



**Savannah River
Remediation**

AECOM | BECHTEL | CH2M | B&W | AREVA

Waste Disposal Authority

SAVANNAH RIVER SITE SALT WASTE DISPOSAL NRC ONSITE OBSERVATION VISIT JULY 7-8, 2015

SRR-CWDA-2015-00086, Revision 1





**Savannah River
Remediation**

AECOM | BECHTEL | CH2M | B&W | AREVA

Savannah River Site Salt Waste Disposal NRC Onsite Observation Visit

We do the right thing.

July 7, 2015

SRR-CWDA-2015-00086, Revision 1

Agenda: 7/7/2015

We do the right thing.

NRC Salt Waste Disposal Onsite Observation			
Tuesday, July 07, 2015			
Start	End	Topic	Location
8:00	8:45	Badging/Travel	Meet 703-46A
8:45	9:00	Inbrief	705-1C, Room 34 A-B
9:00	9:30	<u>Saltstone Facility Status [5]</u> • Operating Status • Disposal Unit Status	705-1C, Room 34 A-B
9:30	12:00	<u>SDF Tour [4, 6, 7, 8]</u> • SDU 4 and 6 • SDU 3A, 3B, 5A, and 5B • Monitoring Wells • SPF Operation	Z-Area
12:00	1:00	Lunch	766-H
1:00	1:30	<u>Monitoring Activities [F1]</u> • Routine Documentation • Action Item Status	705-1C, Room 34 A-B
1:30	4:00	<u>Technical Discussions [2, 3, F2]</u> • Research & Development Update • Update Groundwater Monitoring Data	705-1C, Room 34 A-B
4:00	4:15	NRC/SCDHEC Internal Review	705-1C, Room 34 A-B
4:15	4:45	Outbrief	705-1C, Room 34 A-B
4:45	5:00	Travel/NRC Depart	703-46A

(#) - Activity number from
NRC Observation Guidance
[ML15148A388]

Agenda: 7/8/2015

We do the right thing.

NRC Salt Waste Disposal Onsite Observation			
Wednesday, July 08, 2015			
Start	End	Topic	Location
8:00	8:30	Arrive/Travel	Meet 703-46A
8:30	8:45	Inbrief	705-1C, Room 34 A-B
8:45	11:00	<u>Technical Discussions [1, 9]</u> <ul style="list-style-type: none"> • FY 2014 SA Discussions • GoldSim Modeling 	705-1C, Room 34 A-B
11:00	12:30	Lunch	766-H
12:30	2:30	<u>Technical Discussions [1, 9]</u> <ul style="list-style-type: none"> • FY 2014 SA Discussions • GoldSim Modeling 	705-1C, Room 34 A-B
2:30	3:00	NRC/SCDHEC Internal Review	705-1C, Room 34 A-B
3:00	3:45	Outbrief	705-1C, Room 34 A-B
3:45	4:00	Travel/NRC Depart	703-46A

(#) - Activity number from
NRC Observation Guidance
[ML15148A388]

■ Activities

1. NRC to answer any DOE questions about the NRC Request for Additional Information Questions for the DOE “Fiscal Year 2014 Special Analysis for Saltstone Disposal Facility at the Savannah River Site” (SRR-CWDA-2014-00006, Rev. 2).
2. Update on groundwater monitoring data.
3. Review recent research results developed since the previous onsite observation visit.
4. Tour the site, Saltstone Disposal Structure (SDS) 4, and construction of SDS 6.
5. Discuss the status of operations at the SDF since the last onsite observation visit, including volume of grout poured, current status of SDS 4 (e.g., progress/timetable update on cold cap and roofing), and any unusual occurrences (e.g., visual inspection results, production issues, worker protection).

[Onsite Observation Guidance for July 7-8, 2015, Monitoring Visit to the Savannah River Site, Saltstone Disposal Facility (Docket No. PROJ0734), ML15148A388.]

■ Activities (Cont'd)

6. If saltstone is being poured, then observe Saltstone Production Facility operations.
7. View SDS 3A, SDS 3B, SDS 5A, and SDS 5B.
8. View wells ZBG-2 through ZBG-8 and ZBG-2C.
9. Discuss GoldSim modeling for the DOE "Fiscal Year 2014 Special Analysis for the Saltstone disposal Facility at the Savannah River Site" (SRR-CWDA-2014-00006, Rev. 2)

[Onsite Observation Guidance for July 7-8, 2015, Monitoring Visit to the Savannah River Site, Saltstone Disposal Facility (Docket No. PROJ0734), ML15148A388.]

■ Follow-On Activities

1. The DOE to provide the NRC staff with additional photos of construction of SDS 6, when available:
 - Tension wires; and
 - Wall to roof connections

2. The DOE to provide NRC staff with additional groundwater data relative to:
 - Historical data on Z-Area wells
 - Water thickness of upper zone of the Upper Three Run Aquifer over time.
 - Additional well data related to changes in position of the water line between the lower and upper zones of Upper Three Runs Aquifer over time (including wells beyond Z-Area as applicable).

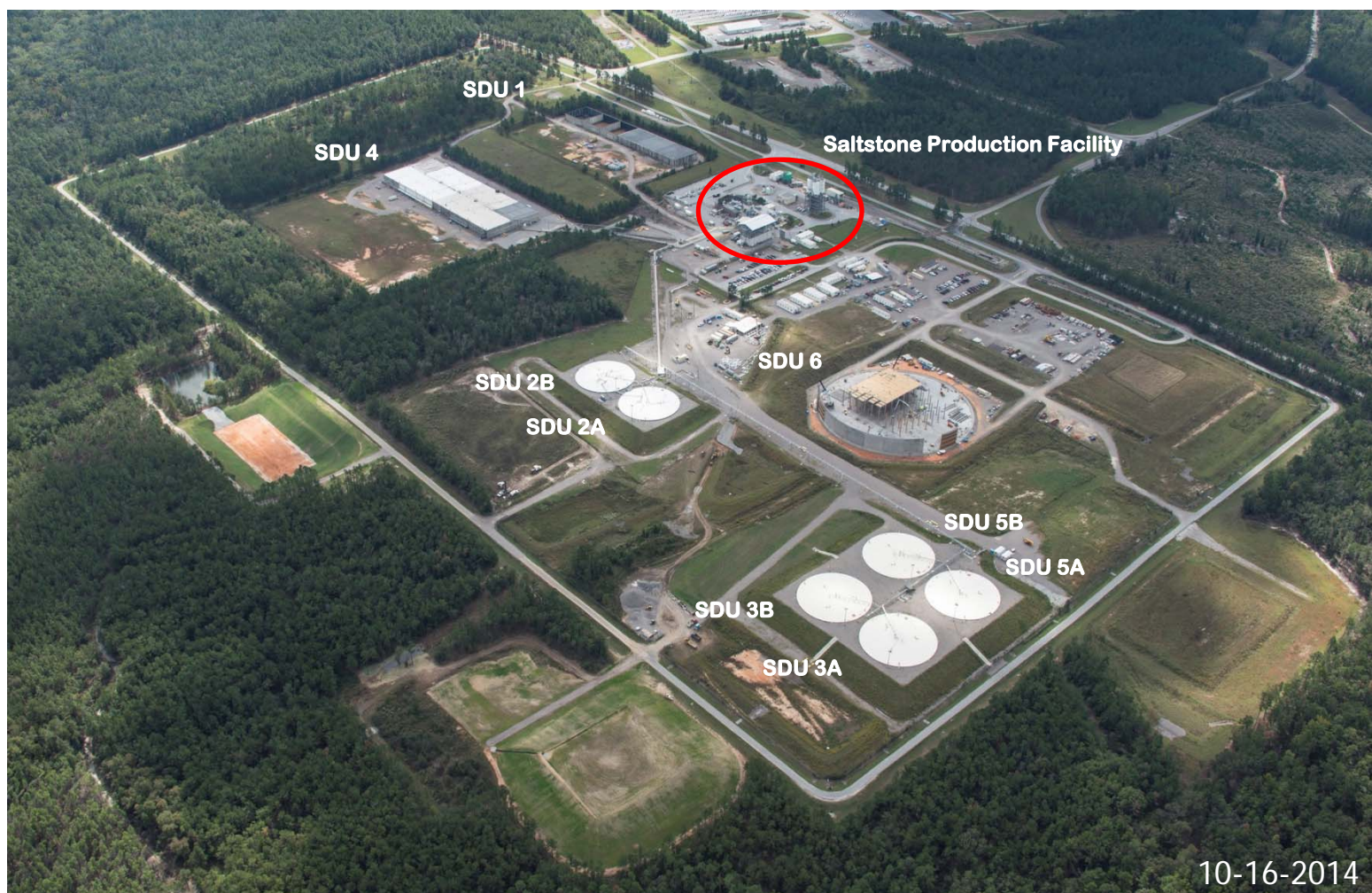
[Onsite Observation Guidance for July 7-8, 2015, Monitoring Visit to the Savannah River Site, Saltstone Disposal Facility (Docket No. PROJ0734), ML15148A388.]

Saltstone Facility Status

- Operational Status
- Saltstone Disposal Unit (SDU) Status
 - SDU 2
 - SDU 3 & 5
 - SDU 6
 - SDU 4 (i.e., Vault 4)
 - Vault 4 Stabilization
- Worker Dose

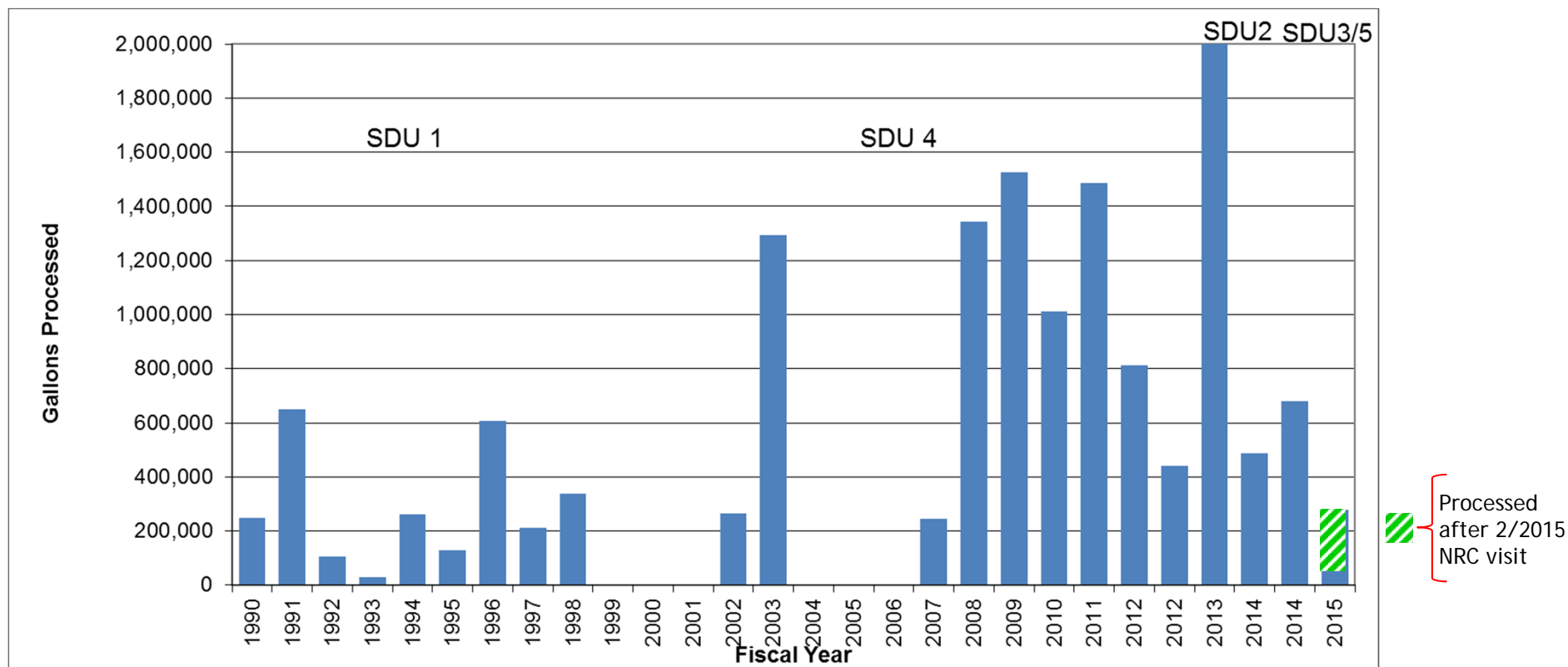
Saltstone Facility

We do the right thing.



