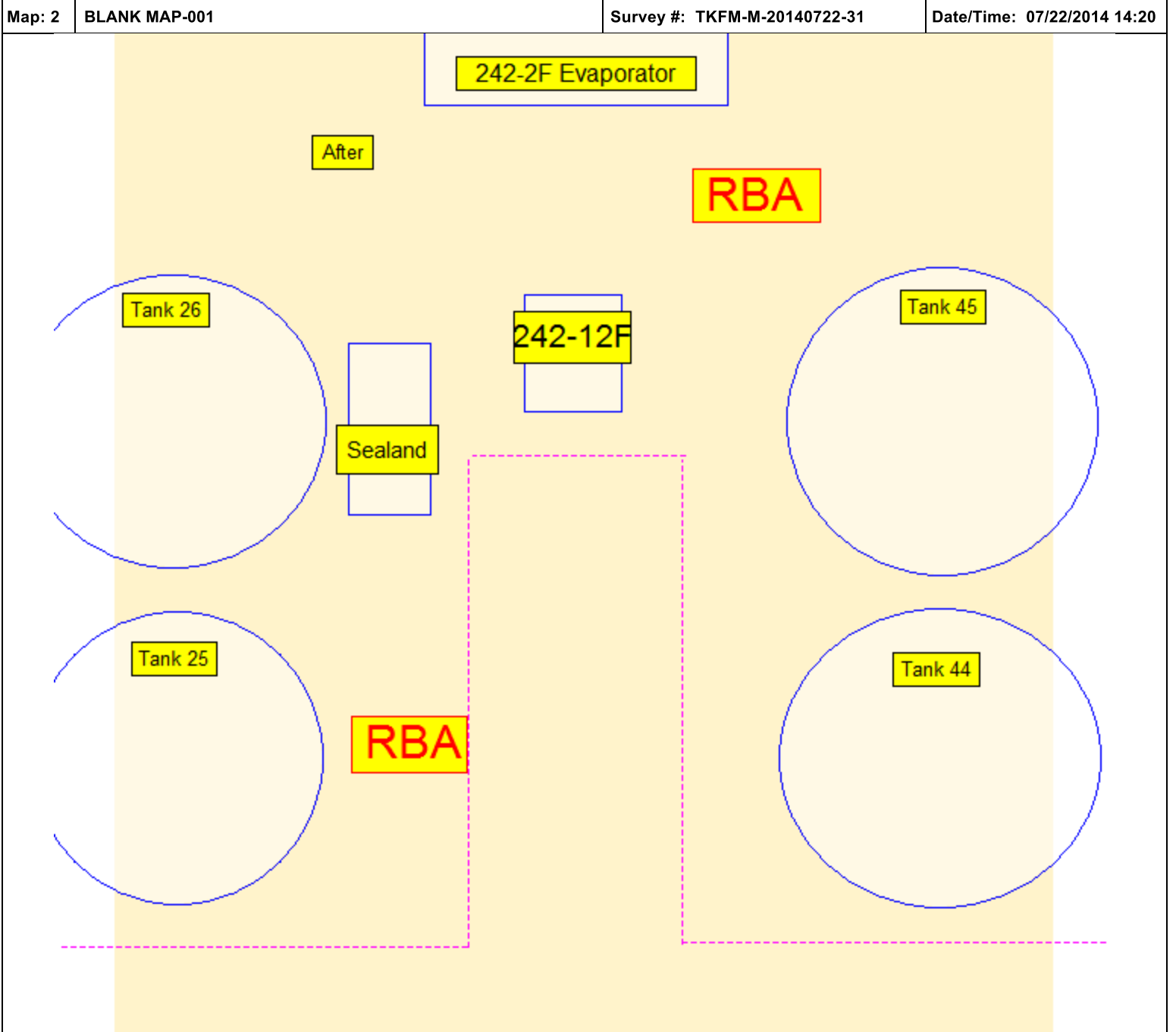
Data Point Details

Survey #: TKFM-M-20140722-31

Map: 1 - FTF\GENERAL\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
1	DR γ	N/A	E ND	mrem/hr	WEST OF 242-12F	
		N/A	S ND	mrem/hr		
		N/A	ND	mrem/hr		
1	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
2	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
3	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
4	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
5	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
1	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
2	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
3	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
4	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
	Text		242-12F			
	Note					SEALAND
	Text		controlled area			
	Text		FIRE damaged			Air conditioner located here
	Text		17 bags of smokey laundry			Smoke damaged laundry to be put in sealand.
	Text		Steps and Decks			
	Text		PCM-1B's			
	Posting		RBA			
	Posting		RBA			

