

Work Order No: 01636229 - 01

Work Order Title: MONITORING OF CLOSED WASTE TANKS FOR HTF AND

FTF

Rev: 0

Asset Suite Information

Date Created	04/09/2018
Planner Name	Guilfoyle, Mark
Planner Telephone	
Equipment Name	MONITORING OF CLOSED WASTE TANKS
Facility	FTF
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.

AHA Number: N/A		Documents: LWO-RIP-2009-00009 and SRR-CWDA-2011-00022			
Pre Job Briefing Checklist: OPS-SO-LWO.01		Procedure: N/A			
SRWP	<input checked="" type="checkbox"/>	OR	Job Specific RWP	Calibration Datasheet: N/A	
Permits: SC1 890 008 898		ASME B31.3:		Yes	<input checked="" type="checkbox"/> No
Fluid Service: N/A					
Additional Attachments: Closed Waste Tank Annual Inspection Checklist Cover Sheet & 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. RM&A/FLM: **PERFORM** a pre-job briefing per OPS-SO-LWO.01.
- 3.2. RM&A: **NOTIFY** Shift Manager prior to performing work. *Notified Radcon Supervisor*
- 3.3. RM&A: **NOTIFY** RPD prior to performing work.
- 3.4. RM&A: **DETERMINE** which waste tanks have been operationally closed and require an inspection below:

<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			

- 3.5. RM&A: **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

4.1. RM&A/WDA: **PERFORM** a walk down, **AND**

Visually INSPECT each respective tank top and surrounding area.

BGM

4.2. WDA: **IF** available, **THEN**

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

BGM

4.3. WDA: **ASSESS** the condition of previous findings.

BGM

4.4. RM&A /WDA: **TAKE** photographs of the tank top and any unsatisfactory conditions.

BGM

4.5. RM&A/WDA: **COMPLETE** the Closed Waste Tank Annual Inspection Coversheet & Checklist (i.e., cover sheet and an inspection checklist for each closed waste tank).

BGM

4.5.1. RM&A: **ATTACH** photographs to the appropriate inspection checklist.

BGM

4.6. RM&A: **ASSIGN** the completed Closed Waste Tank Annual Inspection Cover Sheet and Checklist(s) a single LWO DL document number (guidance provided by the library help), **THEN**

SELECT "C&WDA" for the "Organization" field, **AND**

INCLUDE the inspection year as the first characters in the "Title" field.

BGM

4.7. RM&A: **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*.

BGM

5.0 Post Maintenance Testing & Return to Service:

N/A

6.0 Post Work & Feedback:

Initials

6.1. RM&A: **NOTIFY** work control that the closed waste tank annual inspection task is complete, **AND**

RETURN the completed Closed Waste Tank Annual Inspection Checklist Cover Sheet and Checklist(s) documentation.

Bcm

6.2. RM&A: **ENTER** any feedback including field revisions and recommendations for improvements for future work in Passport **OR** NA if no feedback applies (CO Comments - Mechanic Feedback to be addressed by Work Control).

NA

Note: The following Steps 6.3.1 through 6.3.5 **SHALL** only be performed if unsatisfactory conditions are found. If all conditions are satisfactory these steps can be N/A'd.

6.3. RM&A /WDA: **ASSIGN** a corrective action for any unsatisfactory condition as detailed below:

6.3.1. RM&A: **ENTER** the information required by the STAR system (guidance provided by the system) and include an appropriate due date.

NA

6.3.2. RM&A: **ATTACH** photographs that substantiate the unsatisfactory condition.

NA

6.3.3. RM&A: **INSERT** the STAR unique identifier in the appropriate location on the appropriate inspection checklist.

NA

6.3.4. RM&A: **ATTACH** the necessary electronic files required by the STAR system (e.g., copy of the inspection checklist affected, screen shot of the work request, Request for Engineering Assistance (REA), Nonconformance Report (NCR).

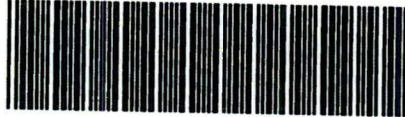
NA

6.3.5. RM&A: **IF** the unsatisfactory condition and planned corrective action cannot be remediated within 30 days, **THEN**

NOTIFY SCDHEC and EPA within 30 days of identification

NA

Facility: FTF F-TANK FARM
 Unit : Project No.:
 W/O Type: PM Priority: 3B W/O Dspln : A
 O Planner : D0931 BURNS G
 Task Planner : D0931 BURNS G
 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
 01636229 01
 Date: 04/09/18 Pg: 1
 Power and productivity
 for a better world™
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:
 LI :
 Maint PGMS: :
 : :
 : :

Work Order Task Instructions

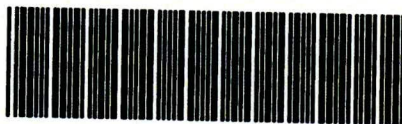
Identify conditions that would lead to loss of integrity or long-term structural strength of the closed tank (as assumed in the performance assessment) that would compromise stabilization and containment of the residual waste (See attached checklist).