We do the right thing.

Salt Solution Processed



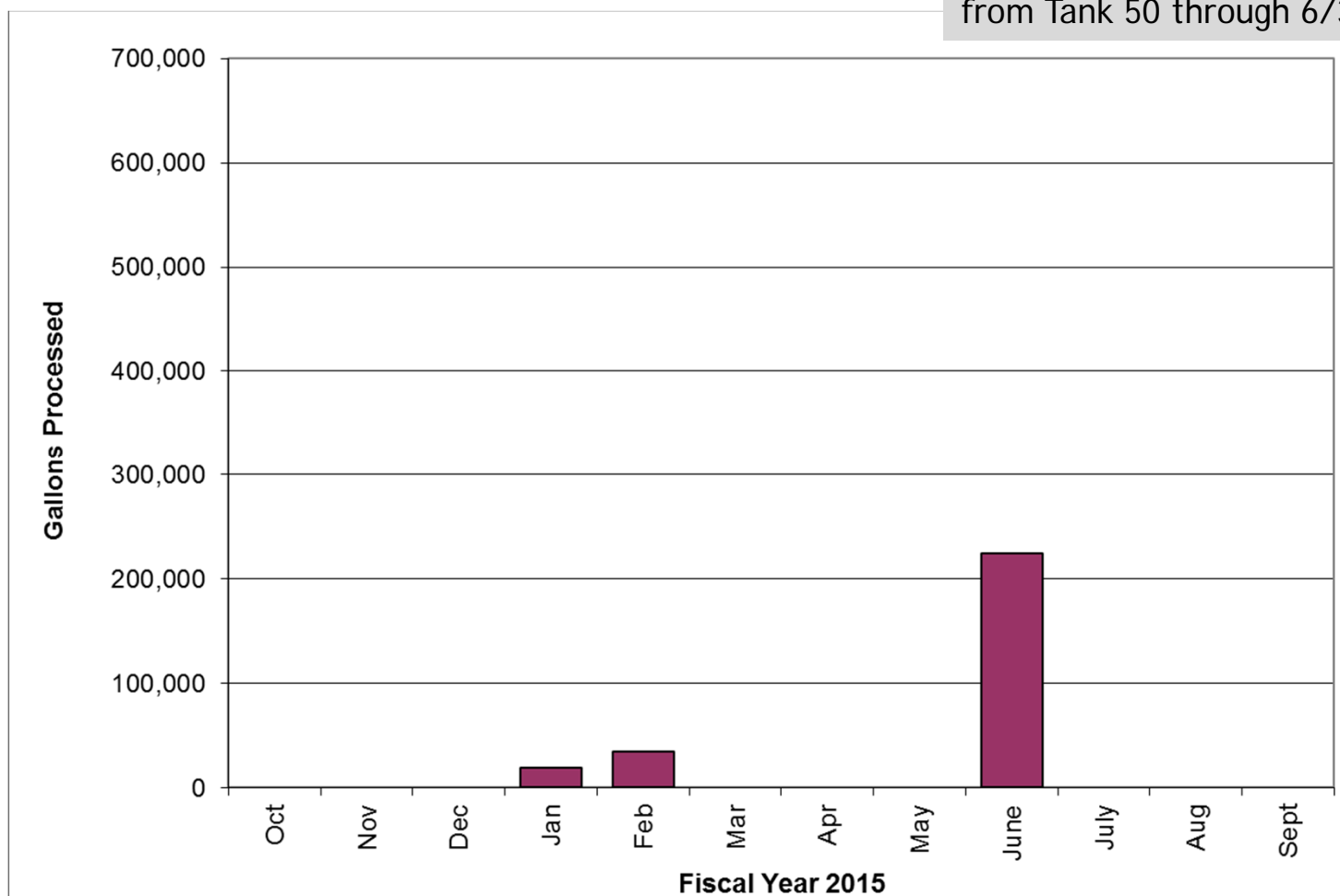
As of 6/30/2015

(SDU)-Saltstone Disposal Unit

Operational Status: SPF Operations FY2015

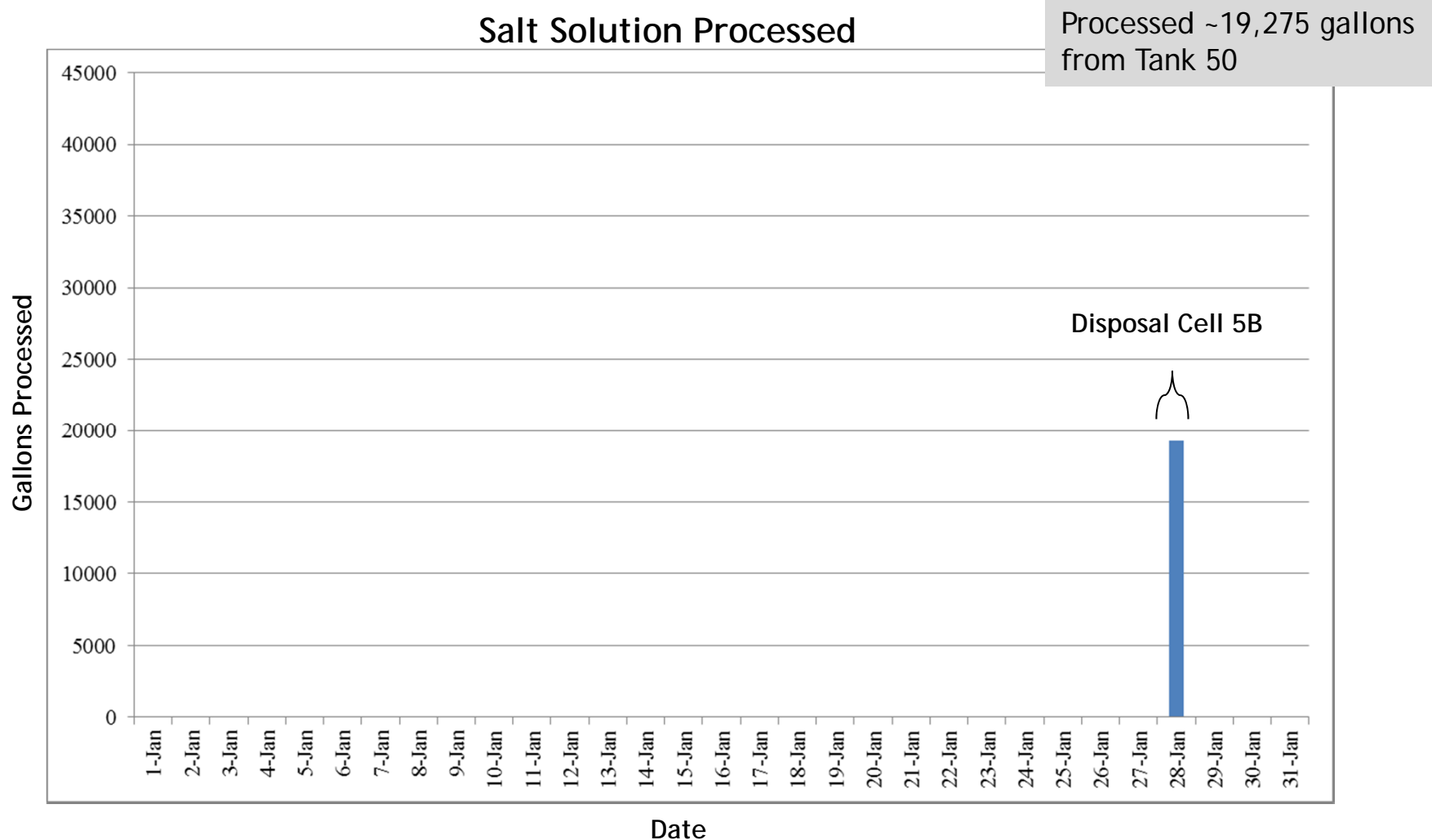
Salt Solution Processed

Processed ~278,098 gallons
from Tank 50 through 6/30/2015



Operational Status: SPF Operations 1/2015

We do the right thing.