VSDS Standard Map RSLs



Comments:	Summary of Highest Readings (All available values may not be listed)	
	Smears	Air Samples & Wipes
Type: Job Coverage		
Symbol Legend (for example only) RWP #: 14-FTF-001		
Unless otherwise noted, dose rates in mrem/hr.		
Lead Inspector: PONTOO, EVAN	Status: Approved by: LEMMON, ROBIN WILLIAMSON, 07/23/2014	
Location Code: H241000	Bldg/Area Name: HTF BLANK MAP	
Location Description: BLANK MAP-001		

VSDS Standard Map RSLs

Data Point Details

Survey #: TKFM-M-20140722-31
Map: 2 - HTF\MISC\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
	Text		Sealand			
	Text		After			
	Text		Tank 26			
	Text		Tank 25			
	Text		Tank 45			
	Text		Tank 44			
	Text		242-12F			
	Text		242-2F Evaporator			
	Posting		RBA			
	Posting		RBA			

VSDS Standard Map RSLs

Comments:

RADCON COVERAGE OF DEMOLITION OF FIRE DAMAGED 242-12F BUILDING.

THE TOP OF THE SEALAND WAS REMOVED AND BUILDING 242-12F WAS DEMOLISHED WITH BACKHOE (SRSR00029) AND PUT INTO SEALAND #FT14005746.
THE STEPS AND DECKS, BAGGED LAUNDRY, AND TWO (2) PCM-1Bs WERE PLACED INTO THE SEALAND.

THE GROUND WHERE 242-12F WAS DEMOLISHED WAS SURVEYED.
ALL LARGE AREA WIPES WERE ND DPM ALPHA AND ND DPM BETA-GAMMA.
ALL SMEARS WERE <20 DPM ALPHA AND <200 DPM BETA-GAMMA/100CM2.
ALL DOSE RATES AROUND 242-12F WERE ND mrem/hr/E/S/WB.

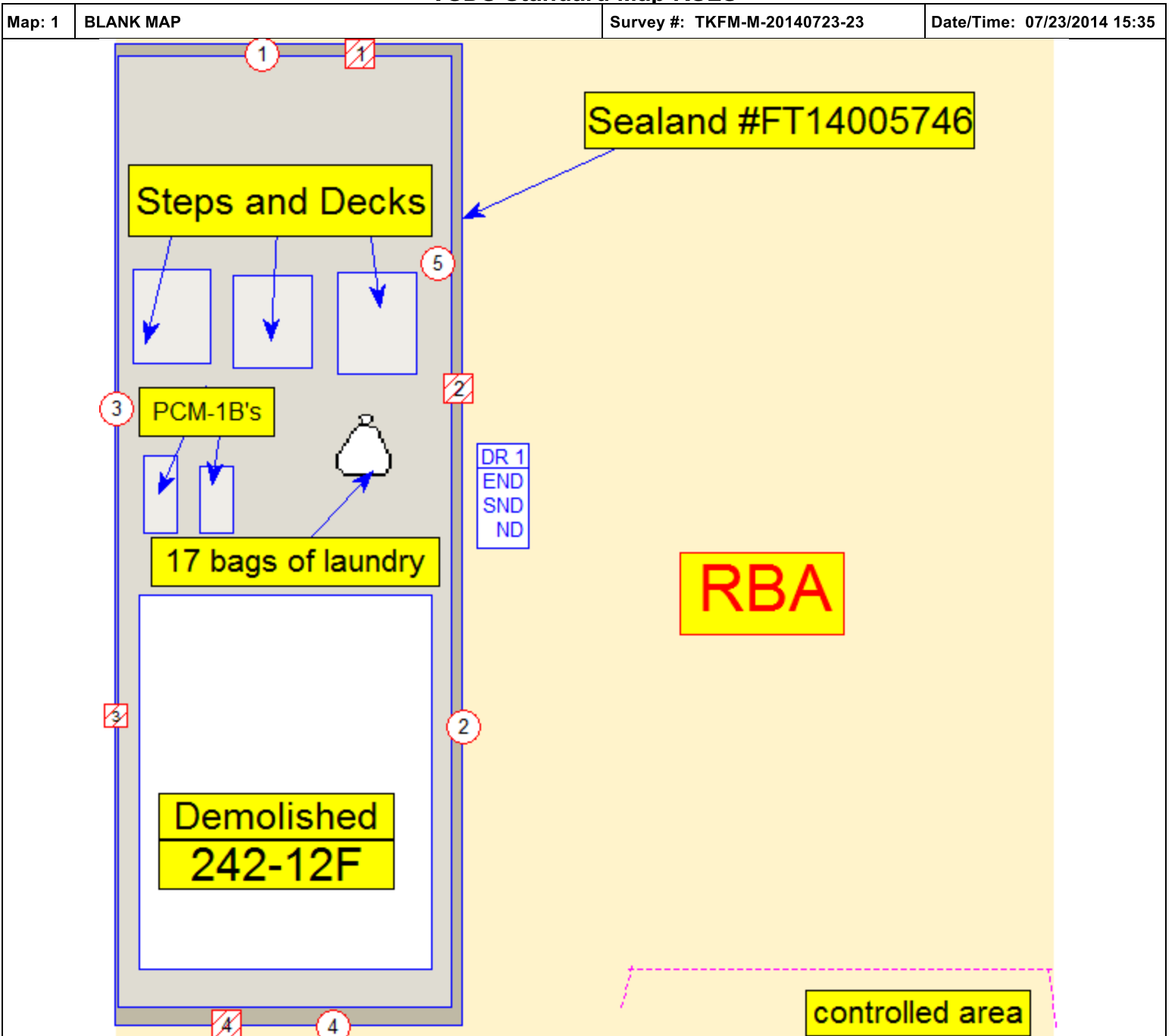
THE PIPES USED TO MOVE THE BUILDING FOR DEMOLITION WERE SURVEYED, CLEARED AND TAKEN TO THE CONSTRUCTION LAY-DOWN AREA.