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.

Crew #(s):

Facility: FTF F-TANK FARM
 Unit : Project No.:
 W/O Type: PM Priority: 3B W/O Dspln : A
 WO Planner : D0931 BURNS G
 Task Planner : D0931 BURNS G
 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

01636229 01

Date: 04/09/18 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

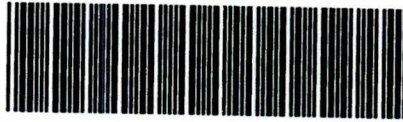
References/Document Information (M102/M104)

Type/Subtyp: DOC	Number : INSP COVER SHEET & CHECKLIST	Sheet:
Title/Desc : INSPECTION COVER SHEET & CHECKLIST		Image: N
Type/Subtyp: DOC	Number : LWO-RIP-2009-00009	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
Type/Subtyp: WI	Number : 01400397-01	Sheet:
Title/Desc : WORK INSTRUCTIONS		Image: N
Type/Subtyp: DOC	Number : SRR-CWDA-2011-00022	Sheet:
Title/Desc : GENERAL CLOSURE PLAN FOR HTF		Image: N

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

Facility: FTF F-TANK FARM
 Unit : Project No.:
 W/O Type: PM Priority: 3B W/O Dspln : A
 W/O Planner : D0931 BURNS G
 Task Planner : D0931 BURNS G
 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

01636229 01

Date: 04/09/18 Pg: 3



ASSET SUITE

Safety Class

Facility Type/Subtyp	Document Number
FTF DOC	INSP COVER SHEET & CHECKLIST
	INSPECTION COVER SHEET & CHECKLIST
FTF WI	01400397-01
	WORK INSTRUCTIONS

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 Checklists</u>	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>
<u>for Tanks 5, 6, 12,</u>	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	<input type="checkbox"/>
<u>16, 17, 18, 19 and 20</u>					

Trouble Found/Work Performed

None

PM Completion Readings: _____ Miles _____ Hours
 Continued on Additional Sheets? : _____

Equipment History Brief Attributes

Brief ID #	Attribute Name	Value	UOM	Type
------------	----------------	-------	-----	------

***** END OF REPORT *****

Closed Waste Tank Annual Inspection Checklist

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: 2018

Number of pages in document including cover page: _____

Date: 04/09/18 Rev: ∅

Work Order Package Number: WO 01636229-01

Preventive Maintenance Number: PMID 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: 01636229 Date: 4/09/18 Rev: 0

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

Mark Layton / WDA / ML

Joe Pavletich / WDA / JP

Bruce Martin / WDA / BM

_____/_____/_____
 _____/_____/_____
 _____/_____/_____

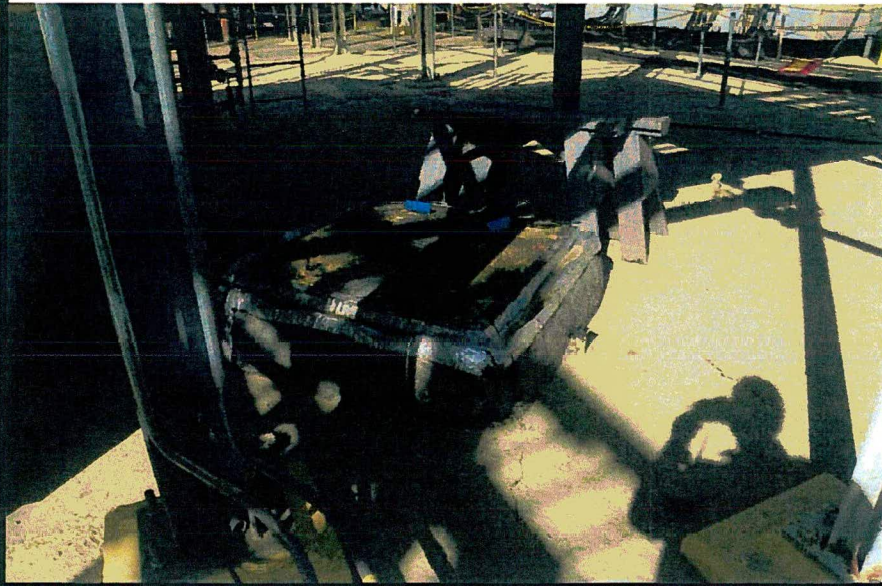
Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/18</u>					
Excessive cracking or openings in riser caps or tank top	<u>MLC 13AM</u>				
Evidence of waste tank elevation changes (sinking or lifting)	<u>MLC 13AM</u>				
Washed out/eroded soil or sink holes near tank tops	<u>MLC 13AM</u>				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<u>MLC 13AM</u>				
Unstable structure/component with potential to fail and damage tank top	<u>MLC 13AM</u>				
Excessive vegetation	<u>MLC, 13AM</u>				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<u>MLC 13AM</u>				
Other evidence of degradation	<u>MLC 13AM</u>				

Comments:

No Comments.