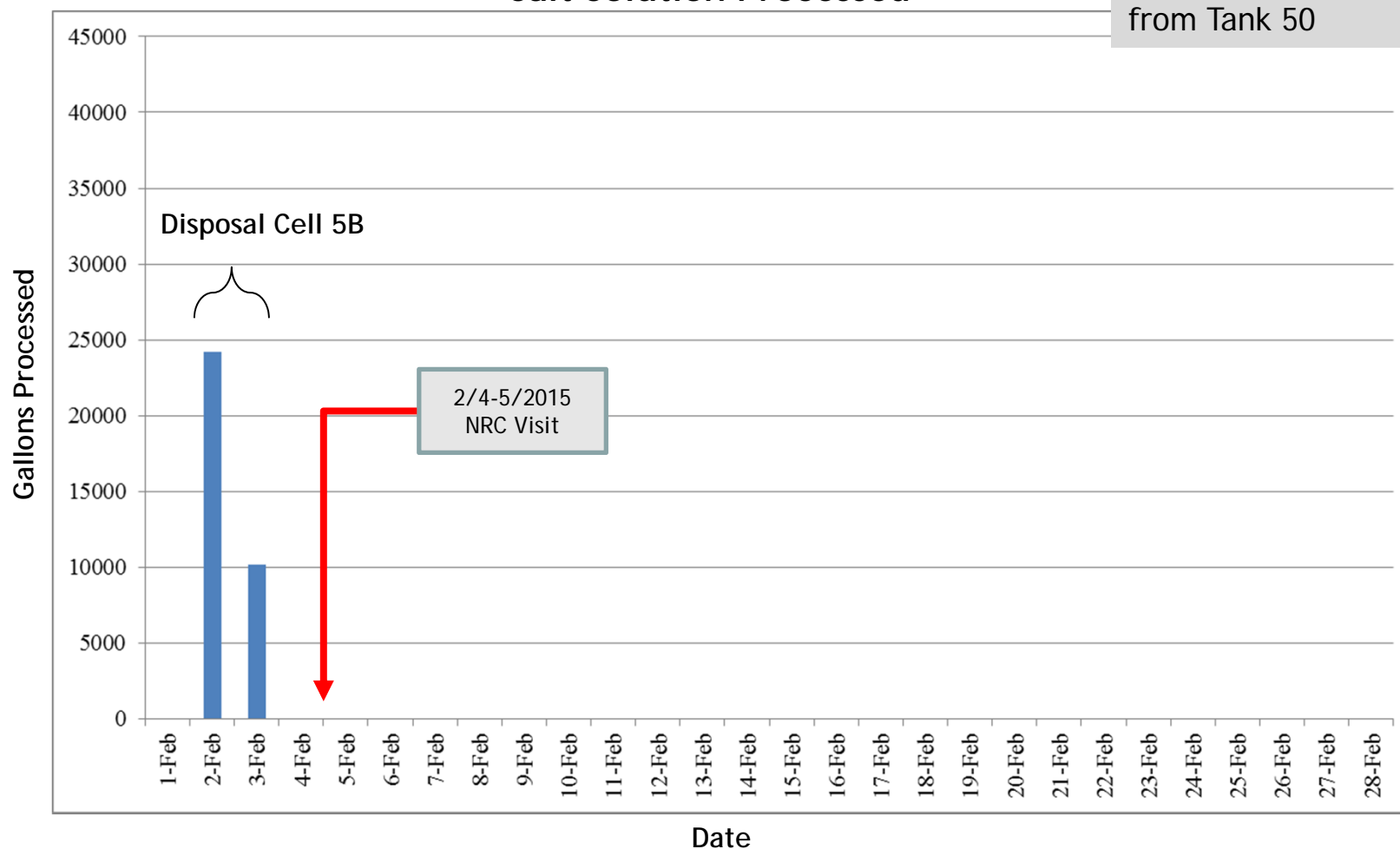


Operational Status: SPF Operations 2/2015

We do the right thing.

Salt Solution Processed

Processed ~34,659 gallons
from Tank 50

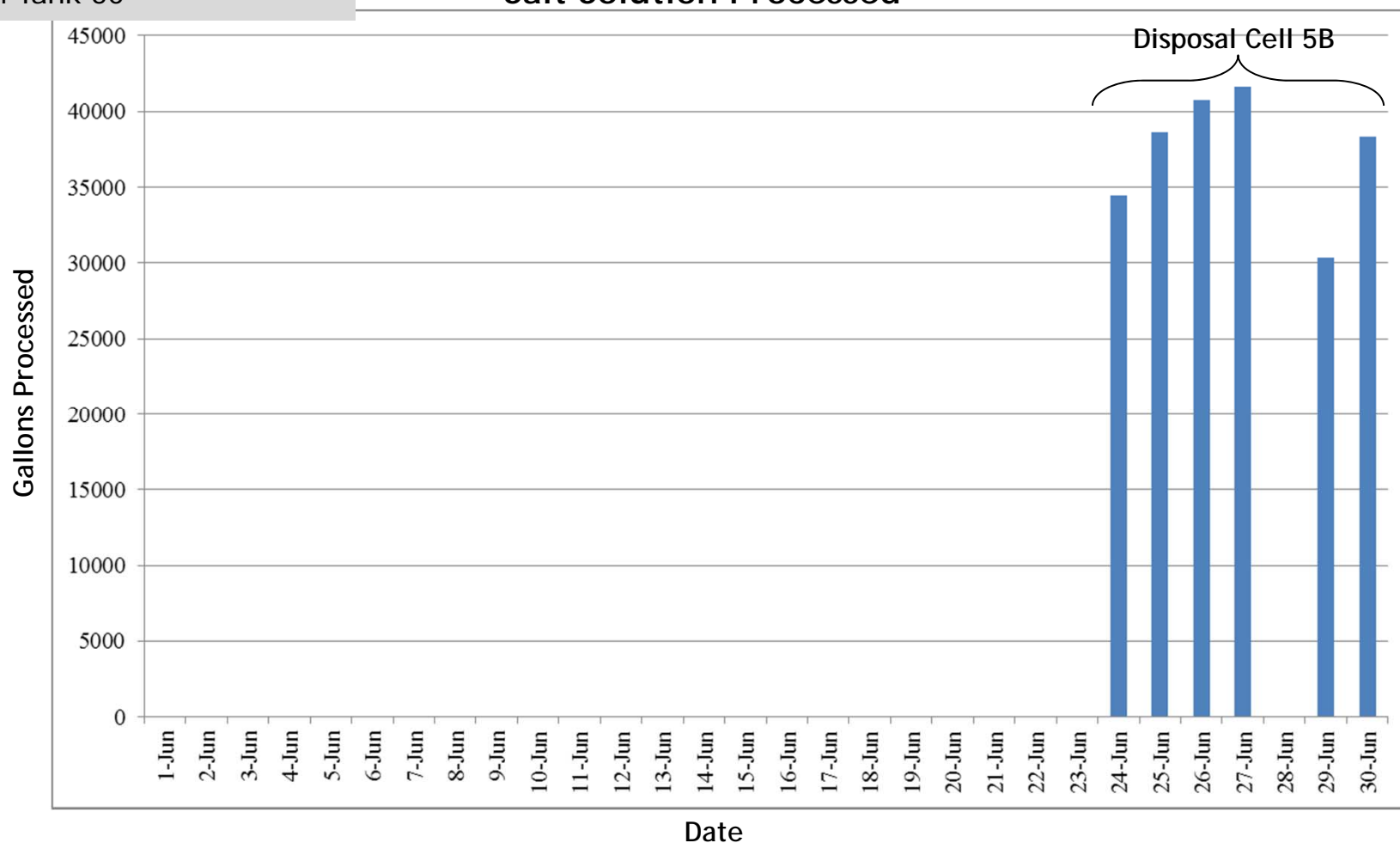


Operational Status: SPF Operations 6/2015

We do the right thing.

Processed ~224,164 gallons
from Tank 50

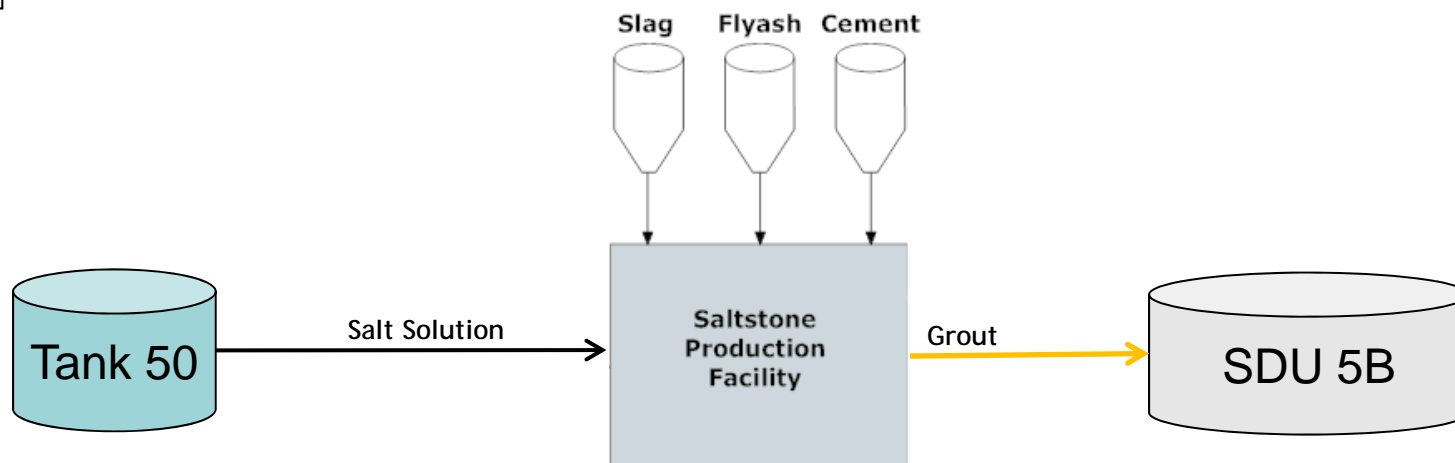
Salt Solution Processed



Operational Status: Current SPF Operations

We do the right thing.

As of 6/30/2015



FY2015 Processing

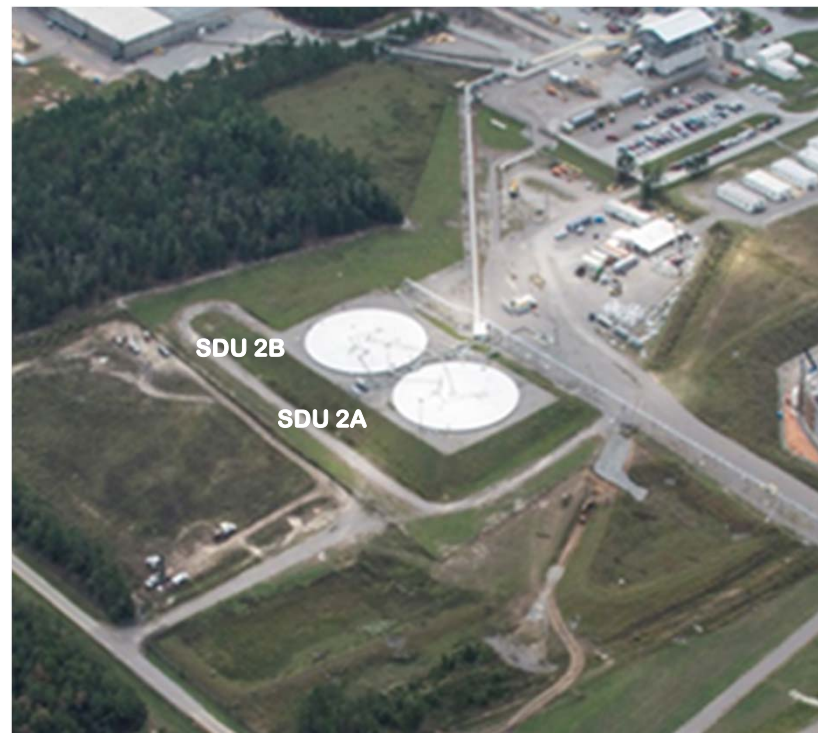
- Processing restarted 6/24/2015
- ~690,000 gallons of salt solution currently available for processing
- ARP/MCU processing Salt Batch 8

Current Level = ~13.25 feet
(space available for ~760,000
gallons of grout)*

* - Beginning with the 6/24/2015 restart, the fill height for SDU 3 & 5 is currently limited to a height of 19 feet (previously 21.5 feet) pending further evaluation of potential impacts of mercury concentrations versus Documented Safety Analysis assumptions.

