

Work Order Number:
01704000



**Title: MONITORING OF CLOSED WASTE TANKS FOR HTF
AND FTF**

Task #'s

01



APPROVED

MSR's: N/A

Work Group #: ENG

CLI #: ----

Functional Class:

Planner: TUTTLE, JEFF LAMONT

Comment

Facility: FTF F-TANK FARM
Unit : Project No.:
W/O Type: PM Priority: 3B W/O Dspln : A
WO Planner : W6083 TUTTLE J
Task Planner : W6083 TUTTLE J
W/O Title : MONITORING OF CLOSED WASTE TANKS FOR
HTF AND FTF
W/O Task Title: MONITORING OF CLOSED WASTE TANKS FOR
HTF AND FTF
Written To : MONITORING OF CLOSED WASTE TANKS

WO / Task Barcode:



Work Order Package FTF

01704000 01

Date: 03/26/19 Pg: 1



ASSET SUITE

Safety
Class

Work Order Task Written To

Job Type : OT User defined:
Facility : FTF Area : Unit : Sys :
Equipment : Component:
Work Item : MONITOR CLOSED TANK UTC :
Equip. Tag: Eqt. List:
Location :
Client/Act:
UTC Eqpt Type: UTC Sub Type/Desc:
CLI :
Maint PGMS: :
: :
:

Work Order Task Instructions

Identify conditions that would lead to loss of integrity or long-term structural strength of the closed tank (as assumed in the performance assessment) that would compromise stabilization and containment of the residual waste (See attached checklist).

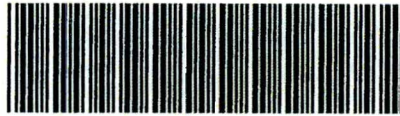
This inspection is performed by the RM&A and WDA groups and is required per the requirements of FTF / HTF General Closure Plans (LWO-RIP-2009-00009 and SRR-CWDA-2011-00022).

The point of contact is Kent Rosenberger, 557-9328, Building 705-1C.
AHA is not required for this work

Crew #(s):

Facility: FTF F-TANK FARM
 Unit : Project No.:
 W/O Type: PM Priority: 3B W/O Dspln : A
 WO Planner : W6083 TUTTLE J
 Task Planner : W6083 TUTTLE J
 W/O Title : MONITORING OF CLOSED WASTE TANKS FOR
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 HTF AND FTF
 Written To : MONITORING OF CLOSED WASTE TANKS

WO / Task Barcode:



Work Order Package FTF

01704000 01

Date: 03/26/19 Pg: 2



ASSET SUITE

Safety
Class

Nuclear Information

RWP Required : Q Group : NCR :
 TS/SLC Related : N Tech Spec Action:
 LCO : Tech Spec Date :

Rework/Approval

Deficiency Tag No. : Loc: Tag Removed:
 ReWork Job : N Comments:

QC Requirements/Comments

none

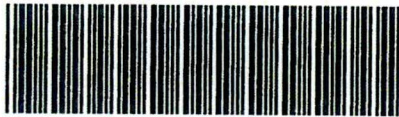
References/Document Information (M102/M104)

Type/Subtyp: WI	Number : 1704000-01	Sheet :
Title/Desc : TWD		Image: N
Type/Subtyp: DOC	Number : INSP COVER SHEET & CHECKLIST	Sheet :
Title/Desc : INSPECTION COVER SHEET & CHECKLIST		Image: N
Type/Subtyp: DOC	Number : SRR-CSDA-2017-00015	Sheet :
Title/Desc : GENERAL CLOSURE PLAN FOR FTF		Image: N
Type/Subtyp: DOC	Number : ORIGINAL CLOSED TANK INSP. DOC	Sheet :
Title/Desc : ORIGINAL CLOSED TANK INSPECTION DOCUMENTS & FORMS		Image: N

Print Report - Work Order Record Documents (M102/M104)

Facility	Type/Subtyp	Document	Number
FTF	DOC	INSP COVER SHEET & CHECKLIST	
		INSPECTION COVER SHEET & CHECKLIST	

Facility: FTF F-TANK FARM
 Unit : Project No.:
 W/O Type: PM Priority: 3B W/O Dspln : A
 WO Planner : W6083 TUTTLE J
 Task Planner : W6083 TUTTLE J
 W/O Title : MONITORING OF CLOSED WASTE TANKS FOR HTF AND FTF
 W/O Task Title: MONITORING OF CLOSED WASTE TANKS FOR HTF AND FTF
 Written To : MONITORING OF CLOSED WASTE TANKS

WO / Task Barcode: 

Work Order Package FTF
 01704000 01
 Date: 03/26/19 Pg: 3
 Power and productivity for a better world™
ASSET SUITE
 Safety Class

FTF WI 1704000-01
TWD

Documents added to work package in field:

Check box if added document is to be retained as part of Work Pkg record

<u>Closed Waste Tank</u>	<input checked="" type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>
<u>Inspection Checklist</u>	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>
<u>for Tans 5, 6, 12, 16, 17, 18, 19 and 20.</u>	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>

Trouble Found/Work Performed

PM Completion Readings: _____ Miles _____ Hours

Continued on Additional Sheets? : _____

Equipment History Brief Attributes

Brief ID #	Attribute Name	Value	UOM	Type
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Asset Suite Information

Date Created	03/21/2019
Planner Name	Tuttle, Jeff
Planner Telephone	208-8725
Equipment Name	MONITORING OF CLOSED WASTE TANKS
Facility	FTF & HTF
CLI Number	
Functional Class	

1.0 Scope of Work:

Identify conditions that would lead to loss of integrity or long-term structural strength of the closed waste tank (as assumed in the applicable performance assessment) that would compromise stabilization and containment of the residual waste.

NOTE: It is recognized that tank tops are covered by earth, asphalt and/or concrete. The grade level surface of the tank top area is required to be inspected. Excavations to the actual tank tops are not intended.

AHA Number: N/A		Drawing: SRR-CSDA-2017-00015			
Pre-Job Briefing Checklist: OSR 39-31		Permit/OSR: SC1-890-008 898			
DCF / DCP: N/A		MSR: N/A			
SRWP	N/A	OR	Job Specific RWP	N/A	Procedure: N/A
P-Code: N/A		ASME B31.3:		Yes	X No
Fluid Service Category: N/A					
Additional Support Documents/Attachments:					
Support Document					
- Closed Waste Tank Annual Inspection Checklist Cover Sheet & Check List					
Attachment A					
- Additional Information to Support the Closed Waste Tank Annual Inspection Checklist.					

2.0 Precautions and Limitations:

- 2.1. Workers shall perform Individual Hazard Analysis (IHA) for this task, which includes continual self-analysis of work scope, hazards and controls (reference Savannah River Site General Employee Basic Hazard Control Handbook).
- 2.2. A Time Out shall be initiated, FLM shall be notified and/or the work package returned to planning for problems or conditions encountered that are not anticipated or covered under the AHA or associated permits, or the boundaries/scope of work change as the job progresses.

3.0 Prerequisites:

3.1. WDA: **ENSURE** a pre-job brief has been performed.

3.1. WDA: **NOTIFY** Shift Manager prior to performing work.

3.2. WDA: **NOTIFY** RPD prior to performing work.

3.3. WDA: **CHECK** below which waste tanks have been operationally closed and require an inspection:

- | | | | | | |
|--|--|-----------------------------|--|--|--|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input checked="" type="checkbox"/> 5 | <input checked="" type="checkbox"/> 6 |
| <input type="checkbox"/> 7 | <input type="checkbox"/> 8 | <input type="checkbox"/> 9 | <input type="checkbox"/> 10 | <input type="checkbox"/> 11 | <input checked="" type="checkbox"/> 12 |
| <input type="checkbox"/> 13 | <input type="checkbox"/> 14 | <input type="checkbox"/> 15 | <input checked="" type="checkbox"/> 16 | <input checked="" type="checkbox"/> 17 | <input checked="" type="checkbox"/> 18 |
| <input checked="" type="checkbox"/> 19 | <input checked="" type="checkbox"/> 20 | <input type="checkbox"/> 21 | <input type="checkbox"/> 22 | <input type="checkbox"/> 23 | <input type="checkbox"/> 24 |
| <input type="checkbox"/> 25 | <input type="checkbox"/> 26 | <input type="checkbox"/> 27 | <input type="checkbox"/> 28 | <input type="checkbox"/> 29 | <input type="checkbox"/> 30 |
| <input type="checkbox"/> 31 | <input type="checkbox"/> 32 | <input type="checkbox"/> 33 | <input type="checkbox"/> 34 | <input type="checkbox"/> 35 | <input type="checkbox"/> 36 |
| <input type="checkbox"/> 37 | <input type="checkbox"/> 38 | <input type="checkbox"/> 39 | <input type="checkbox"/> 40 | <input type="checkbox"/> 41 | <input type="checkbox"/> 42 |
| <input type="checkbox"/> 43 | <input type="checkbox"/> 44 | <input type="checkbox"/> 45 | <input type="checkbox"/> 46 | <input type="checkbox"/> 47 | <input type="checkbox"/> 48 |
| <input type="checkbox"/> 49 | <input type="checkbox"/> 50 | <input type="checkbox"/> 51 | | | |

3.4. WDA: **IF** an inspection was performed on a tank the previous year, **THEN**

RETRIEVE the closed waste tank annual inspection task document and associated photographs from the previous year, from the Liquid Waste Organization Document Library (LWO DL).