THE TOP WAS PUT BACK ON THE SEALAND, SECURED, SURVEYED AND TAGGED.
ALL LARGE AREA WIPES WERE ND DPM ALPHA AND ND DPM BETA-GAMMA.
ALL SMEARS WERE <20 DPM ALPHA AND <200 DPM BETA-GAMMA/100CM2.
ALL DOSE RATES AROUND SEALAND WERE ND mrem/hr/E/S/WB.

FORK TRUCK (SRSR 00128) AND BACKHOE (SRSR 00029) WERE SURVEYED TO EXIT RBA.
ALL PROBES ON THE FORKS AND TIRES WERE ND ALPHA AND BETA-GAMMA.
ALL LARGE AREA WIPES WERE ND DPM ALPHA AND ND BETA-GAMMA.

ALL PERSONEL SURVEYED AND PASSED THE PCM-1B.

VSDS Standard Map RSLs



Comments:

Summary of Highest Readings
 (All available values may not be listed)

Smears	Air Samples & Wipes
5) <20 DPM/100 cm ² α	Wipe 4) ND DPM/Wipe α
5) <200 DPM/100 cm ² β/γ	Wipe 4) ND DPM/Wipe β/γ

Type: Job Coverage

Symbol Legend (for example only) RWP #: 14-FTF-001

15 Smear 15 Direct Probe
15 Large Area DR Dose Rate
15 Air Sample Rate

Unless otherwise noted, dose rates in mrem/hr.