SDU 2 Status

- Cells 2A and 2B filled with grout in FY2014
 - ~2.6 million gallons of grout per cell
 - ~21.25 feet of grout per cell



SDU 3/5 Status

- Construction complete and ready for disposal operations
 - Cell 5B has received a total of ~960,000 gallons salt solution (~1.7 million gallons of grout)
 - Cells 3A, 3B & 5A have not received material
- Total remaining space for grout
 - ~8.3 million gallons @
2.5 million gallons per empty cell*

* - Beginning with the 6/24/2015 restart, the fill height for SDU 3 & 5 is currently limited to a height of 19 feet (previously 21.5 feet) pending further evaluation of potential impacts of mercury concentrations versus Documented Safety Analysis assumptions.



We do the right thing.

SDU 6 Status

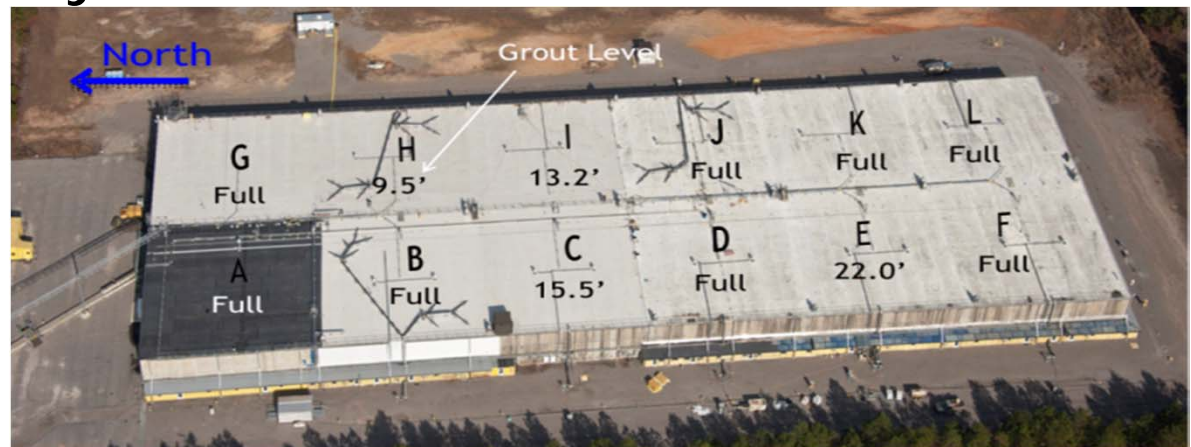
- The Lower Mud Mat, HDPE/GCL, Upper Mud Mat and floor are complete.
- 25 of 25 wall sections complete
- 208 of 208 column footers complete
- 208 of 208 columns complete
- 10 of 10 roof sections complete
- Installation of tension wires in-progress (289 miles total)
- Total Volume ~35 million gallons

HDPE - High Density Polyethylene
GCL - Geosynthetic Clay Liner



Vault 4 Stabilization

- DOE committed to Vault 4 Stabilization Plan
 - Eliminates rain infiltration
 - Reduces environmental risk
- Clean cap and roof coating of six south cells (D, E, F, J, K & L)
- North six cells already coated/sealed



Vault 4 Stabilization Status

We do the right thing.

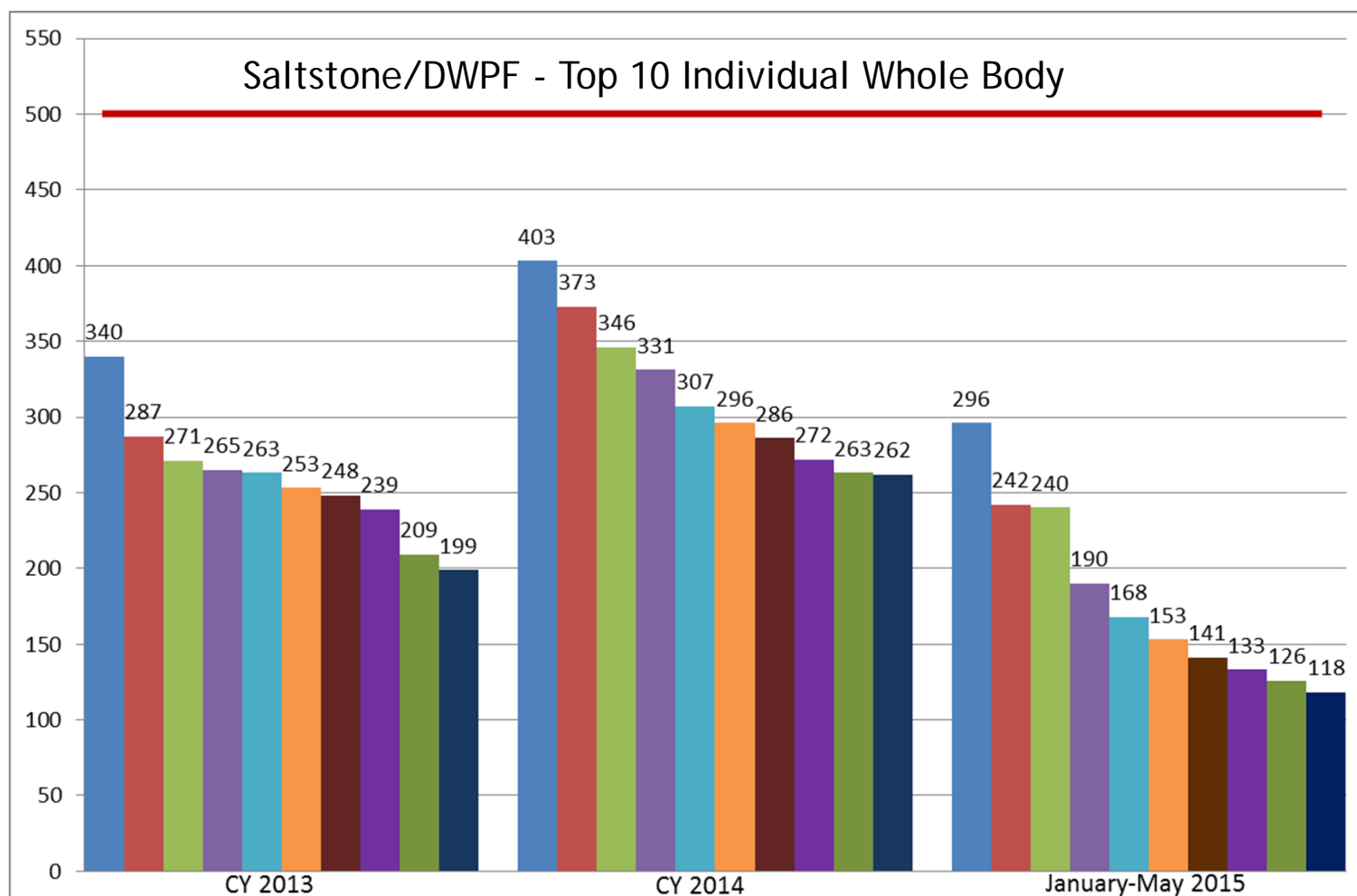
- **Clean cap, supplied via truck**
 - Grout mix is 45/45/10 with W/C ratio of 0.45
 - Lowers dose rates for installation of roof coating
 - Cells D, E, F, K, J and L complete
 - Additionally, clean cap poured in Cell H (April 2015)

- **Apply roof coating material**
 - Elastomeric roof coating
 - Same as previously used on the north cells of Vault 4
 - Cells D, E, F, K, J and L complete

- DOE and SRS Administrative Control Levels (ACLs) for whole body:
 - DOE annual limit - whole body 5,000 mrem/year
 - DOE ACL - whole body 2,000 mrem/year
 - SRS ACL - whole body 500 mrem/year
- No unexpected exposures
- No individual exposures above either regulatory limits or SRS ACLs

Radiological Exposure

We do the right thing.



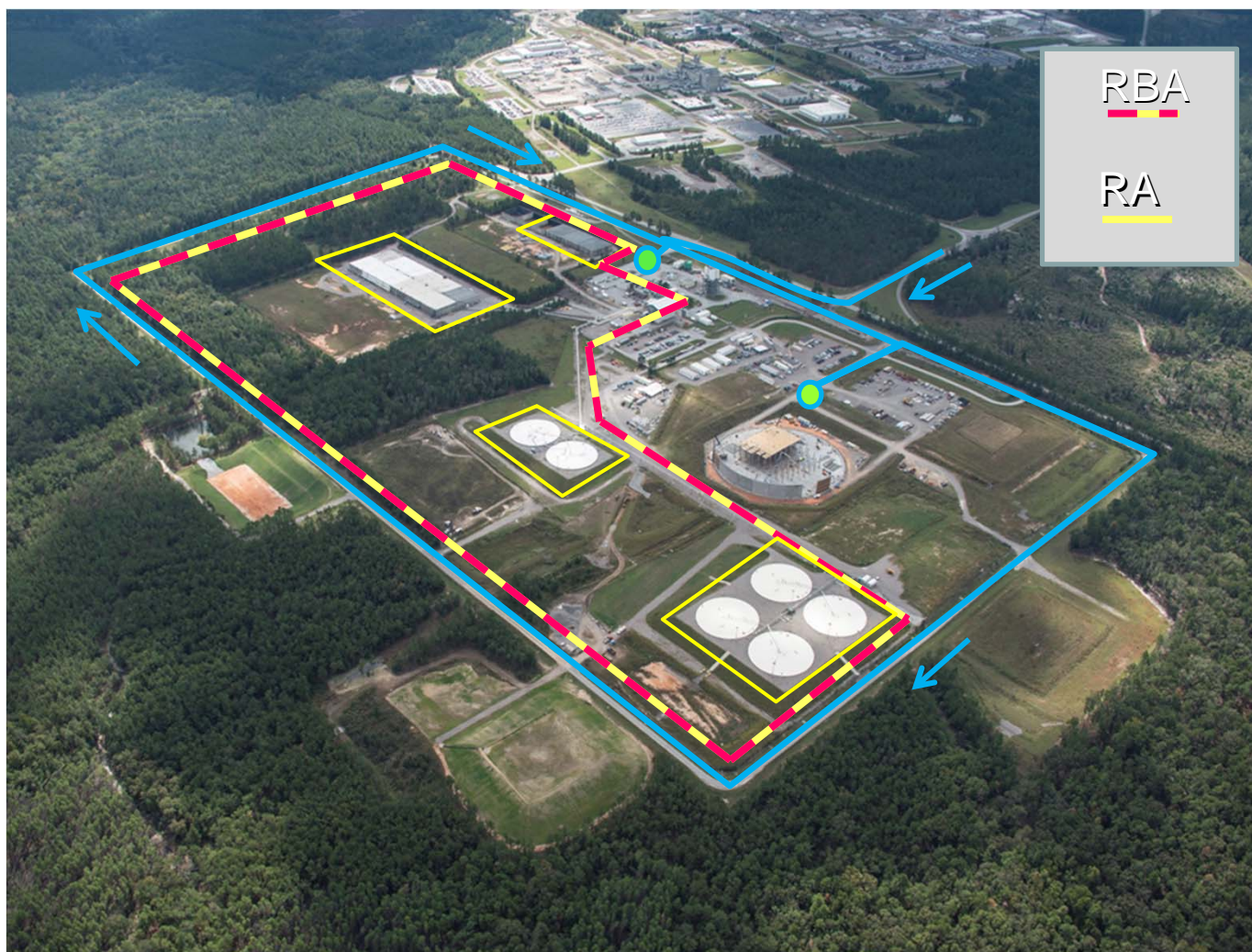
Note: Merged DWPF and Saltstone Staff in October 2013