4.0 Task Performance:

Initials

NOTE 1: Steps 4.1 and 4.2 may be worked concurrently.

NOTE 2: For step 4.2, the Closed Waste Tank Annual Inspection Checklist Cover Sheet and Checklist are included in this set of work instructions and will be filled out separate from these work instructions.

4.1. WDA: **INSPECT** each closed waste tank as follows:

4.1.1. **PERFORM** a walk-down and visual inspection the tank top and surrounding area

BaM

4.1.2. **COMPARE** photographs from the previous year to the current condition of the tank top.

BaM

4.1.3. **ASSESS** the condition of previous findings.

BaM

4.1.4. **PHOTOGRAPH** the tank top and any unsatisfactory conditions, **AND**

IDENTIFY them to the appropriate condition on the Inspection Checklist in step 4.2

BaM

4.2. WDA: **COMPLETE** the Closed Waste Tank Annual Inspection Cover Sheet and Checklist.

BaM

5.0 Post Maintenance Testing & Return to Service:

Initials

NOTE: This inspection was visual only and does not require any PMT.

6.0 Post Work & Feedback:

6.1. WDA: **NOTIFY** Work Control that the Closed Waste Tank Annual Inspection task is complete, **AND**

RETURN the completed work package, Inspection Checklist Cover Sheet and Checklist to Work Control for closure.

Bam

6.2. WDA: **IF** feedback is required, **THEN**

ENTER any feedback including field revisions and recommendations for improvements for future work in Asset Suite History.

Bam

6.3. WDA: **ASSIGN** corrective actions for any unsatisfactory condition as detailed below:

6.3.1. **CREATE** a STAR action item

NA

6.3.2. **ENTER** the information and due date into the STAR database.

NA

6.3.3. **ATTACH** all necessary electronic files into the STAR record to ensure proper actions will be performed by the assignee (e.g. copy of the inspection checklist, Photographs, Request for Engineering Assistance (REA), Nonconformance Report (NCR), etc.).

NA

6.3.4. **INSERT** the STAR unique identifier in the appropriate location on the inspection checklist.

NA

6.3.5. **IF** the planned corrective action cannot be remediated within 30 days of findings, **THEN**

NOTIFY SCDHEC and EPA of the unsatisfactory conditions found.

NA

NOTE: Step 6.4 may be performed with guidance provided by the library help.

6.4. WDA: **ASSIGN** the completed (Closed Waste Tank Annual Inspection Cover Sheet and Checklist(s)) a single LWO DL document number, **AND**

SELECT "C&WDA" for the "Organization" field with the inspection year as the first characters in the "Title" field.

Bam

6.5. WDA: **RETAIN** the completed Closed Waste Tank Annual Inspection Checklist Cover Sheet and Checklist(s) as a Tank Farm Area Specific document per procedure S4-ADM.55 (Tank Closure Wallet (TCW) Documentation Process).

Bam

Section 6.0 continued:

Initials

6.6. WDA: **ENTER** work history data into WMS considering:

- Details of the work performed
- Special equipment and tools used
- Procedures or drawings needed
- Parts and materials installed (include make and model; add manufacturer if not listed in the detail on the Material Service Request (MSR))
- Post maintenance testing accomplished
- Job hazards encountered
- Problems encountered and actions taken to resolve them
- Other information that may be useful at a later date should be included in the history provided by Maintenance in M350, History Brief Panel

KGM

6.7. WDA: **IF** constructive feedback to the planner is required, **THEN**

SUBMIT constructive feedback for the planners to use to improve future performance of this task or other work packages by entering a comment of type "CO" on Panel M301.

NA

7.0 Attachments / References:

- Support Document: Closed Waste Tank Annual Inspection Checklist Cover Sheet and Checklist.
- Attachment A: Additional Information to Support the Closed Waste Tank Annual Inspection Checklist.

Attachment A

Additional Information to Support the Closed Waste Tank Annual Inspection Checklist

Area of Inspection	Waste Tank Feature of Concern	Condition of Concern (i.e., expected to have potential impact on waste tank modeling)
Excessive cracking or openings in riser caps or tank top	Tank Top Integrity	Cracks in riser caps and/or the waste tank should be minimized such that water infiltration through the tank top is not significantly increased.
Evidence of waste tank elevation changes	Tank Concrete/ Tank Grout Stability	Substantive waste tank elevation changes (sinking or lifting) could result in cracks forming in the Tank Concrete and/or the Tank Grout.
Washed out/eroded soil or sink holes near tank tops	Tank Top Integrity	Washed out/eroded soil or sink holes near tank tops should be minimized such that water infiltration through or mean the tank top is not significantly increased.
Excessive accumulation of water on tank tops	Tank Concrete/ Tank Grout Stability	Inadequate drainage or stormwater system degradation could lead to increased degradation in the Tank Concrete and/or the Tank Grout.
Unstable tank top structure/component	Tank Top Integrity	Structure/component with potential to fail and damage tank top.
Excessive vegetation	Tank Top Integrity	Vegetation should not be allowed to impact the tank top such that water infiltration through the tank top would be significantly increased (e.g., substantial root infiltration).
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	Tank Grout Stability	Leakage of grout material out of risers or waste tank could be indicative of grout degradation.

Closed Waste Tank Annual Inspection Checklist Cover Sheet

Inspection Year: 2019

Number of pages in document including cover page: _____

Date: 4/23/19 ^{3/26/19} Rev: 0
Bam

Work Order Package Number: 01704000-01

Preventive Maintenance Number: PM10 68926

Completed inspection checklists are included in this document for the waste tanks selected below:

- | | | | | |
|---------------------------------------|--|-----------------------------|-----------------------------|-----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 11 | <input type="checkbox"/> 21 | <input type="checkbox"/> 31 | <input type="checkbox"/> 41 |
| <input type="checkbox"/> 2 | <input checked="" type="checkbox"/> 12 | <input type="checkbox"/> 22 | <input type="checkbox"/> 32 | <input type="checkbox"/> 42 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 13 | <input type="checkbox"/> 23 | <input type="checkbox"/> 33 | <input type="checkbox"/> 43 |
| <input type="checkbox"/> 4 | <input type="checkbox"/> 14 | <input type="checkbox"/> 24 | <input type="checkbox"/> 34 | <input type="checkbox"/> 44 |
| <input checked="" type="checkbox"/> 5 | <input type="checkbox"/> 15 | <input type="checkbox"/> 25 | <input type="checkbox"/> 35 | <input type="checkbox"/> 45 |
| <input checked="" type="checkbox"/> 6 | <input checked="" type="checkbox"/> 16 | <input type="checkbox"/> 26 | <input type="checkbox"/> 36 | <input type="checkbox"/> 46 |
| <input type="checkbox"/> 7 | <input checked="" type="checkbox"/> 17 | <input type="checkbox"/> 27 | <input type="checkbox"/> 37 | <input type="checkbox"/> 47 |
| <input type="checkbox"/> 8 | <input checked="" type="checkbox"/> 18 | <input type="checkbox"/> 28 | <input type="checkbox"/> 38 | <input type="checkbox"/> 48 |
| <input type="checkbox"/> 9 | <input checked="" type="checkbox"/> 19 | <input type="checkbox"/> 29 | <input type="checkbox"/> 39 | <input type="checkbox"/> 49 |
| <input type="checkbox"/> 10 | <input checked="" type="checkbox"/> 20 | <input type="checkbox"/> 30 | <input type="checkbox"/> 40 | <input type="checkbox"/> 50 |
| | | | | <input type="checkbox"/> 51 |

Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 5

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):

Bruce Martin / WPA / B.G.M.A / /
Mark Layton / WPA / ML ZA / /
 / / / /

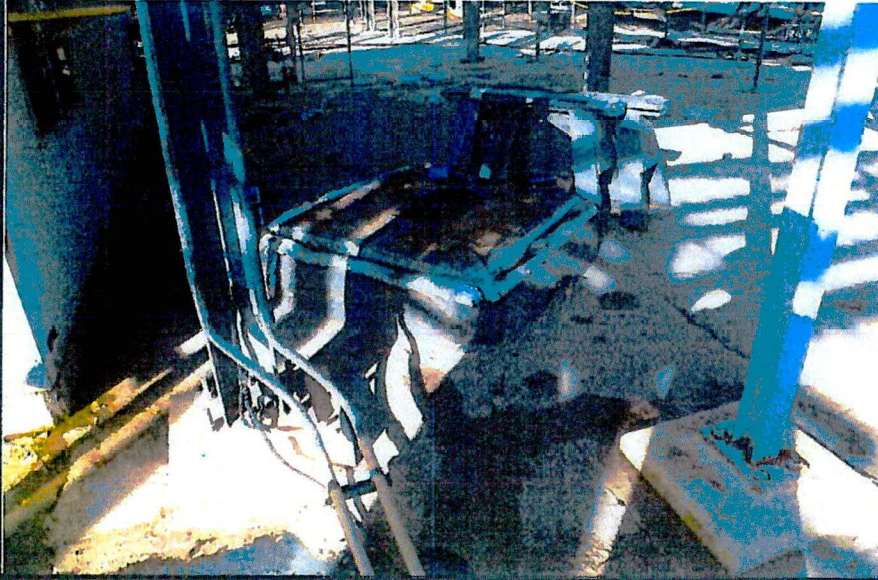
Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/10/19</u>					
Excessive cracking or openings in riser caps or tank top	<u>ML</u> <u>BGM</u>				
Evidence of waste tank elevation changes (sinking or lifting)	<u>ML</u> <u>BGM</u>				
Washed out/eroded soil or sink holes near tank tops	<u>ML</u> <u>BGM</u>				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<u>ML</u> <u>BGM</u>				
Unstable structure/component with potential to fail and damage tank top	<u>ML</u> <u>BGM</u>				
Excessive vegetation	<u>ML</u> <u>BGM</u>				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<u>ML</u> <u>BGM</u>				
Other evidence of degradation	<u>ML</u> <u>BGM</u>				