BM ML

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



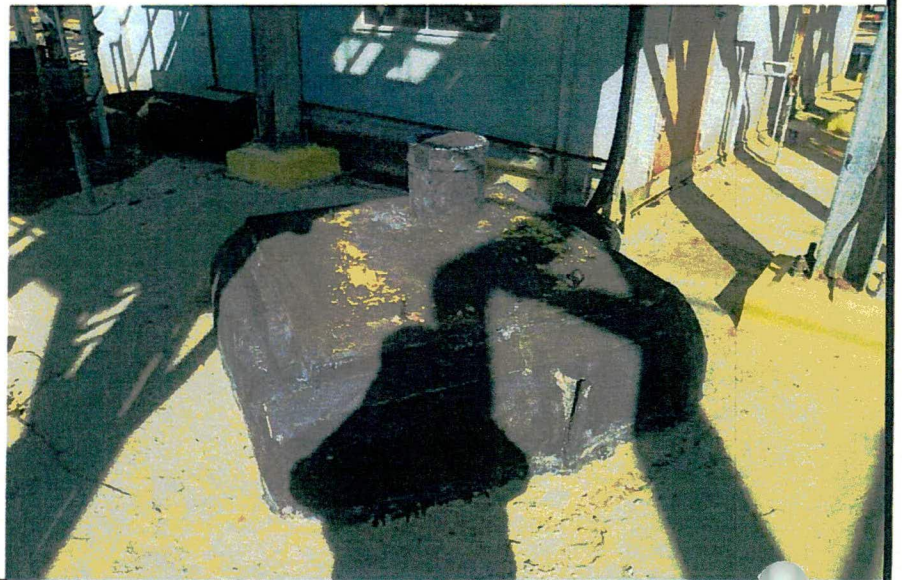
Tank 5, Riser 6



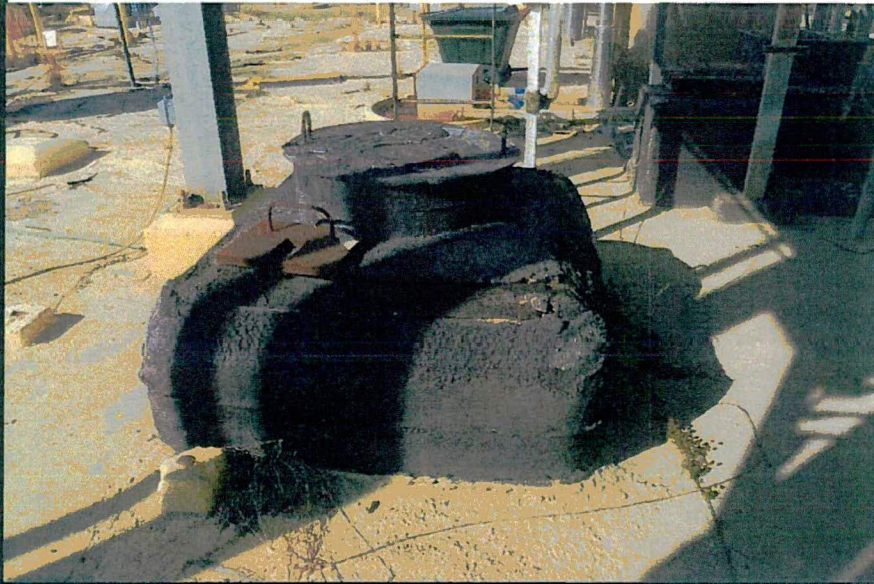
Tank 5, Riser 7



Tank 5, Riser 8



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: 01636229-01
Date: 04/11/2018

Tank 5, East Annulus Riser

Page 6 of 37



Closed Waste Tank Annual Inspection Checklist

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

Work Order Package Number: 01636229 Date: 4/09/18 Rev: 0

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

Mark Layton / WDA / ML / /
Joe Pavletich / WDA / JP / /
Bruce Martini / WDA / B-GM / /

Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/18</u>					
Excessive cracking or openings in riser caps or tank top	<u>ML DAM</u>				
Evidence of waste tank elevation changes (sinking or lifting)	<u>ML DAM</u>				
Washed out/eroded soil or sink holes near tank tops	<u>ML DAM</u>				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<u>ML DAM</u>				
Unstable structure/component with potential to fail and damage tank top	<u>ML DAM</u>				
Excessive vegetation	<u>ML DAM</u>				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<u>ML DAM</u>				
Other evidence of degradation	<u>ML DAM</u>				