Field Observation

- (4) - Tour the site, Saltstone Disposal Structure (SDS) 4, and construction of SDS 6
- (6) - If saltstone is being poured, then observe Saltstone Production Facility operations.
- (7) - View SDS 3A, SDS 3B, SDS 5A, and SDS 5B.
- (8) - View wells ZBG-2 through ZBG-8 and ZBG-2C

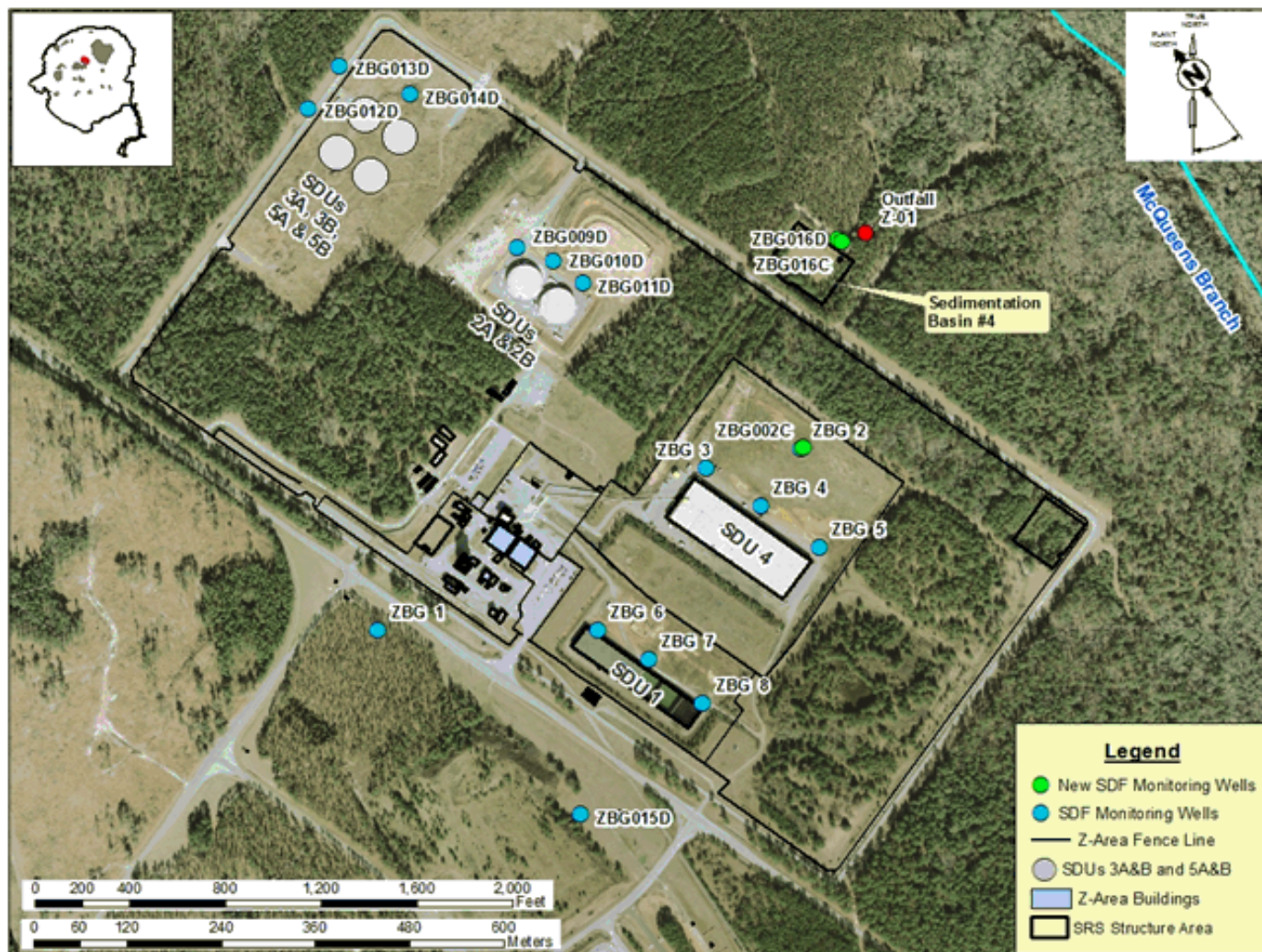
(#) - Activity number from
NRC Observation Guidance
[ML15148A388]

Saltstone Disposal Facility Field Observation



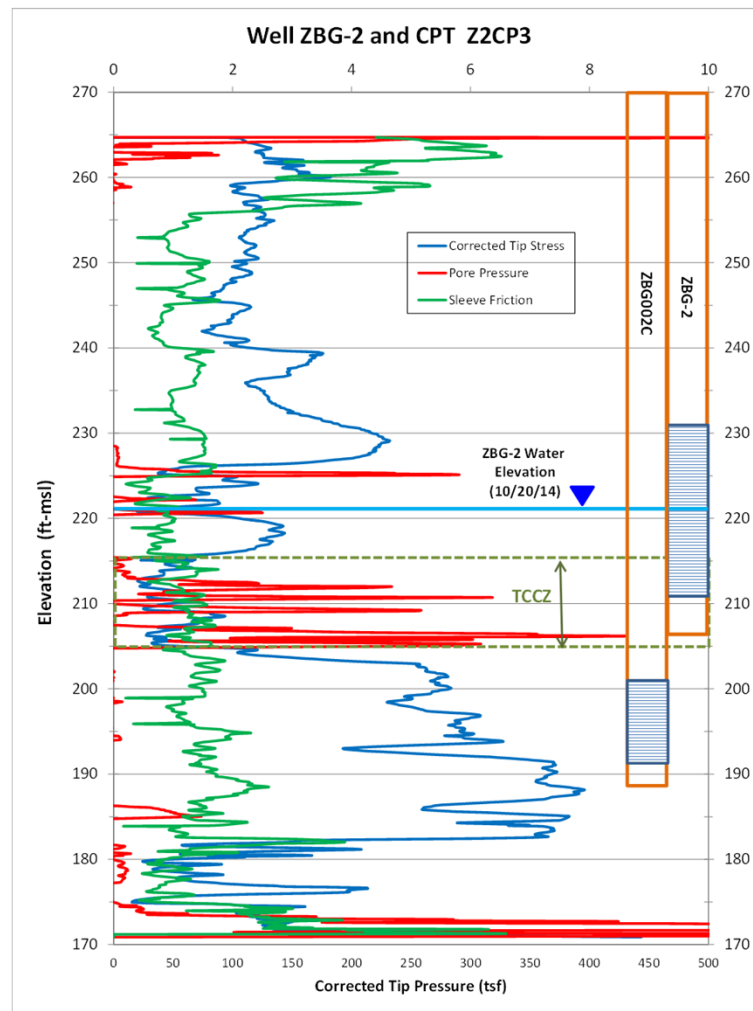
Groundwater Wells

We do the right thing.



Well ZBG-2

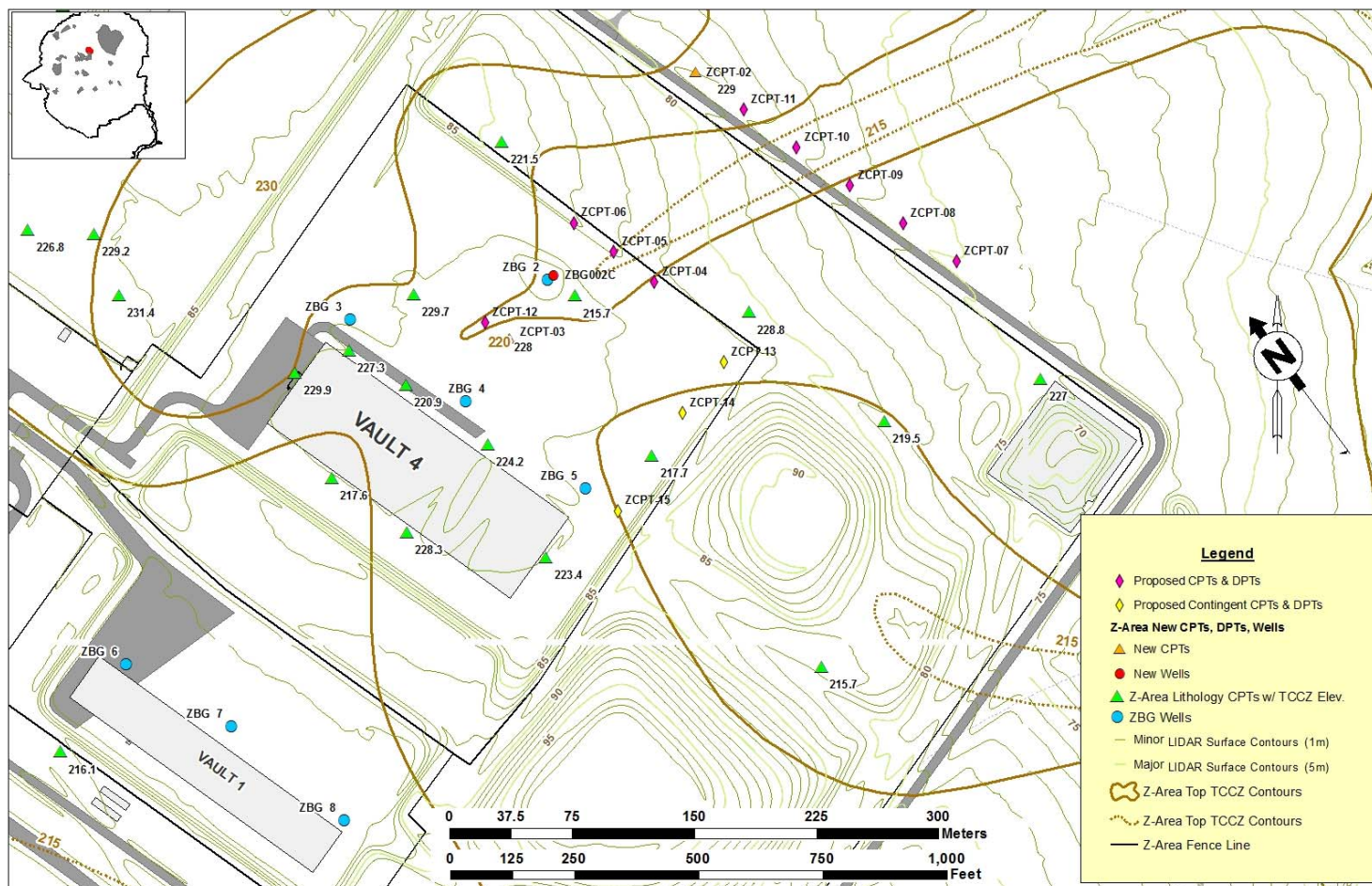
We do the right thing.