Comments:

No changes. Satisfactory.
BGM ML

Closed Waste Tank Annual Inspection Checklist Photos

Tank 5, Riser 1



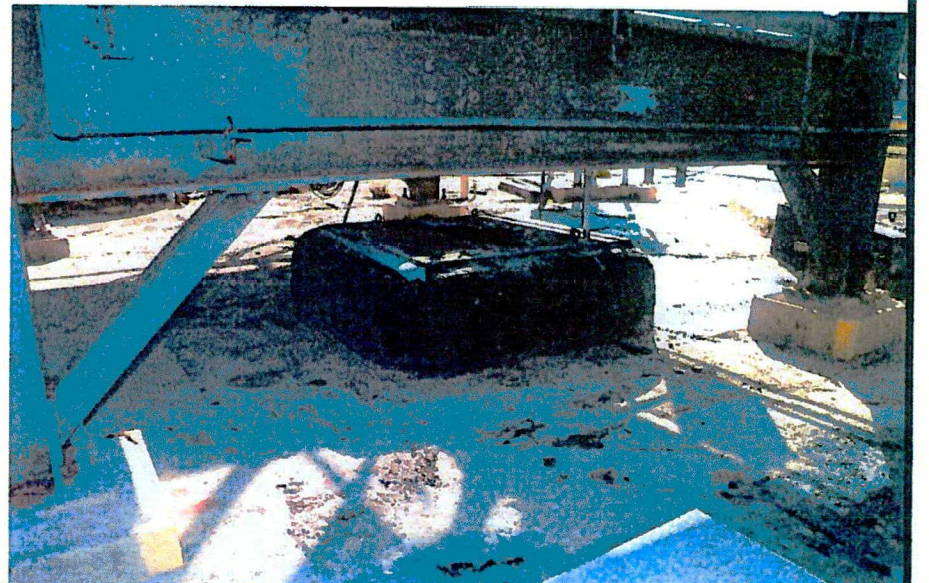
Tank 5, Riser 2



Tank 5, Riser 3



Tank 5, Riser 4



Closed Waste Tank Annual Inspection Checklist Photos

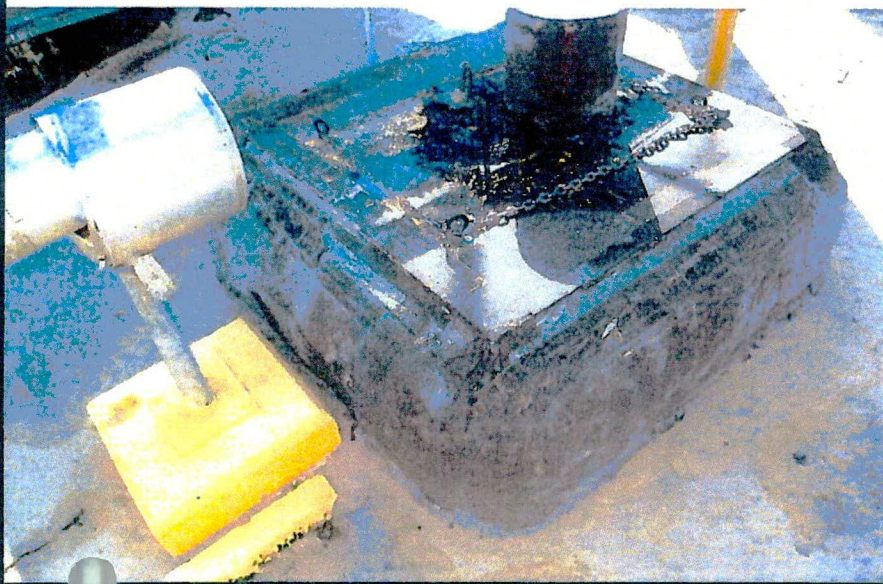
Tank 5, Riser 5



Tank 5, Riser 6



Tank 5, Riser 7

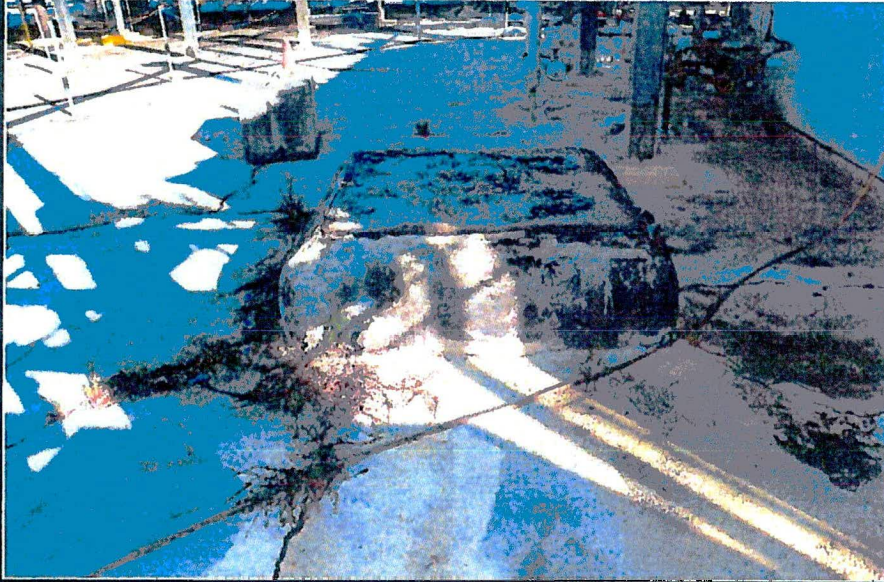


Tank 5, Riser 8



Closed Waste Tank Annual Inspection Checklist Photos

Tank 5, Center Riser



Tank 5, South Annulus Riser



Tank 5, West Annulus Riser



Tank 5, North Annulus Riser



Closed Waste Tank Annual Inspection Checklist Photos

PMID: 68926
WO Package Number: 01704000-01
Date: 03/26/2019

Tank 5, East Annulus Riser



Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 6

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):

Bruce Martin / WPA / MLL BGM / /
Mark Layton / WPA / MLL JA / /
 / / / /

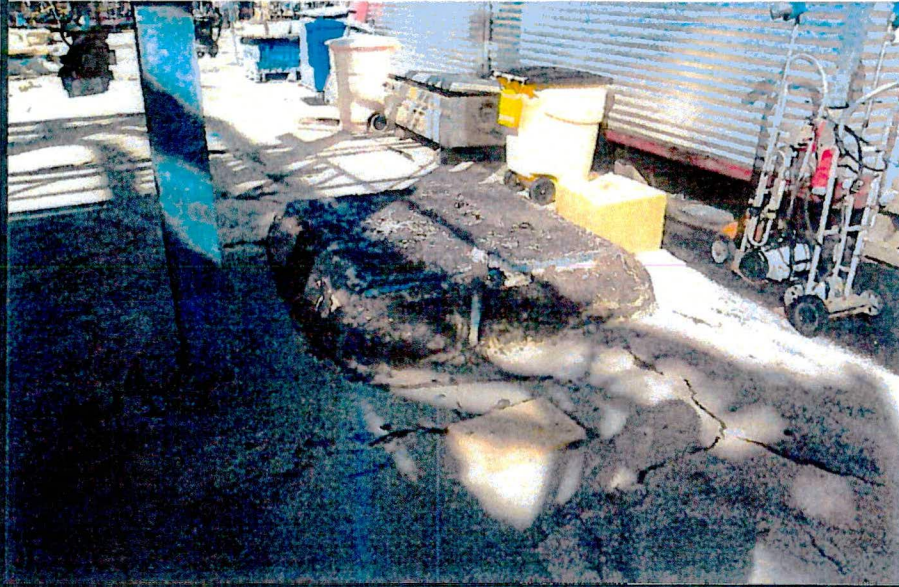
Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/10/19</u>					
Excessive cracking or openings in riser caps or tank top	<u>MLL BGM</u>				
Evidence of waste tank elevation changes (sinking or lifting)	<u>MLL BGM</u>				
Washed out/eroded soil or sink holes near tank tops	<u>MLL BGM</u>				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<u>MLL BGM</u>				
Unstable structure/component with potential to fail and damage tank top	<u>MLL BGM</u>				
Excessive vegetation	<u>MLL BGM</u>				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<u>MLL BGM</u>				
Other evidence of degradation	<u>MLL BGM</u>				