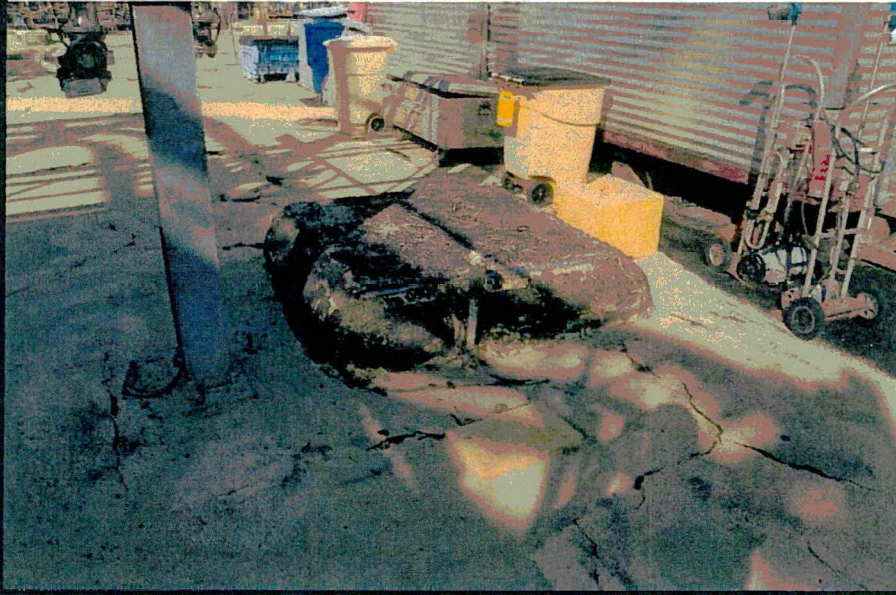
Comments:

No Comments

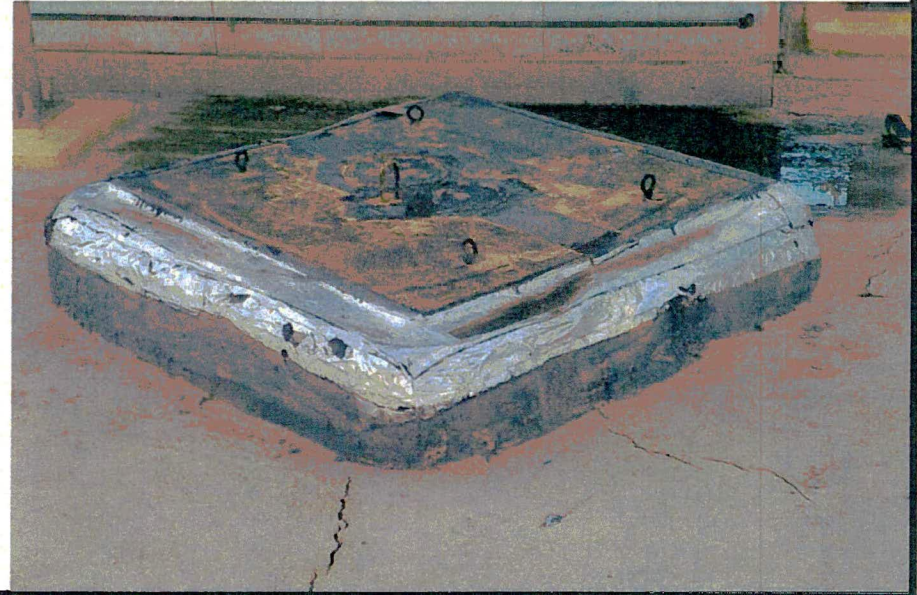
ML
DAM

Closed Waste Tank Annual Inspection Checklist Photos

Tank 6, North Annulus Riser



Tank 6, Riser 1



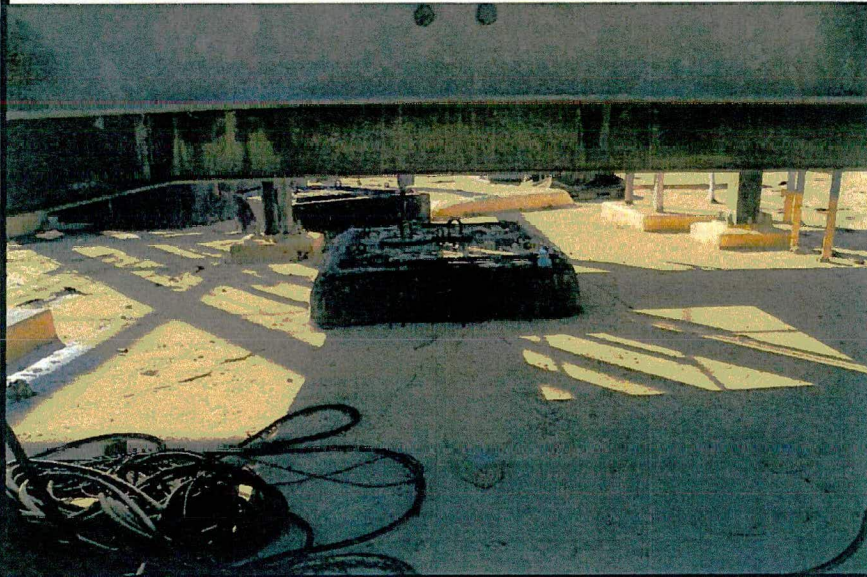
Tank 6, Riser 2



Tank 6, West Annulus Riser



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



Tank 6, Riser 3



Closed Waste Tank Annual Inspection Checklist

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

Work Order Package Number: 01636229 Date: 4/09/18 Rev: 0

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

~~Mark Layton / WDA~~ Kent Rosenberger / WDA Kent H. Rosenberger
~~Joe Pavletich / WDA~~ _____
Bruce Martin / WDA D. C. M. _____