- In-Progress
 - New well ZBG002D being installed above the TCCZ

Proposed CPTs / DPTs

We do the right thing.



- **Planned**
 - Eight CPTs w/three additional contingent
 - Nine Complete to date
 - DPT samples near each CPT
 - Following completion of CPTs

SDU 4 / Wells ZBG-2 through ZBG-8 and ZBG-2C / SPF Operations



We do the right thing.

February 2015



March 2015



April 2015



May 2015



SDU 6 Wall to Roof Connection (Action Item #10h from 2/2015 OOV)

We do the right thing.



We do the right thing.



Wells ZBG-009D through ZBG-011D



Technical Discussions: 7/7/2015 (pm)

- (n/a) - Update status of Routine Documentation/Action Items
- (2) - Update on groundwater monitoring data
- (F2) - The DOE to provide NRC staff with additional groundwater data relative to:
 - Historical data on Z-Area wells
 - Water thickness of upper zone of the Upper Three Run Aquifer over time.
 - Additional well data related to changes in position of the water line between the lower and upper zones of Upper Three Runs Aquifer over time (including wells beyond Z-Area as applicable).
- (3) - Review recent research results developed since the previous OOV

(#) - Activity number from
NRC Observation Guidance
[ML15148A388]

Routine Document List

We do the right thing.

Status Since Last Visit

Topical Area	Document	Approximate Availability/Frequency
Groundwater	* SDF Annual Groundwater Report * SDF Midyear-Groundwater Report * SDF Performance Assessment Annual Review * SRS Annual Environmental Report	January July March September
Air Monitoring	* SRS Annual Environmental Report	September
Inventory	* SDF Performance Assessment Annual Review and Key Supporting Inventory References * Saltstone Permit Website Reporting Data (http://sro.srs.gov/saltstone.htm) * Salt Batch Qualification Reports# * Tank 50 WAC Sample Analysis	March Quarterly As-Issued Quarterly
Performance Assessment Maintenance	* SRS Liquid Waste Facilities Performance Assessment Maintenance Annual Implementation Plan * SDF Performance Assessment Annual Review (includes the following): -Inventory -Unreviewed Waste Management Question Evaluations Performed -Research and Development Performed -Research and Development Planned	March March
Research and Development Testing/Studies	Various Reports	As-issued (Typically, September through December)
Note: DOE anticipates providing NRC with Salt Batch Qualification Reports throughout the timeperiod during which DOE has imposed lower Tc-99 limits on the salt solution which can be processed at SPF.		

SRR-CWDA-2014-00101 (FY2014)
SRR-CWDA-2014-00124 (FY 2014 Inventory)

<http://sro.srs.gov/saltstone.html>

SRR-CWDA-2015-00002, FY2015 Saltstone Core-Drilling Mock-up Summary

SRR-CWDA-2015-00066, Summary of Saltstone Disposal Unit Cell 2A Core Drill Activities

- Documents noted in black text provided/available
- Red text indicates items not yet provided/added as Action Items

We do the right thing.

■ Action Items

1. DOE to provide NRC an electronic copy of presentation material including action items and attendance rosters. [SRR-CWDA-2015-00011, Revision 1] *-complete (ML15070A359)*
2. DOE to provide NRC a copy of the Salt Batch 8 qualification report, when available, and information on the timing of processing future batches including anticipated increase in Tc-99 concentration. *-complete (SRR-CWDA-2015-00035, ML15075A111)*
3. DOE to attach NRC research and development slides presented during the visit to Revision 1 of DOE presentation material. [SRR-CWDA-2015-00011] *-complete (ML15070A359 , slides 55-57)*
4. DOE to provide NRC a copy of the Savannah River National Laboratory report on saltstone simulant preparation. *-complete (SRR-CWDA-2015-00035, ML15075A111)*
5. DOE to provide NRC a table with Tank 50 sample quarterly report historical information. *-complete (SRR-CWDA-2015-00035, ML15075A111)*

We do the right thing.

■ Action Items

6. DOE to provide NRC a copy of the saltstone preparation (i.e., mixing) procedure(s). -complete (SRR-CWDA-2015-00035, ML15075A111)
7. DOE to provide NRC additional groundwater data relative to:
 - a. Historical data on Z-Area wells
 - i. Water thickness of UAZ over time
 - b. Additional well data related to changes in position of the water line between the lower and upper aquifers over time (including wells beyond Z-Area as applicable)
-Planned discussions 7/7/2015
8. DOE to provide NRC an updated revision of SRS-REG-2008-00025 if available. -complete (ML15131A404)
9. DOE to provide NRC additional documentation relative to iodine K_d values for concrete including: -complete (SRR-CWDA-2015-00035, ML15075A111)
 - a. European Study
 - b. F-Area iodine studies (soils)

We do the right thing.

■ Action Items

10. DOE to provide NRC additional photos of SDU-6 including:

- a. Photos contained in laminated handout utilized during SDU-6 tour
- b. Aerial photos
- c. Column rebar photos of the following
 - i. Column pedestal to floor
 - ii. Column to pedestal
 - iii. Column to roof
- d. Intersection of roof joints with waterstop
- e. Wall bearing pads
- f. Wall joints (waterstop, bearing pads)
- g. Tension wires
- h. Wall to roof connections

-10a-f complete, (SRR-CWDA-2015-00026, ML15121A400)

-10g, see slides 63-64 of this presentation

-10h, see slide 30 of this presentation

Activities Since February 2015 Visit

- A new well being installed to replace ZBG 2
 - ZBG002D (above TCCZ)
- Nine CPTs performed
 - DPT samples to follow
- Results of CPT/DPT work will be documented in the 2015 annual groundwater monitoring report
- 2015 midyear groundwater monitoring report to be issued to SCDHEC by 7/15/2015

CPT - Cone Penetrometer Test
DPT - Direct Push Technology
TCCZ- Tan Clay Confining Zone

■ Follow-On Activities

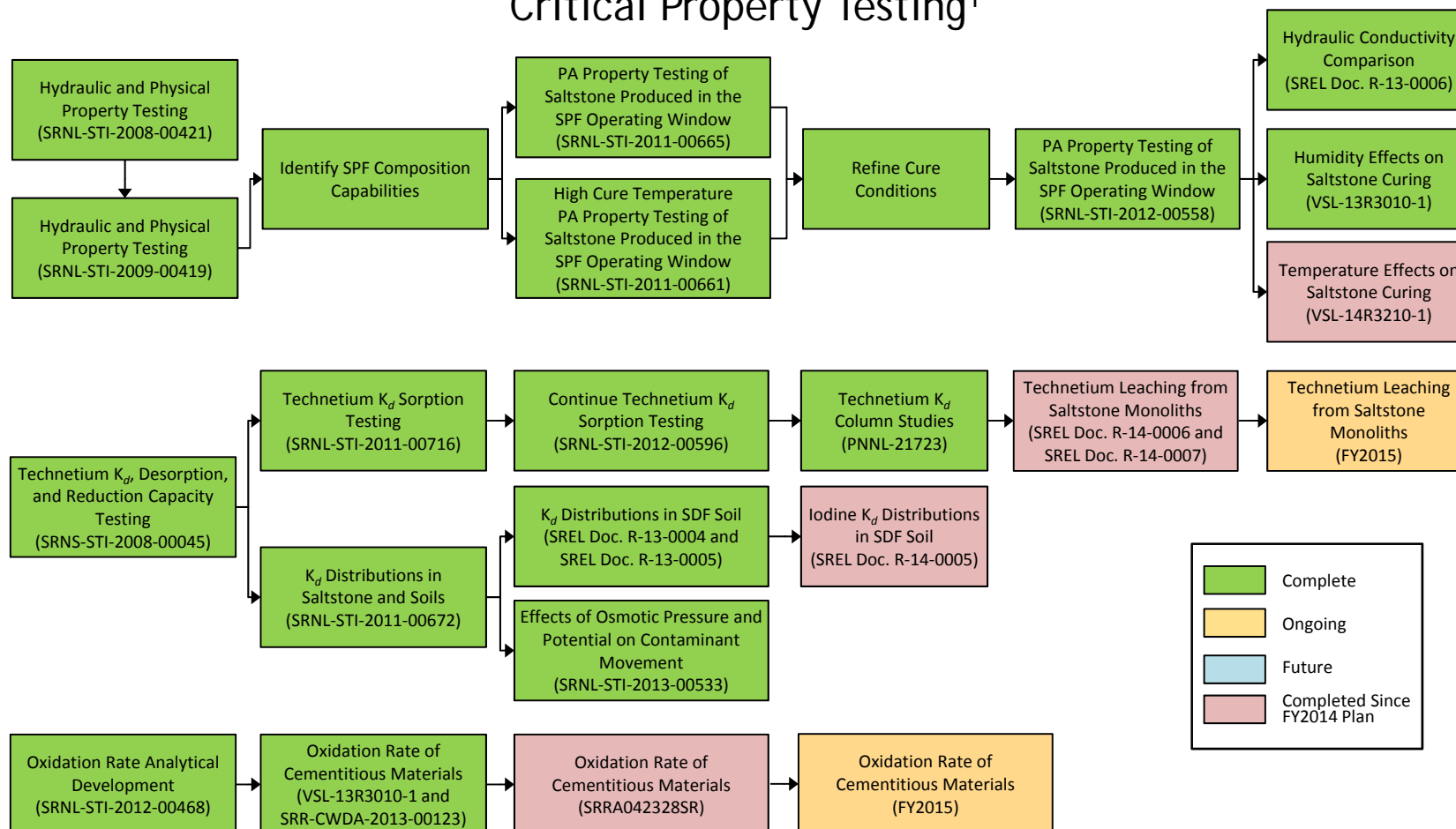
2. The DOE to provide NRC staff with additional groundwater data relative to:
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[Onsite Observation Guidance for July 7-8, 2015, Monitoring Visit to the Savannah River Site, Saltstone Disposal Facility (Docket No. PROJ0734), ML15148A388.]