Comments:

No change. Satisfactory
MLL BGM

Closed Waste Tank Annual Inspection Checklist Photos

Tank 6, North Annulus Riser



Tank 6, Riser 1



Tank 6, Riser 2



Tank 6, West Annulus Riser



Closed Waste Tank Annual Inspection Checklist Photos

Tank 6, Riser 4



Tank 6, Riser 5



Tank 6, Center Riser



Tank 6, Riser 6



Closed Waste Tank Annual Inspection Checklist Photos

Tank 6, South Annulus Riser



Tank 6, Riser 7



Tank 6, Riser 8



Tank 6, East Annulus Riser



Closed Waste Tank Annual Inspection Checklist Photos

PMID: 68926
WO Package Number: 01704000-01
Date: 03/26/2019

Tank 6, Riser 3

Page 11 of 36



Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 12

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):

Bruce Martin / WPA / B.G.M. / /
Mark Layton / WPA / MML / /
 / / / /

Date of Inspection:	<u>4/18/19</u>	SAT	UNSAT	Description	Corrective Action	Due Date
Excessive cracking or openings in riser caps or tank top	<u>BGM</u> <u>MML</u>					
Evidence of waste tank elevation changes (sinking or lifting)	<u>BGM</u> <u>MML</u>					
Washed out/eroded soil or sink holes near tank tops	<u>BGM</u> <u>MML</u>					
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<u>BGM</u> <u>MML</u>					
Unstable structure/component with potential to fail and damage tank top	<u>BGM</u> <u>MML</u>					
Excessive vegetation	<u>BGM</u> <u>MML</u>					
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<u>BGM</u> <u>MML</u>					
Other evidence of degradation	<u>BGM</u> <u>MML</u>					

Comments:

NO change. Satisfactory. BGM

Closed Waste Tank Annual Inspection Checklist Photos

Tank 12, Riser 1



Tank 12, Riser 2



Tank 12, Riser 3



Tank 12, Riser 4



Closed Waste Tank Annual Inspection Checklist Photos

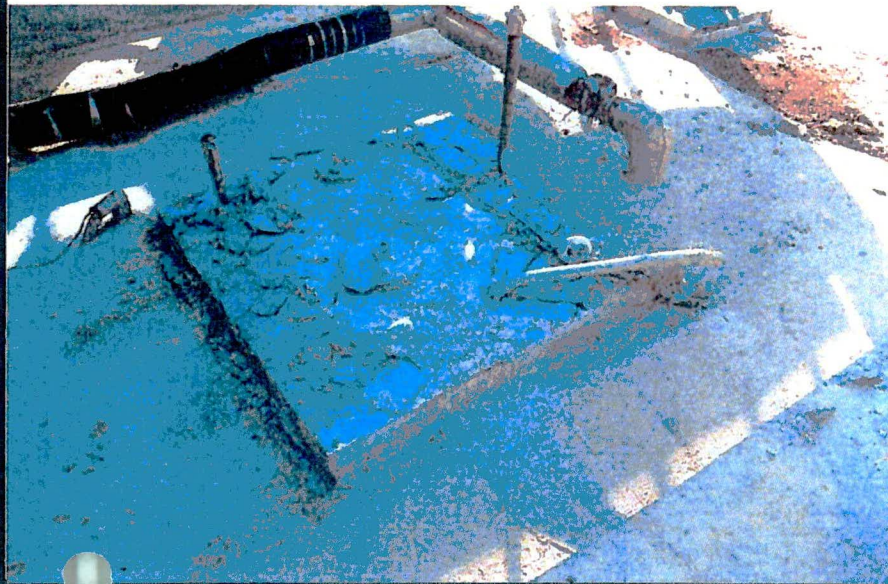
Tank 12, Riser 5



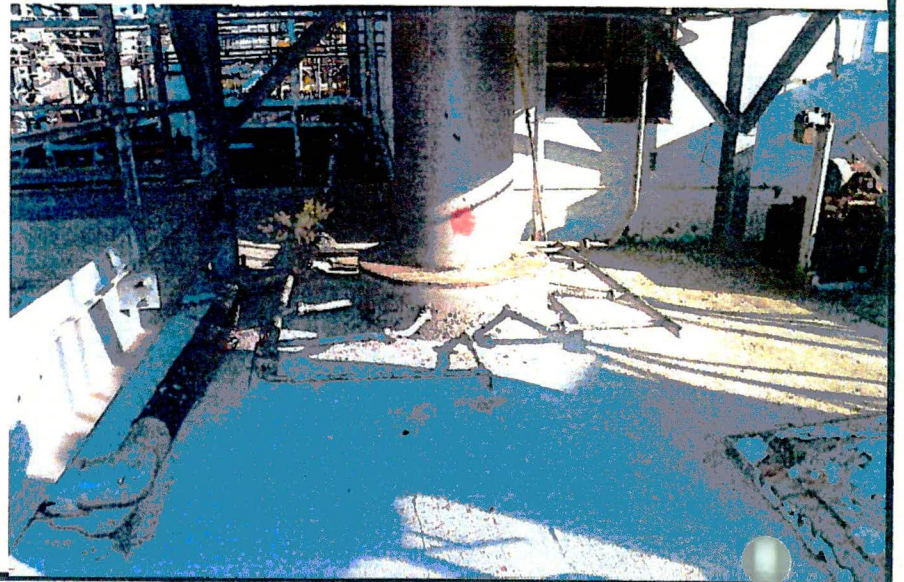
Tank 12, Riser 6



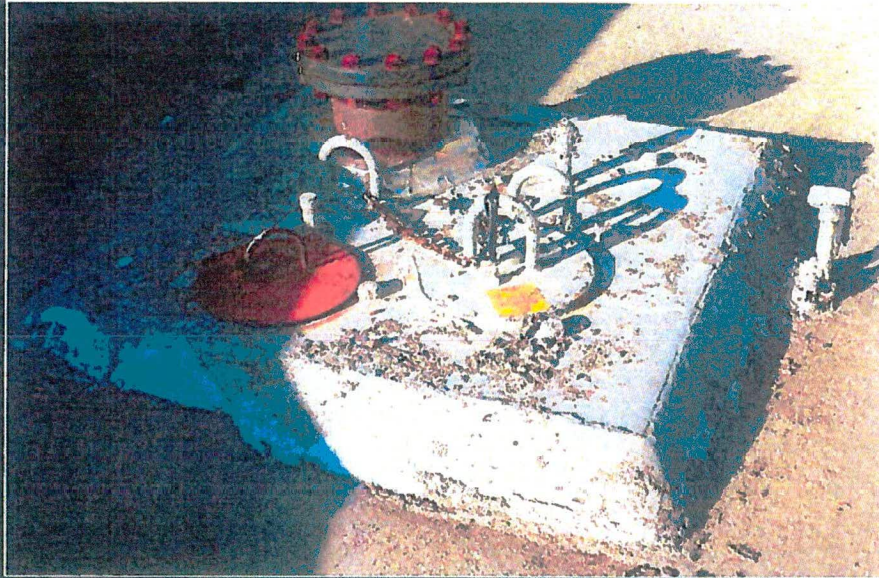
Tank 12, Riser 7



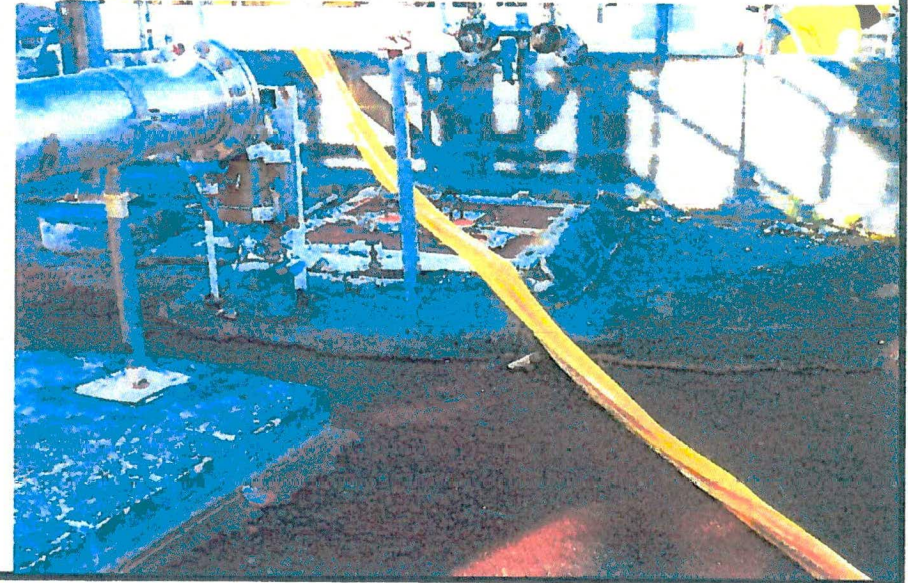
Tank 12, Riser 8



Tank 12, North Annulus Riser



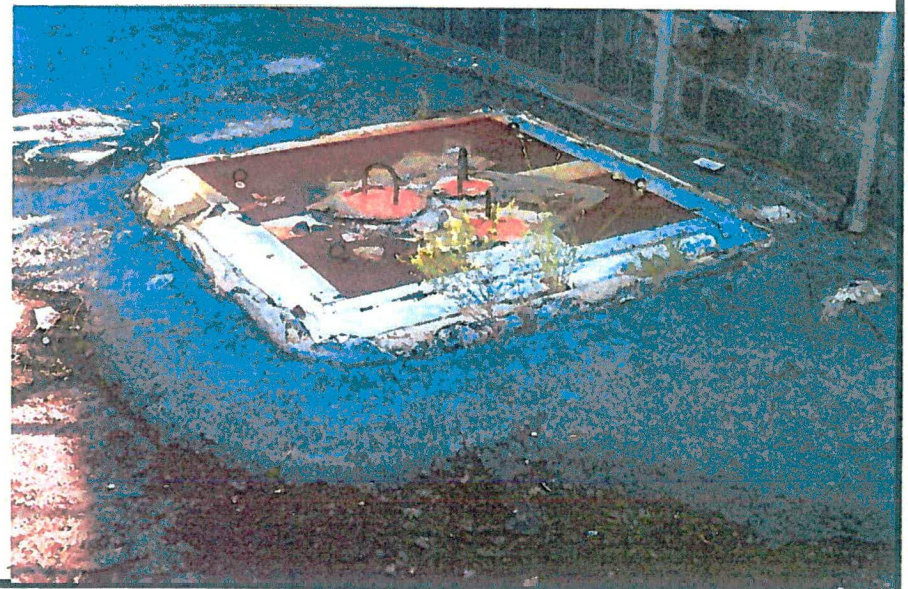
Tank 12, West Annulus Riser



Tank 12, South Annulus Riser

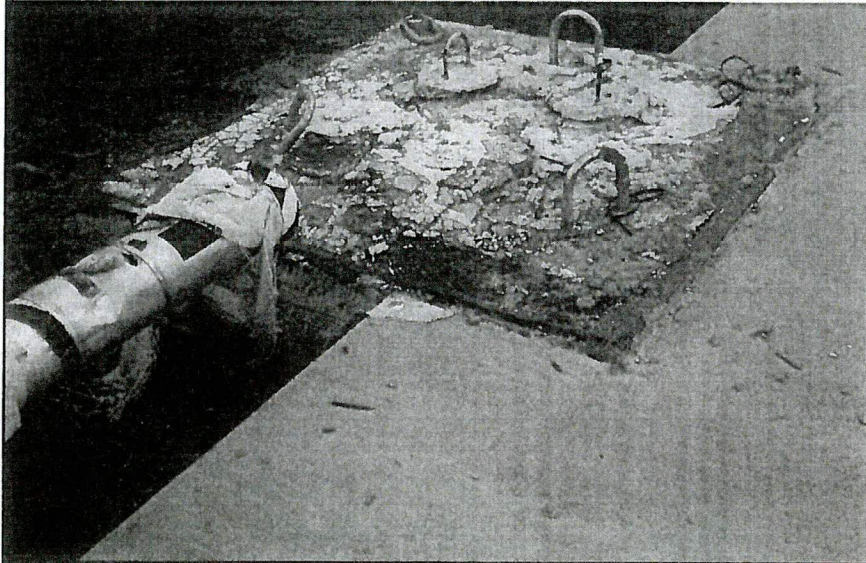


Tank 12, East Annulus Riser



Closed Waste Tank Annual Inspection Checklist Photos

Tank 12, Center Riser



Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 16

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):

Bruce Martin / WDA / B-AMS / /
Mark Layton / WDA / MHL / /
 / / / /

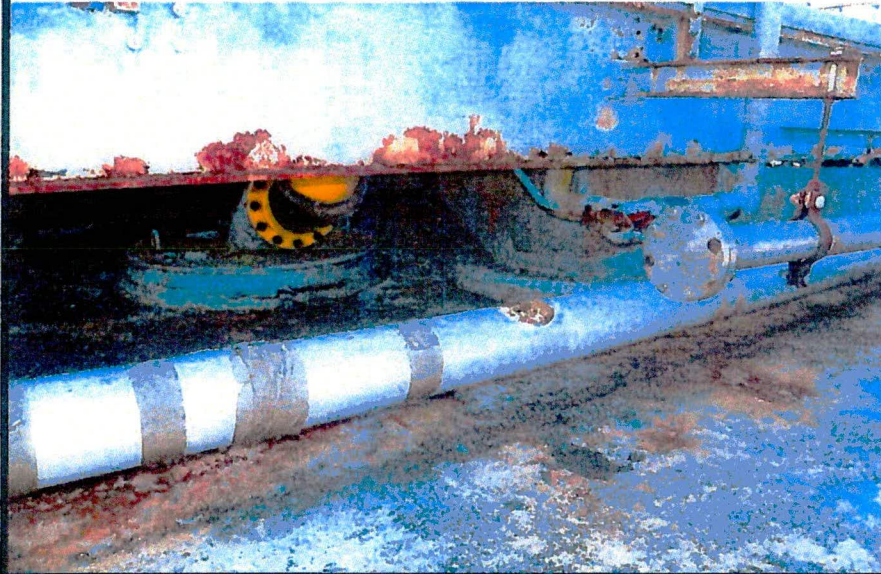
Date of Inspection:	<u>4/18/19</u>	SAT	UNSAT	Description	Corrective Action	Due Date
Excessive cracking or openings in riser caps or tank top		Bam MHL				
Evidence of waste tank elevation changes (sinking or lifting)		Bam MHL				
Washed out/eroded soil or sink holes near tank tops		Bam MHL				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.		Bam MHL				
Unstable structure/component with potential to fail and damage tank top		Bam MHL				
Excessive vegetation		Bam MHL				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)		Bam MHL				
Other evidence of degradation		Bam MHL				

Comments:

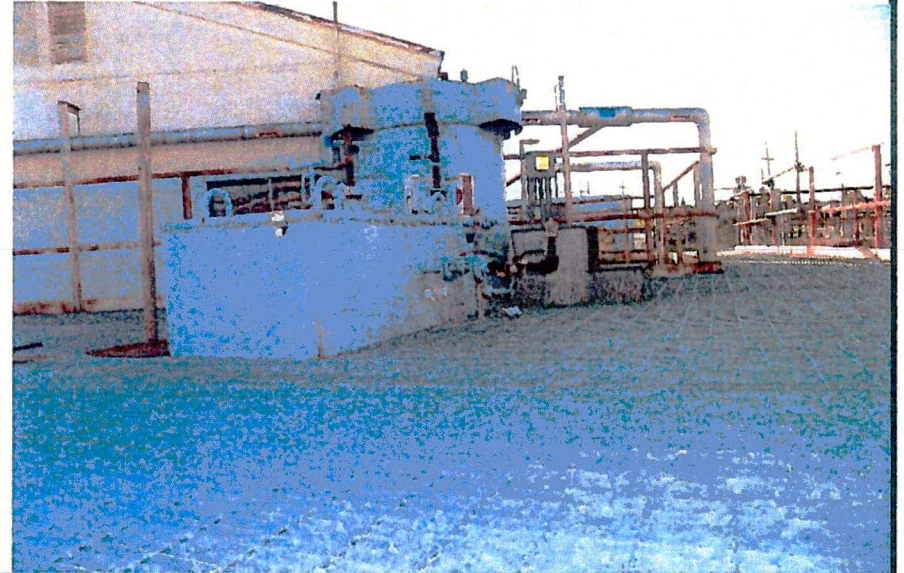
No change. Satisfactory. Bam

Closed Waste Tank Annual Inspection Checklist Photos

Tank 16, Risers 1 and 2



Tank 16, Riser 2A



Tank 16, Riser 3



Tank 16, Risers 4 and 4A



Closed Waste Tank Annual Inspection Checklist Photos

Tank 16, Risers 5 and 6



Tank 16, Riser 7



Tank 16, Inspection Ports 151 and 154



Tank 16, South Annulus Riser



Closed Waste Tank Annual Inspection Checklist Photos

Tank 16, West Annulus Riser



Tank 16, North Annulus Riser



Tank 16, East Annulus Riser



Tank 16, Inspection Port 118



Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 17

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):
Bruce Martin / WPA / B.G.M.S. _____ / _____ / _____
Mark Layton / WPA / [Signature] _____ / _____ / _____
Aaron White / DOE / [Signature] _____ / _____ / _____

Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/19</u>					
Excessive cracking or openings in riser caps or tank top	<u>M/L</u> <u>BAM</u>				
Evidence of waste tank elevation changes (sinking or lifting)	<u>M/L</u> <u>BAM</u>				
Washed out/eroded soil or sink holes near tank tops	<u>M/L</u>				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<u>M/L</u> <u>BAM</u>				
Unstable structure/component with potential to fail and damage tank top	<u>M/L</u> <u>BAM</u>				
Excessive vegetation	<u>M/L</u> <u>BAM</u>				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<u>M/L</u> <u>BAM</u>				
Other evidence of degradation	<u>M/L</u> <u>BAM</u>				