Lead Inspector: PONTOO, EVAN

Status: Approved by: LEMMON, ROBIN WILLIAMSON, 07/23/2014

Location Code: F241900

Bldg/Area Name: GENERAL

Location Description: BLANK MAP

VSDS Standard Map RSLs

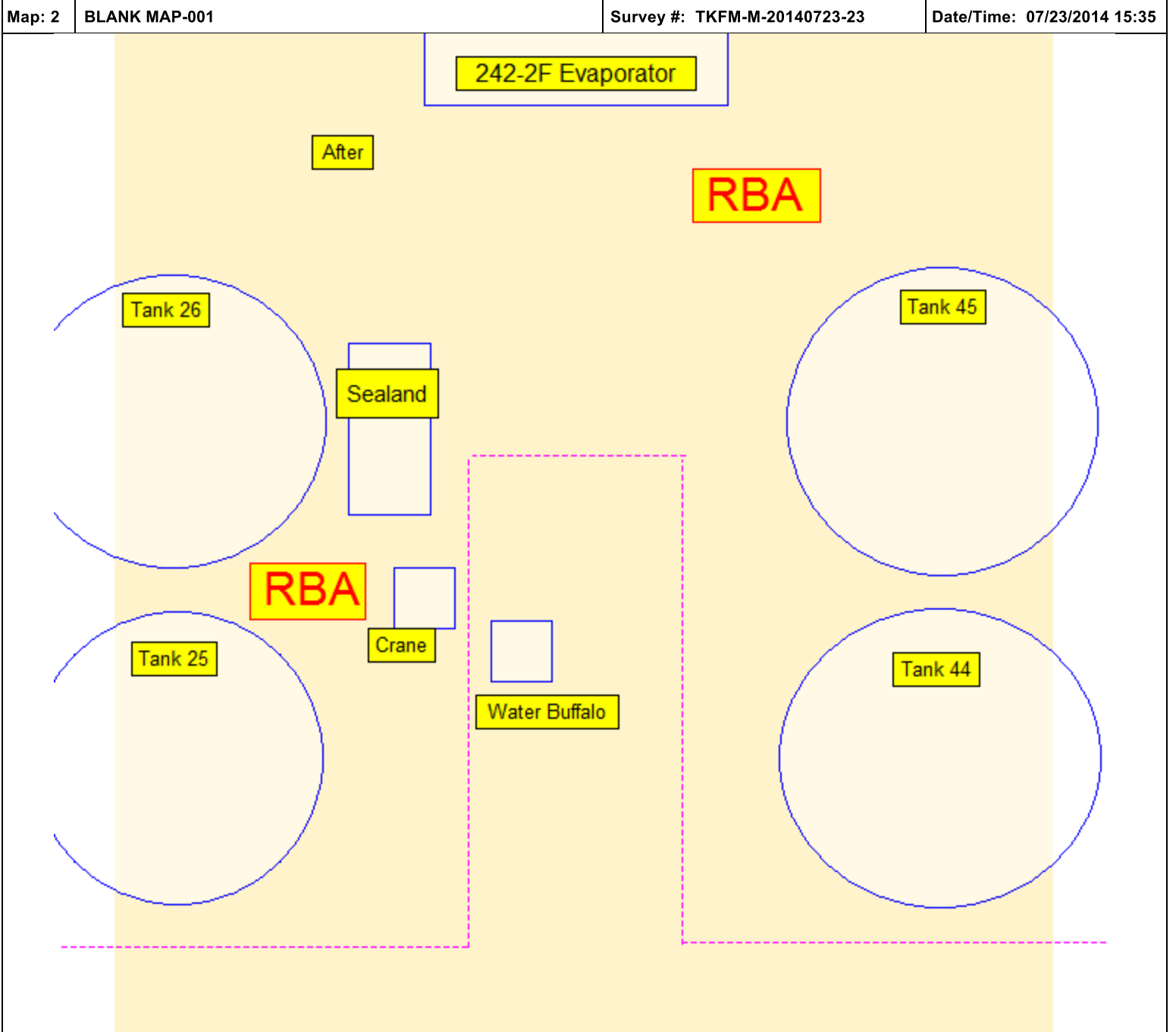
Data Point Details

Survey #: TKFM-M-20140723-23

Map: 1 - FTF\GENERAL\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
1	DR γ	N/A	E ND	mrem/hr	WEST OF 242-12F	
		N/A	S ND	mrem/hr		
		N/A	ND	mrem/hr		
1	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
2	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
3	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
4	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
5	Smear	N/A	$\alpha < 20$	DPM/100 cm ²		
		N/A	$\beta/\gamma < 200$	DPM/100 cm ²		
1	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
2	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
3	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
4	Wipe		α ND	DPM/Wipe		
			β/γ ND	DPM/Wipe		
	Text		242-12F			
	Text		controlled area			
	Text		Demolished			Air conditioner located here
	Text		17 bags of laundry			Smoke damaged laundry to be put in sealand.
	Text		Steps and Decks			
	Text		PCM-1B's			
	Text		Sealand #FT14005746			
	Posting		RBA			

VSDS Standard Map RSLs



Comments:	Summary of Highest Readings (All available values may not be listed)	
	Smears	Air Samples & Wipes
Type: Job Coverage		
Symbol Legend (for example only) RWP #: 14-FTF-001		
Unless otherwise noted, dose rates in mrem/hr.		
Lead Inspector: PONTOO, EVAN	Status: Approved by: LEMMON, ROBIN WILLIAMSON, 07/23/2014	
Location Code: H241000	Bldg/Area Name: HTF BLANK MAP	
Location Description: BLANK MAP-001		

VSDS Standard Map RSLs

Data Point Details

Survey #: TKFM-M-20140723-23

Map: 2 - HTF\MISC\Blank Map-001

#	Type	Inst.	Value	Units	Position	Notes
	Text		Sealand			
	Text		After			
	Text		Tank 26			
	Text		Tank 25			
	Text		Tank 45			
	Text		Tank 44			
	Text		242-2F Evaporator			
	Text		Crane			
	Text		Water Buffalo			
	Posting		RBA			
	Posting		RBA			