- *Savannah River Site Liquid Waste Facilities
Performance Assessment Maintenance Program
FY2015 Implementation Plan*
[SRR-CWDA-2014-00108, Rev. 0]
 - Provided to NRC January, 2015

Critical Property Testing

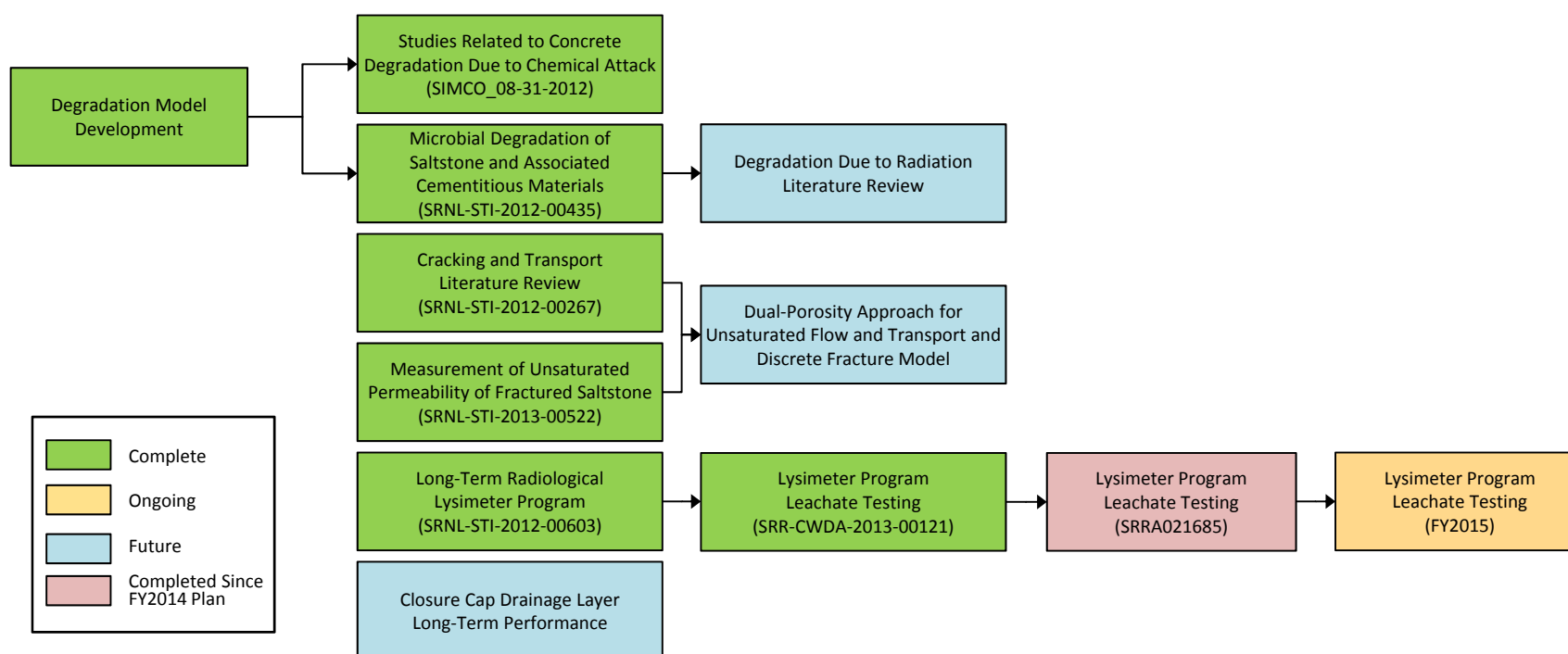
Critical Property Testing¹



¹ Figure 2.3-2 from SRR-CWDA-2014-00108

Degradation Studies

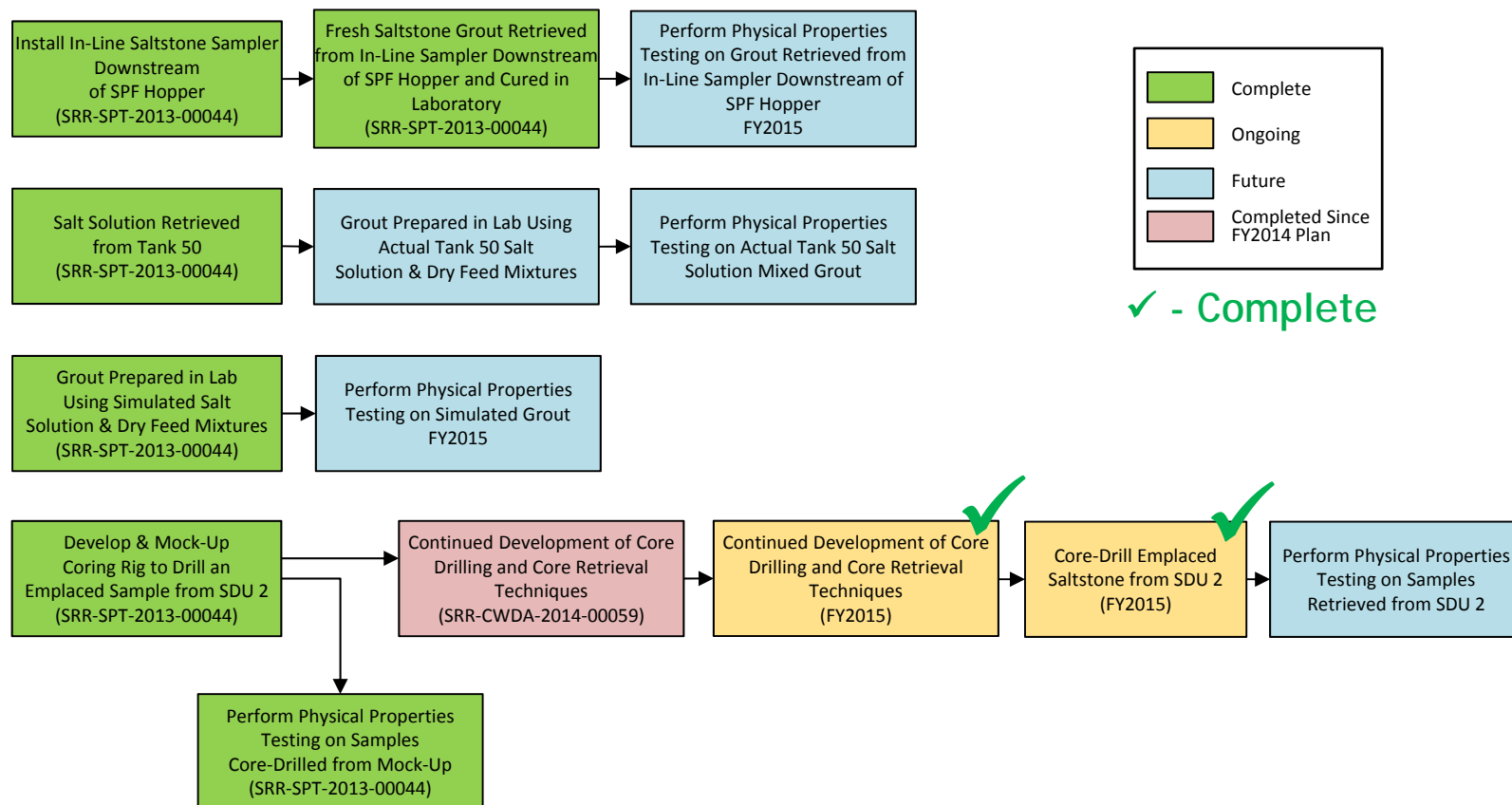
Degradation Studies¹



¹ Figure 2.3-3 from SRR-CWDA-2014-00108

Emplaced Sampling

Emplaced Saltstone Testing Strategy¹



¹ Figure 2.3-4 from SRR-CWDA-2014-00108

■ Status Update

- Presentation - *Saltstone Disposal Facility SDU Cell 2A Core Drill Summary*, SRR-CWDA-2015-00087
- Mock-up Summary Report- *FY2015 Saltstone Core-Drilling Mock-Up Summary*, SRR-CWDA-2015-00002
- SDU 2A Sampling Summary Report- *Summary of Saltstone Disposal Unit Cell 2A Core Drill Activities*, SRR-CWDA-2015-00066

- Update on NRC research activities
 - Saltstone waste release experiments
 - Saltstone cracking
 - Acoustic emission

NRC Daily Outbrief

- NRC Staff Outbrief
- Action Items captured

Agenda: 7/8/2015

We do the right thing.

NRC Salt Waste Disposal Onsite Observation			
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3:45	4:00	Travel/NRC Depart	703-46A

(#) - Activity number from
NRC Observation Guidance
[ML15148A388]

Technical Discussions: 7/8/2015

- (1) - NRC to answer any DOE questions about the NRC Request for Additional Information Questions for the DOE "Fiscal Year 2014 Special Analysis for Saltstone Disposal Facility at the Savannah River Site" (SRR-CWDA-2014-00006, Rev. 2).
- (9) - Discuss GoldSim modeling for the DOE "Fiscal Year 2014 Special Analysis for the Saltstone disposal Facility at the Savannah River Site" (SRR-CWDA-2014-00006, Rev. 2)

(#) - Activity number from
NRC Observation Guidance
[ML15148A388]

- *FY2014 Special Analysis for the Saltstone Disposal Facility at the Savannah River Site [SRR-CWDA-2014-00006, Rev. 2]*
 - Provided to NRC November, 2014
- *Comment Response Matrix for U. S. Nuclear Regulatory Commission Staff Request for Additional Information on the Fiscal Year 2013 Special Analysis for the Saltstone Disposal Facility at the Savannah River Site [SRR-CWDA-2014-00099, Rev. 1]*
 - Provided to NRC January, 2015
- *U. S. Nuclear Regulatory Commission Staff Request for Additional Information on the "Fiscal Year 2014 Special Analysis for the Saltstone Disposal Facility at the Savannah River Site," SRR-CWDA-2014-0006, Revision 2 [ML15161A541]*
 - Provided to DOE June, 2015

- *Technical Review: Oxidation of Reducing Cementitious Waste Forms, Docket No. PROJ0734 [ML15098A031]*
 - June, 2015

NRC Observation Visit Outbrief

- NRC Staff Outbrief
- Action Items Captured
- Closing Statements

We do the right thing.

■ Action Items

1. DOE to provide NRC an electronic copy of presentation material including action items and attendance rosters. [SRR-CWDA-2015-00086, Revision 1] **(Complete)**
2. DOE to provide NRC the 2015 midyear groundwater monitoring report when available.
3. DOE to provide NRC an electronic copy of *FY2015 Saltstone Core-Drilling Mock-up Summary*, SRR-CWDA-2015-00002
4. DOE to provide NRC an electronic copy of *Saltstone Disposal Facility SDU Cell 2A Core Drill Summary*, SRR-CWDA-2015-00087
5. DOE to provide NRC an electronic copy of *Summary of Saltstone Disposal Unit Cell 2A Core Drill Activities*, SRR-CWDA-2015-00066
6. DOE to provide NRC an electronic copy of *Determination of SDF Inventories through 9/30/2014*, SRR-CWDA-2014-00124

We do the right thing.

■ Action Items

7. DOE to provide NRC information on water tank (Syracuse) used as model for SDU 6.
8. DOE to provide NRC SDU 5B inventory through 6/30/2015.
9. DOE to provide NRC an electronic copy of photographs from SDF/SPF tour on 7/7/2015. **(Complete: Slides 56-62)**
10. DOE to provide NRC a listing of existing papers relative to technetium reduction/solubility.
11. DOE to provide NRC an electronic copy of *SDU 2A Core Sample Test Designation*, SRNL-L3100-2015-00108.
12. DOE to provide NRC information on SDU 3 and SDU 5 fill height restrictions related to resolution of mercury PISA.