Comments:
C - Riser irregularities unchanged.
BAM

Closed Waste Tank Annual Inspection Checklist Photos

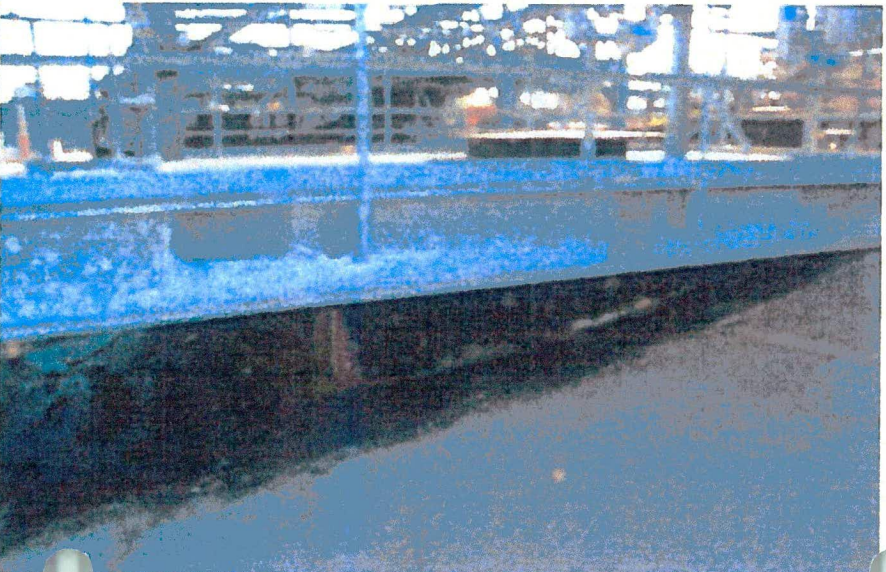
Tank 17, Southeast Riser



Tank 17, East Riser



Tank 17, Northeast Riser

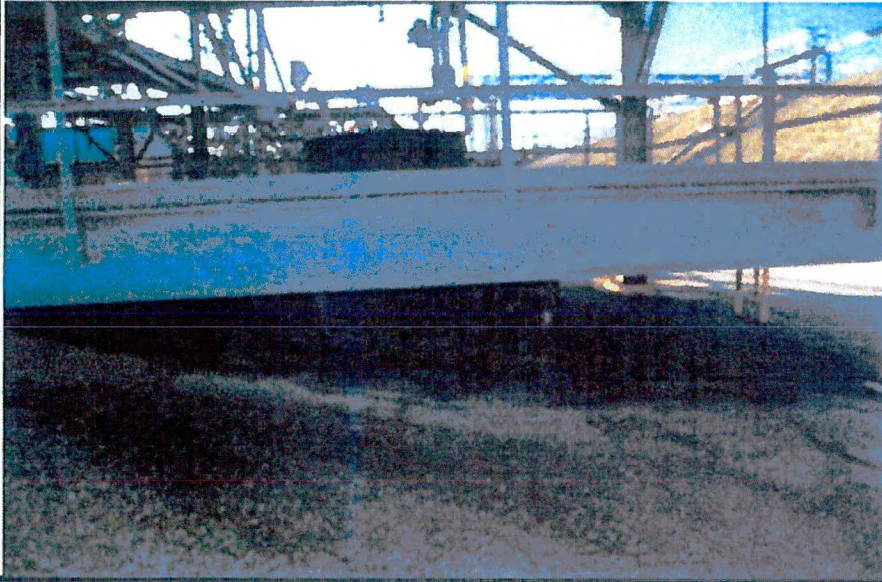


Tank 17, Southwest Riser

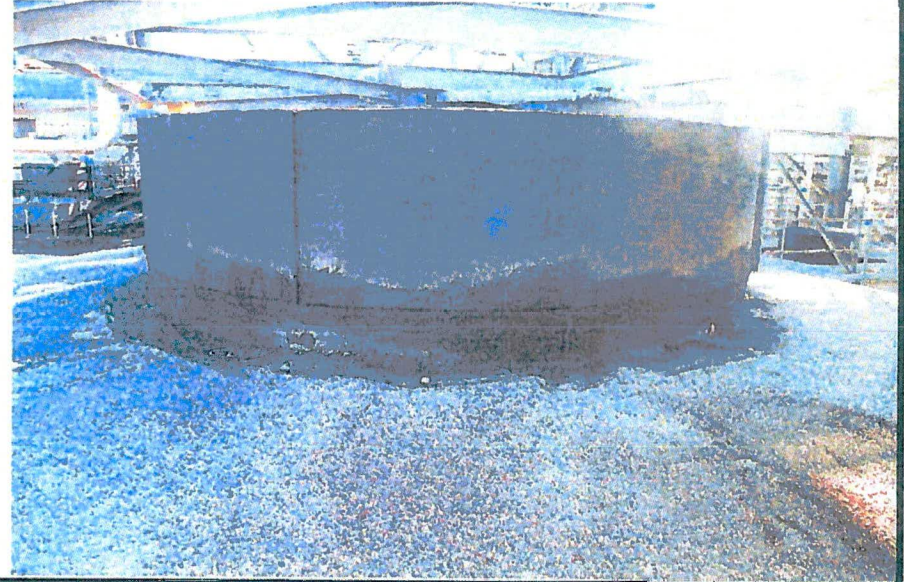


Closed Waste Tank Annual Inspection Checklist Photos

Tank 17, West Riser



Tank 17, Center Riser, West Side



Tank 17, Center Riser, North Side



Tank 17, Southwest Riser



Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 18

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):

Bruce Martin / WPA / BS G M _____ / _____ / _____
 Mark Layton / WPA / Ma J _____ / _____ / _____
 Aaron White / DOE / Aaron White _____ / _____ / _____

Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/19</u>					
Excessive cracking or openings in riser caps or tank top	ML BAM				
Evidence of waste tank elevation changes (sinking or lifting)	ML BAM				
Washed out/eroded soil or sink holes near tank tops	ML BAM				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	ML BAM				
Unstable structure/component with potential to fail and damage tank top	ML BAM				
Excessive vegetation	ML BAM				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	ML BAM				
Other evidence of degradation	ML BAM				

Comments:

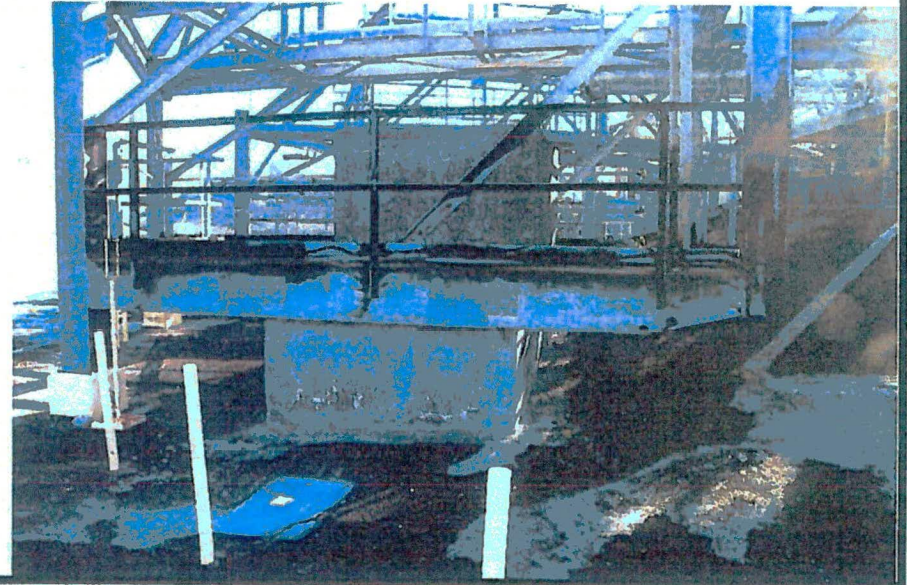
Depression North of E-riser unchanged.