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

Comments:

No Comments. BGM
No comments. KHR

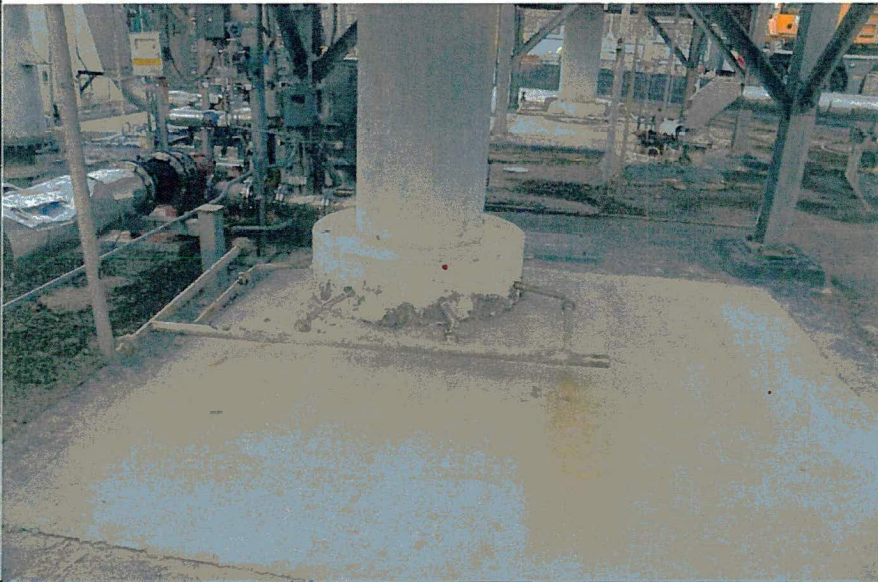
Tank 12, Riser 1



Tank 12, Riser 2



Tank 12, Riser 3



Tank 12, Riser 4

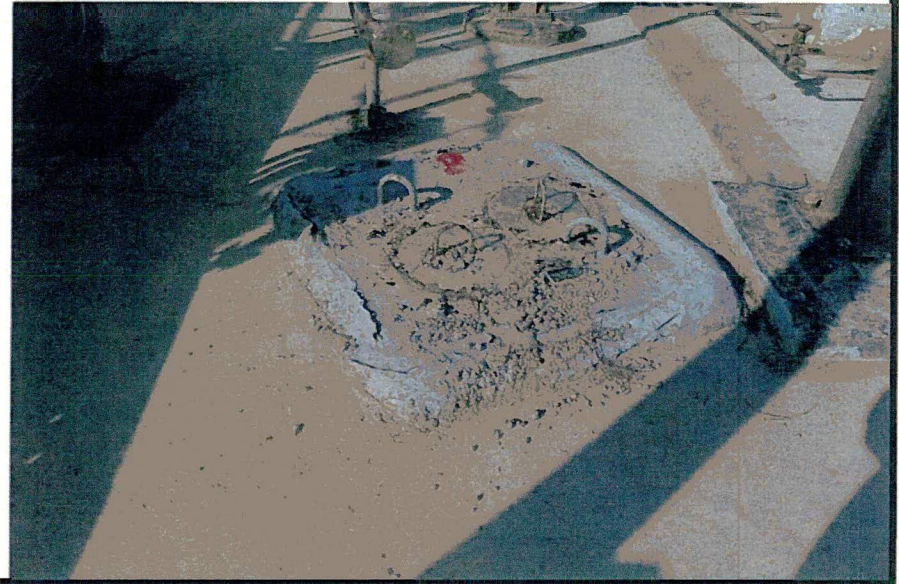


Closed Waste Tank Annual Inspection Checklist Photos

Tank 12, Riser 5



Tank 12, Riser 6



Tank 12, Riser 7

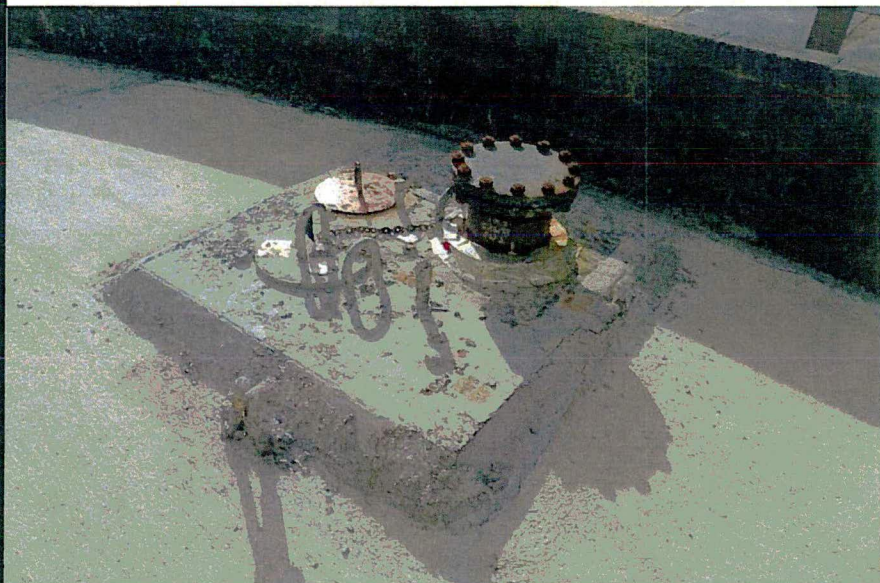


Tank 12, Riser 8



Closed Waste Tank Annual Inspection Checklist Photos

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

PMID: 68926
WO Package Number: 01636229-01
Date: 04/19/2018

Tank 12, Center Riser

Page 16 of 37



Closed Waste Tank Annual Inspection Checklist

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

Work Order Package Number: 01636229 Date: 4/09/18 Rev: 0

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