We do the right thing.

■ Action Items

- 13. DOE to provide NRC information available on production well (SDU 6) depth and potential impact on surface settlement.
(Complete: slides 65-66)
- 14. DOE to Provide NRC documentation on how locations along the 100-meter boundary were determined for the GoldSim model.
- 15. DOE to provide NRC documentation on how to set up computer for a GoldSim run.

Attendance Sheets

NRC Salt Waste Disposal Monitoring Visit
July 7, 2015

Inbrief/Operation Status/SDF Tour/Technical Discussions

Name	Affiliation	Phone
Larry Rannow	SRR	
Kent Rosenberger	SRR	
Linda Sutton	DOE HQ	
Steve Thomas	SRR	
Sherri R. Ross	DOE-SR	
George Alexander	NRC	
Karen Pinkston	NRC	
A. Christianne Ridge	NRC	
Terrence C. Brimfield	NRC	
HARRY FELSHER	NRC	
Dan Ferguson	DOE-SA	
Hans Arlt	US NRC	
Steve Hommel	SRR	
Jerry Mangold	SRR	
OWEN STEVENS	SRR	
ROGER SCHWEITZER	SC DHEC-Hydro.	
Tom Kaufert	SC DHEC-SWGW	
Andrea Skinner	SC DHEC	
Justin Koon	SC DHEC	
Armanda Watson	DOE-SR	
Scott Simons	SC DHEC	
STEVEN	SRR	

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NRC Salt Waste Disposal Monitoring Visit
July 8, 2015

Technical Discussions/Outbrief

Name	Affiliation	Phone
Larry Rannow	SRR	
Steve Thomas	SRR-WDA	
Kent Rosenberger	SRR	
Sherri R. Ross	DOE-SR	
George Alexander	NRC	
Karen Pinkston	NRC	
A. Christianne Ridge	NRC	
Terrence C. Brimfield	NRC	
HARRY FELSHER	NRC	
Dan Ferguson	DOE-SA	
Hans Arlt	U.S. NRC	
Steve Hommel	SRR	
Jerry Mangold	SRR	
Tim Goffield	SRR	
Andrea Skinner	SC DHEC	
Jason Shirley	SC DHEC	
Alan Rosa	SC DHEC	
DAVID WATKINS	SRR	
Linda Sutton	DOE-HQ	

Page 1 of 1

We do the right thing.

SDU 4

Letters/directional
arrows represent
approximate location
and direction of
photos on slides 57-62



Saltstone Disposal Facility Field Observation Photos (Action Item #9)

We do the right thing.



A

SDU 4



B

See slide 56 for approximate
location/orientation of photographs

Saltstone Disposal Facility Field Observation Photos (Action Item #9)

SDU 4

C →



See slide 56 for approximate
location/orientation of photographs

Saltstone Disposal Facility Field Observation Photos (Action Item #9)

We do the right thing.



D

SDU 4

See slide 56 for approximate
location/orientation of photographs

E



Saltstone Disposal Facility Field Observation Photos (Action Item #9)

We do the right thing.



← F

SDU 4



G →

See slide 56 for approximate
location/orientation of photographs

Saltstone Disposal Facility Field Observation Photos (Action Item #9)

We do the right thing.



H

SDU 4



See slide 56 for approximate
location/orientation of photographs

I

Saltstone Disposal Facility Field Observation Photos (Action Item #9)

We do the right thing.



J

SDU 4



K

See slide 56 for approximate
location/orientation of photographs

Saltstone Disposal Facility Field Observation Photos (Action Item #9)

We do the right thing.



← Monitoring
Well ZBG 4

Monitoring
Well ZBG 5 →



← Example CPT Location

SDU 6 Tension Wires (Action Item #10g from 2/2015 OOV)



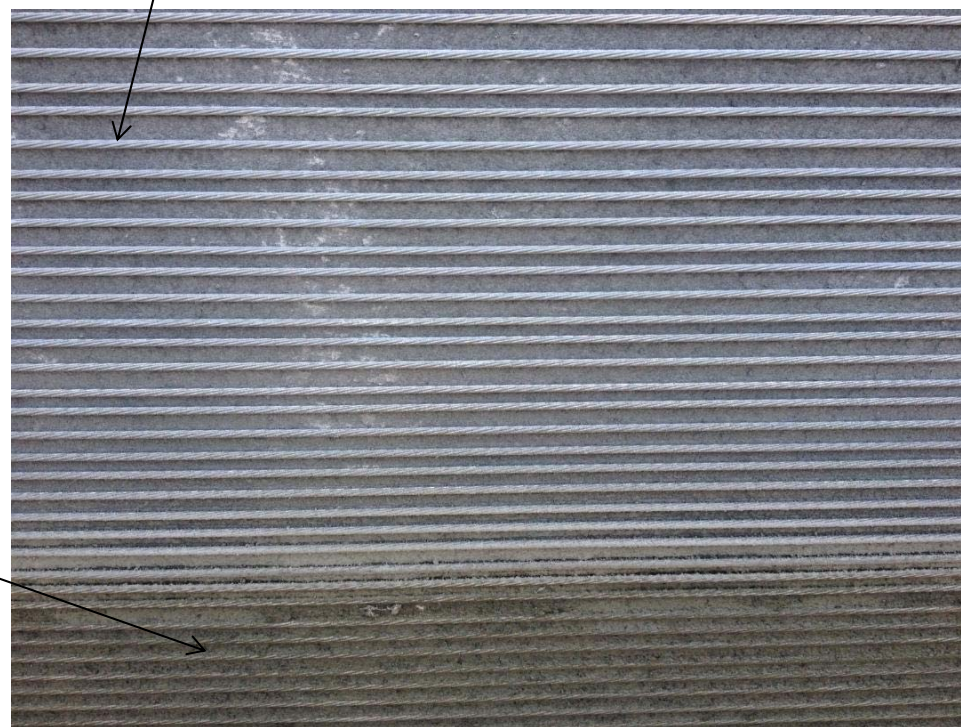
Tension Wires Being Applied

SDU 6 Tension Wires (Action Item #10g from 2/2015 OOV)

We do the right thing.



Tension Wires

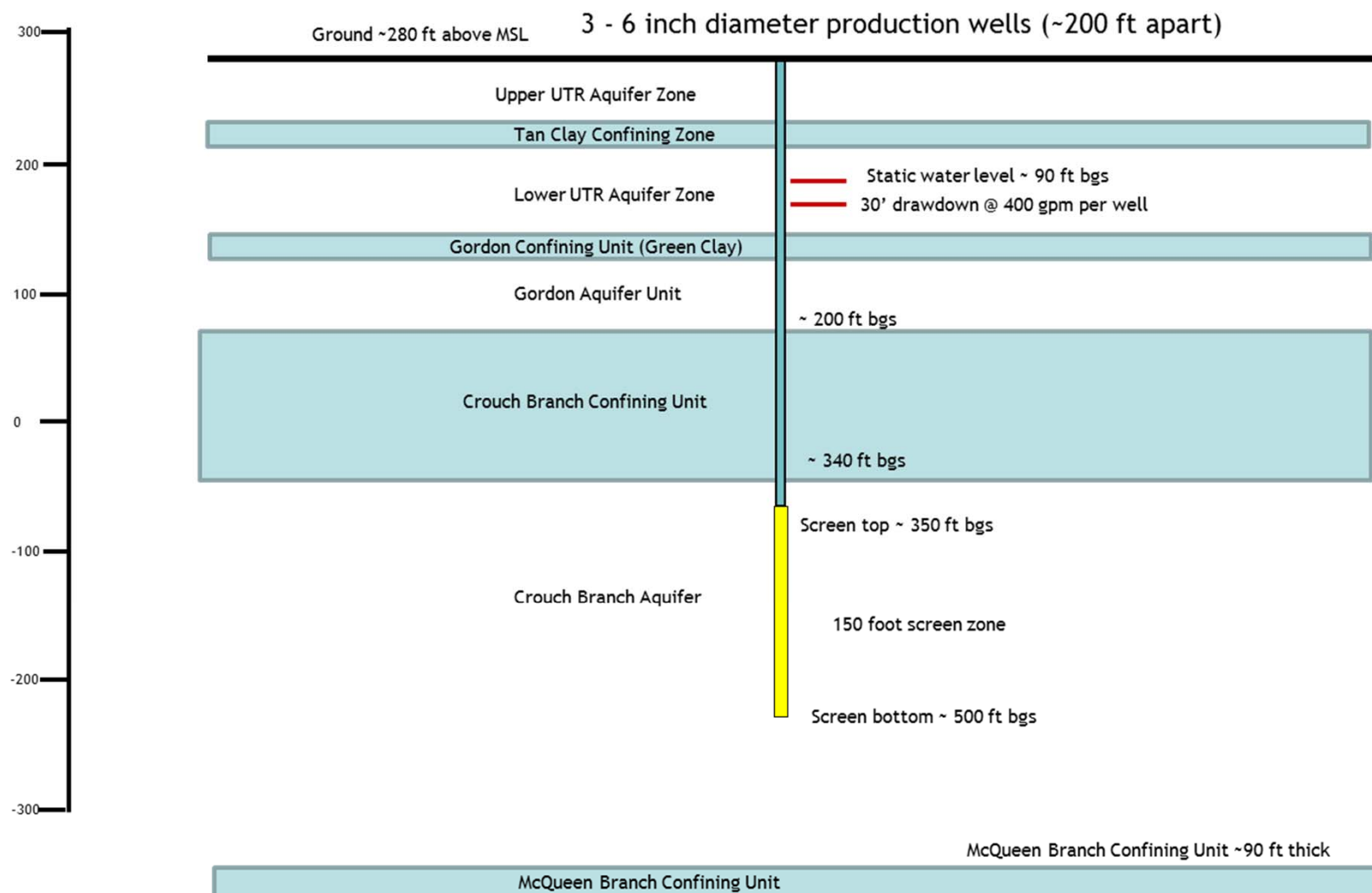


Shotcrete Layer Over Cables -
Application In-progress

SDU 6 Production Well Details

(Action Item #13)

We do the right thing.



SDU 6 Production Well Details

(Action Item #13)

We do the right thing.

- Six inch diameter well (three total)
- 150 foot long stainless steel screen
- Installed in the Crouch Branch Aquifer
- Overlain by the Crouch Branch Confining Unit (~150 feet thick)
- 350 to 500 feet below ground surface (-70 to -220 feet MSL)
- Static water approximately 92 feet below ground surface
- Pump installed above screen interval
- At least 160 to 170 feet of water above pump
- When pumping to meet required 1,000 gpm, immediate drawdown approximately 30 feet, then stable
- Wells recover quickly when pumps turned off



Savannah River Remediation

AECOM | BECHTEL | CH2M | B&W | AREVA

Notes

We do the right thing.



Savannah River Remediation

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Notes

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