BAM

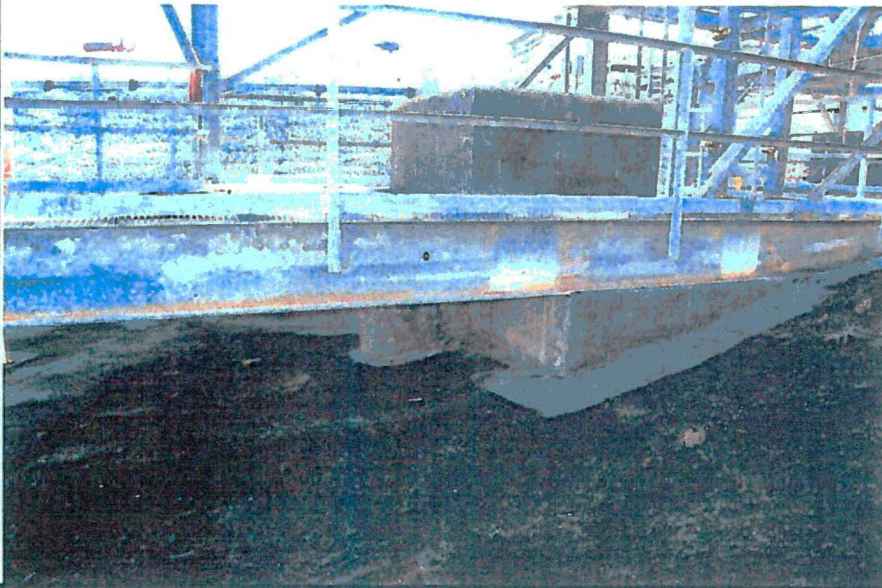
Tank 18, West Riser



Tank 18, Northwest Riser



Tank 18, Northeast Riser

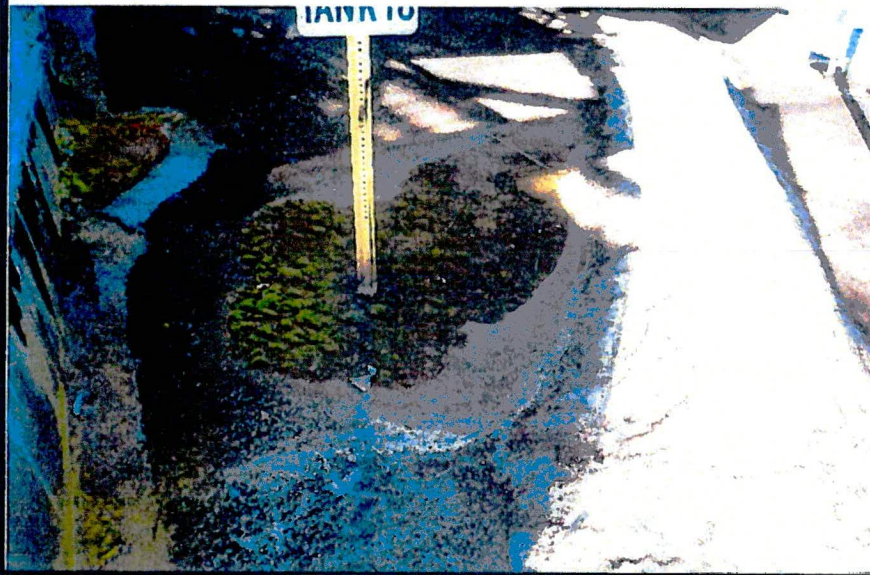


Tank 18, Northeast Riser, Underliner Sump

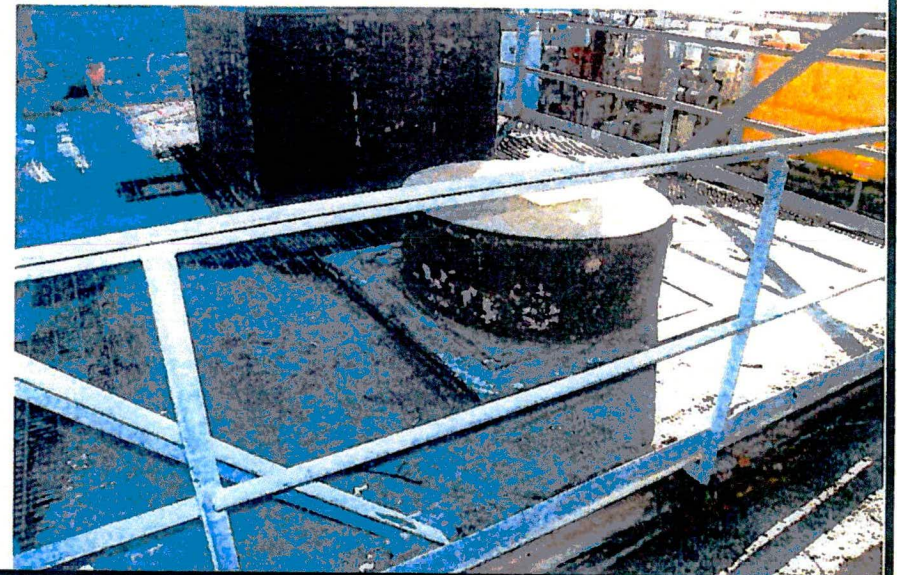


Closed Waste Tank Annual Inspection Checklist Photos

Tank 18, Depression North of East Riser



Tank 18, East Riser



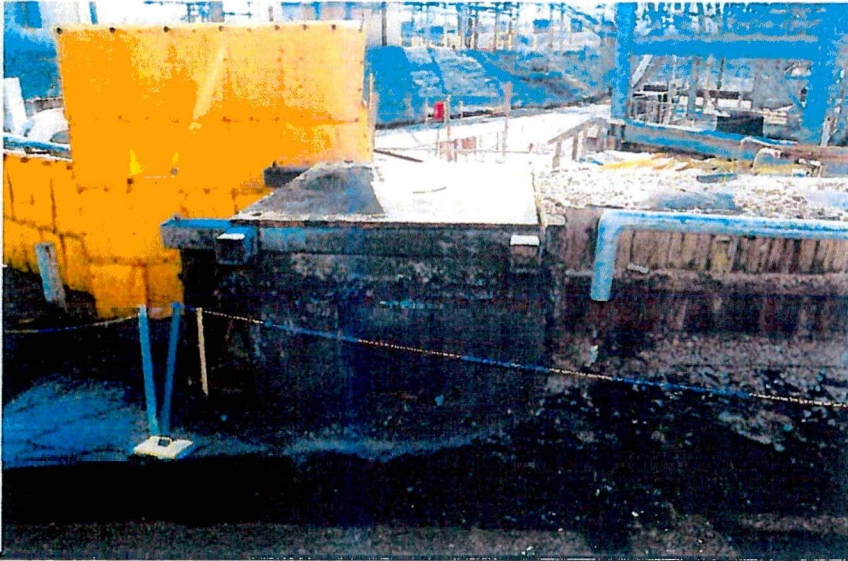
Tank 18, Center Riser



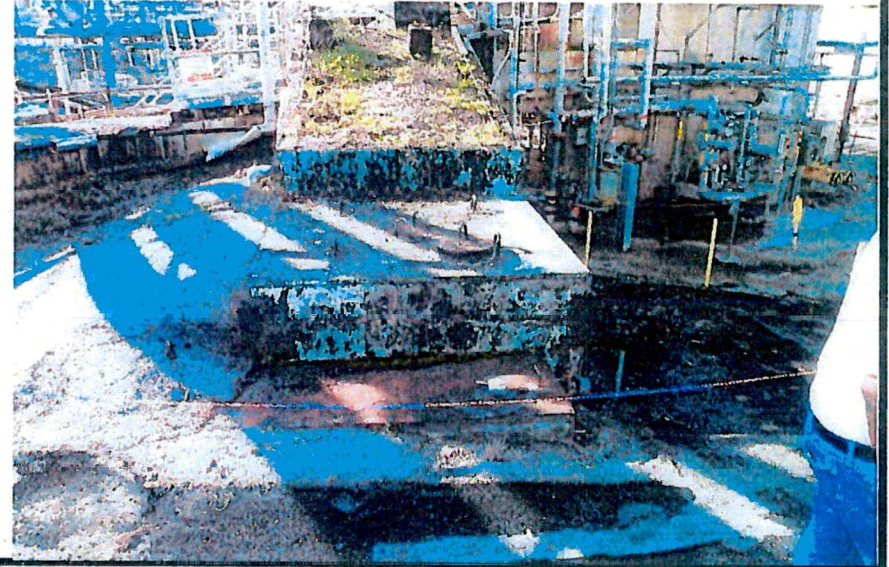
Tank 18, Center Riser



Tank 18, Southeast Riser



Tank 18, Southwest Riser



Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 19

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):
Bruce Martin / WPA / B G M A / /
Mark Layton / WPA / M L / /
Aaron White / DOE / A W / /

Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/19</u>					
Excessive cracking or openings in riser caps or tank top	MIL BGM				
Evidence of waste tank elevation changes (sinking or lifting)	MIL BGM				
Washed out/eroded soil or sink holes near tank tops	MIL BGM				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	MIL BGM				
Unstable structure/component with potential to fail and damage tank top	MIL BGM				
Excessive vegetation	MIL BGM				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	MIL BGM				
Other evidence of degradation	MIL				

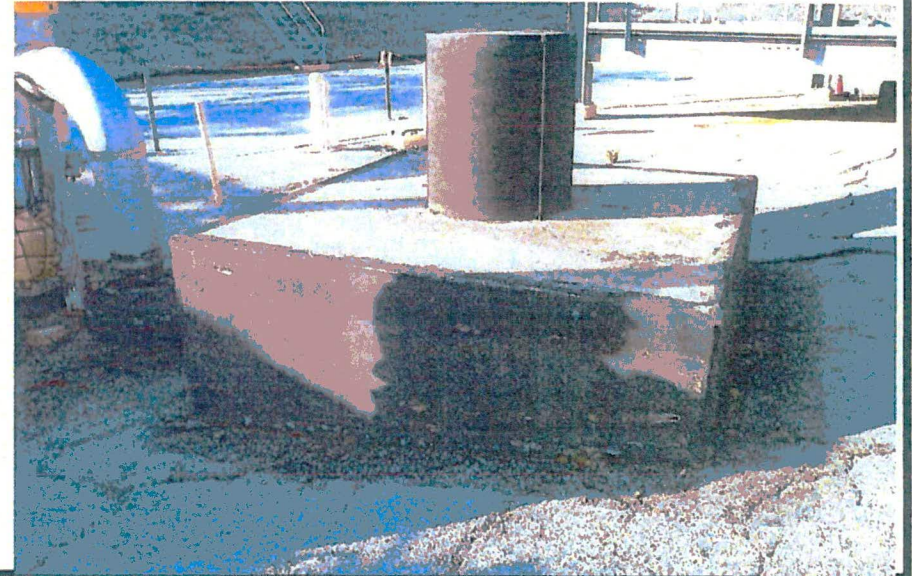
Comments:
 1. Three cracks noted on Tank 19 NW riser cap: W side, E side and S side
 2. Riser degradation unchanged
 BGM