~~Mark Layton / WDA~~ Kent Rosenberger / WDA Kent H. Rosenberger
~~Joe Pavletich / WDA~~ _____
Bruce Martin / WDA D.A.M. _____

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

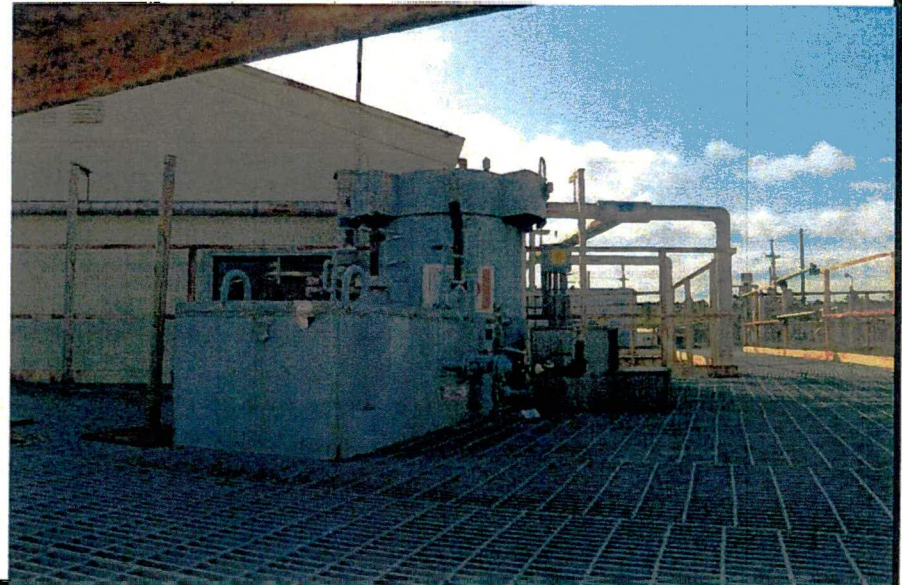
Comments:

No comments. BGM
No comments. KHR

Tank 16, Risers 1 and 2



Tank 16, Riser 2A



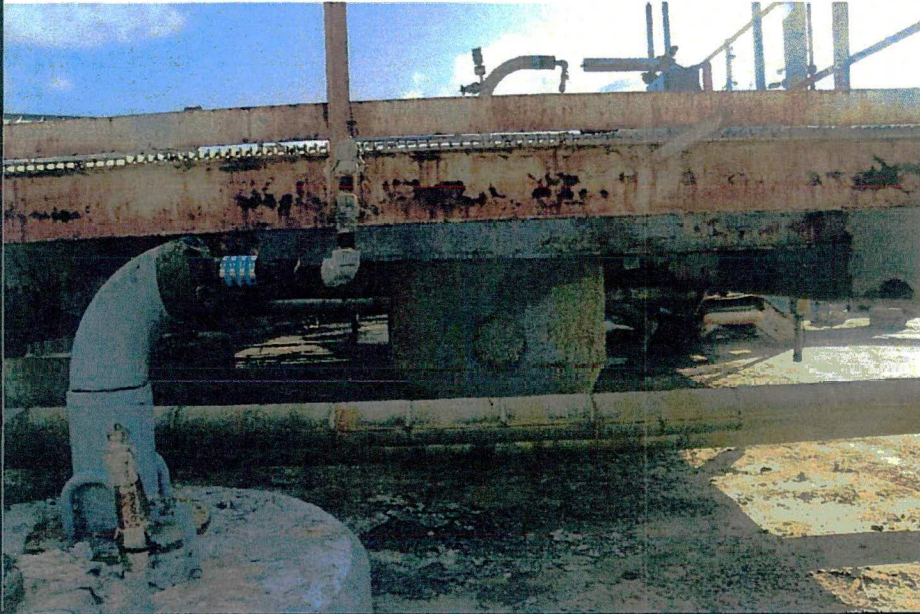
Tank 16, Riser 3



Tank 16, Risers 4 and 4A



Tank 16, Risers 5 and 6



Tank 16, 3'-6" Riser



Tank 16, Riser 8



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



Closed Waste Tank Annual Inspection Checklist

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

Work Order Package Number: 01636229 Date: 4/09/18 Rev: 0

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

Mark Layton / WDA / [Signature] / /
 Joe Pavletich / WDA / [Signature] / /
 Bruce Martin / WDA / [Signature] / /

Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/18</u>					
Excessive cracking or openings in riser caps or tank top	MHL BGM				
Evidence of waste tank elevation changes (sinking or lifting)	MHL BGM				
Washed out/eroded soil or sink holes near tank tops	MHL BGM				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	MHL BGM				
Unstable structure/component with potential to fail and damage tank top	MHL BGM				
Excessive vegetation	MHL BGM				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	MHL BGM				
Other evidence of degradation	MHL BGM				

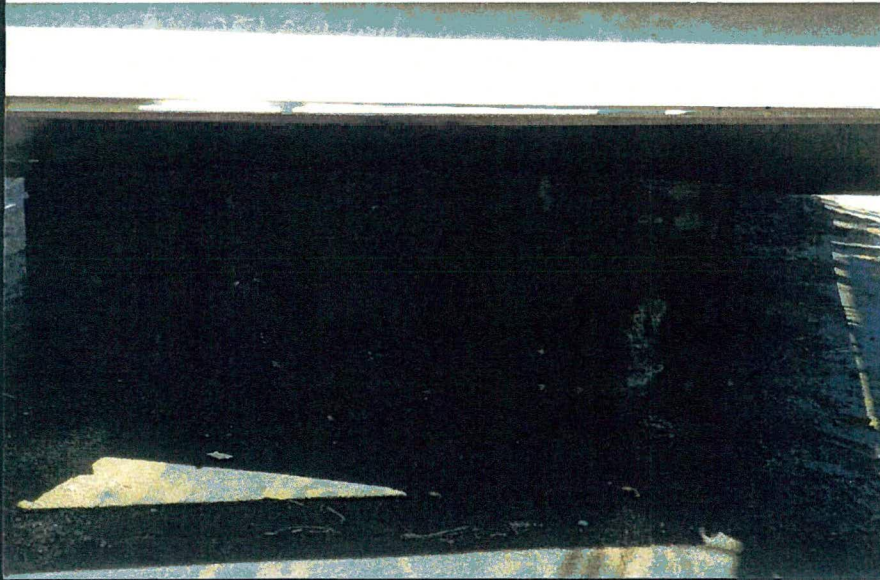
Comments:

Renter Riser irregularities unchanged.