Closed Waste Tank Annual Inspection Checklist Photos

Tank 19, Ventilation Riser



Tank 19, Southeast Riser



Tank 19, Southwest Riser

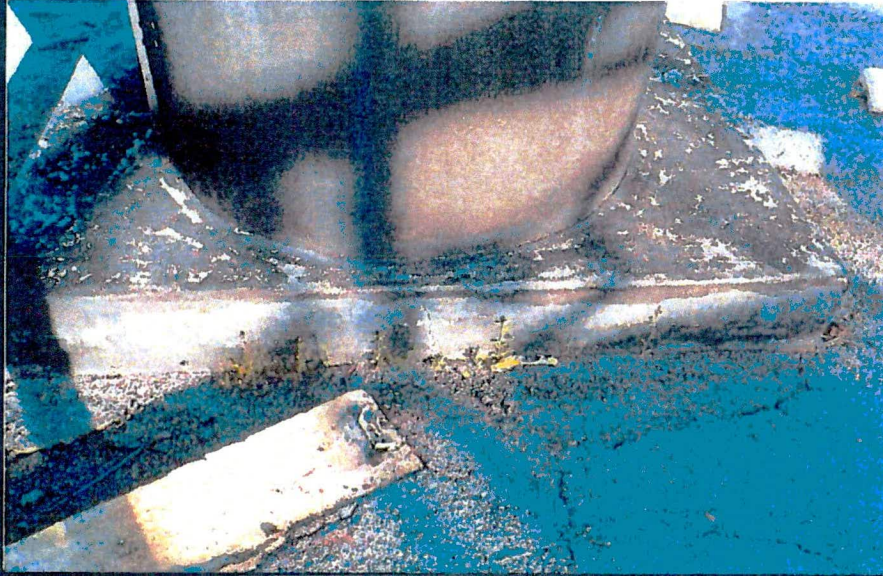


Tank 19, West Riser



Closed Waste Tank Annual Inspection Checklist Photos

Tank 19, Northwest Riser, South Side



Tank 19, Northwest Riser, East Side



Tank 19, North Sample Riser



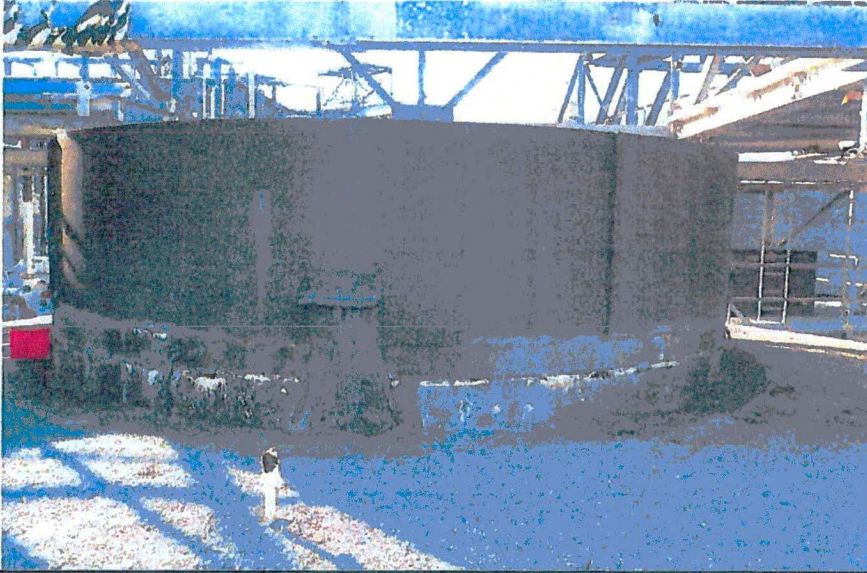
Tank 19, Northeast Riser



Closed Waste Tank Annual Inspection Checklist Photos

PMID: 68926
WO Package Number: 01704000-01
Date: 03/26/2019

Tank 19, Center Riser, East Side



Tank 19, Center Riser, Southwest Side



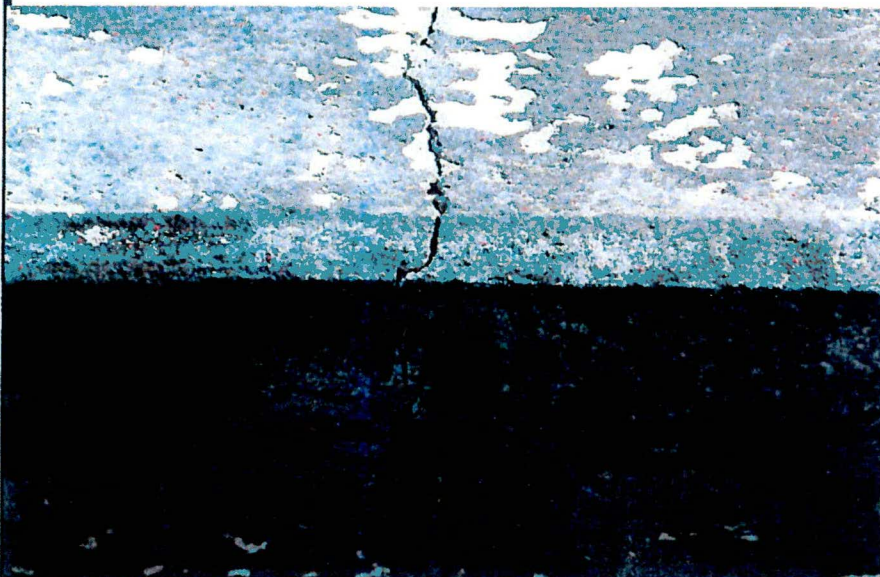
Tank 19, East Riser



Tank 19, Northwest Riser, West Side



Tank 19, Northwest Riser, West Side



Tank 19, Underliner Sump, Northeast Riser



Closed Waste Tank Annual Inspection Checklist

Closed Waste Tank Annual Inspection Checklist for Waste Tank Number: 20

Work Order Package Number: 01704000 Date: 3/26/19 Rev: Ø

Personnel in Attendance (print name/organization/signature):

Bruce Martin / WDA / B-G M & _____ / _____ / _____
 Mark Layton / WDA / MLK _____ / _____ / _____
 Aaron White / DOE / AWP _____ / _____ / _____

Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/19</u>					
Excessive cracking or openings in riser caps or tank top	NH BGM				
Evidence of waste tank elevation changes (sinking or lifting)	NH BGM				
Washed out/eroded soil or sink holes near tank tops	NH BGM				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	NH BGM				
Unstable structure/component with potential to fail and damage tank top	NH BGM				
Excessive vegetation	NH BGM				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	NH BGM				
Other evidence of degradation	NH BGM				

Comments:

NW riser unchanged.
 BGM NH

Closed Waste Tank Annual Inspection Checklist Photos

Tank 20, West Riser



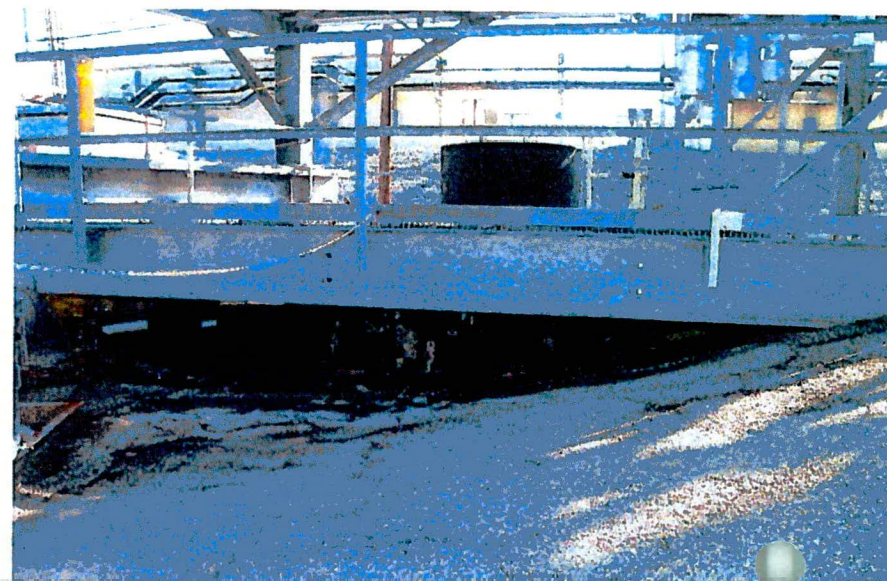
Tank 20, West Riser



Tank 20, Northwest



Tank 20, Northeast Riser



Closed Waste Tank Annual Inspection Checklist Photos

Tank 20, East Riser



Tank 20, Southeast Riser



Tank 20, Ventilation Riser



Tank 20, Southwest Riser



Closed Waste Tank Annual Inspection Checklist Photos

Tank 20, Center Riser