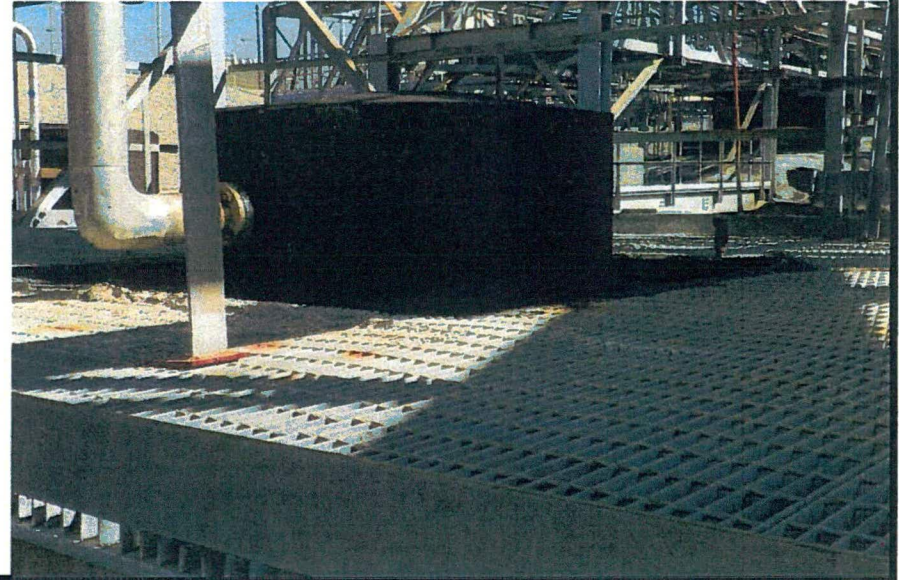
BGM

Closed Waste Tank Annual Inspection Checklist Photos

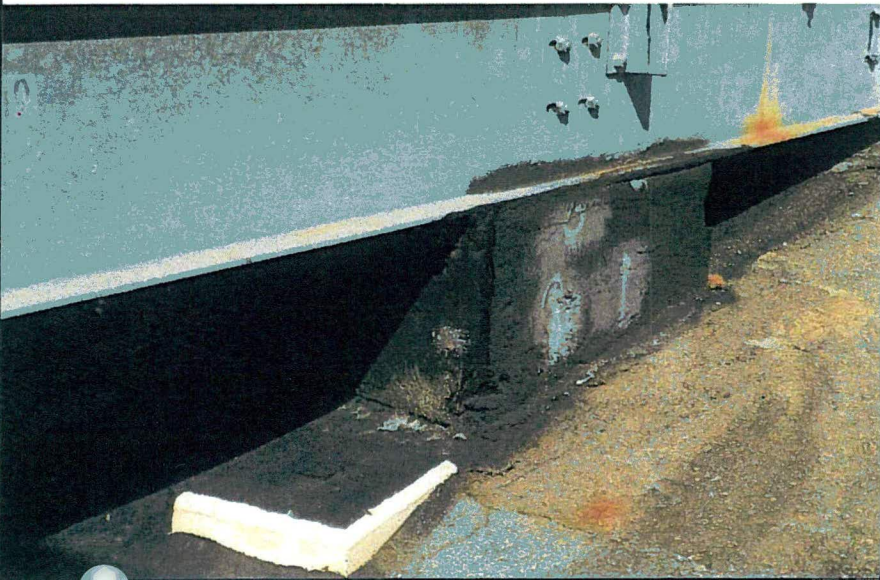
Tank 17, Southeast Riser



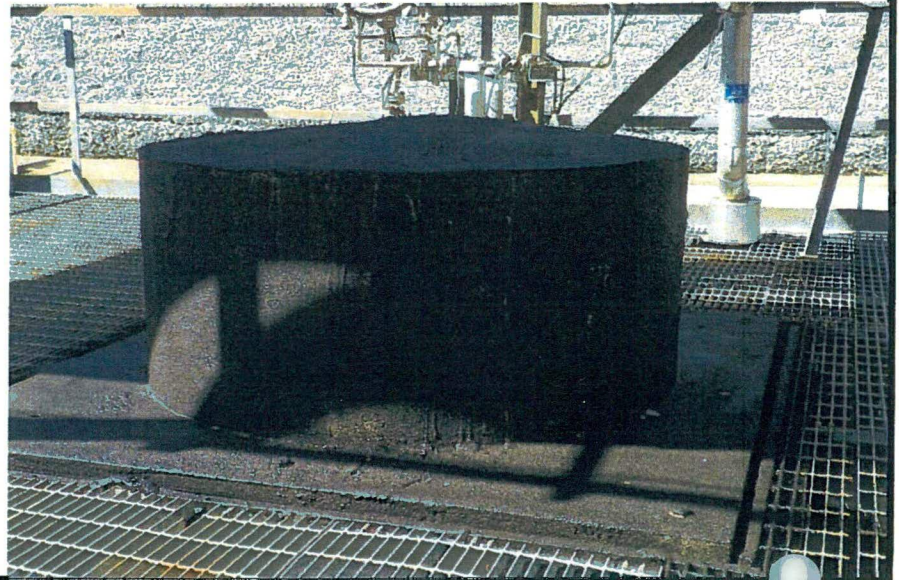
Tank 17, Southeast Riser



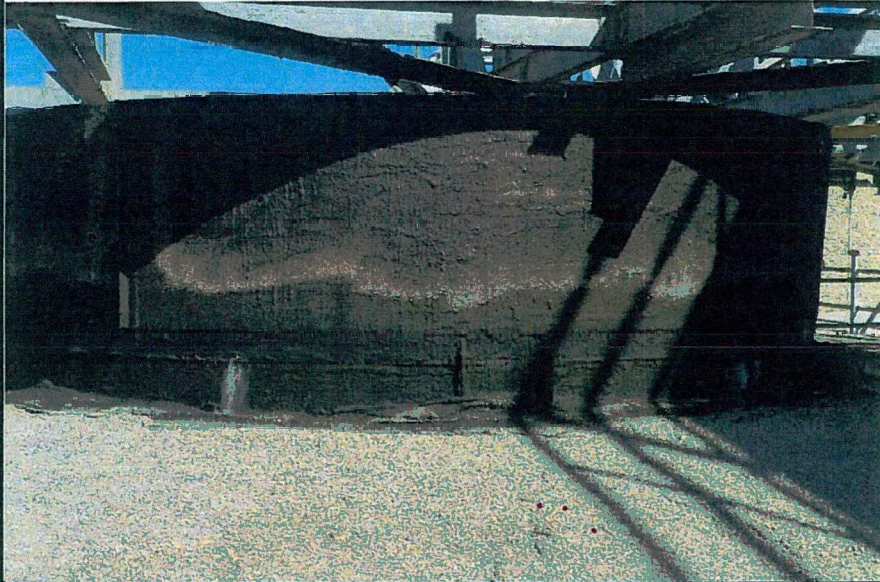
Tank 17, Southwest Riser



Tank 17, Southwest Riser



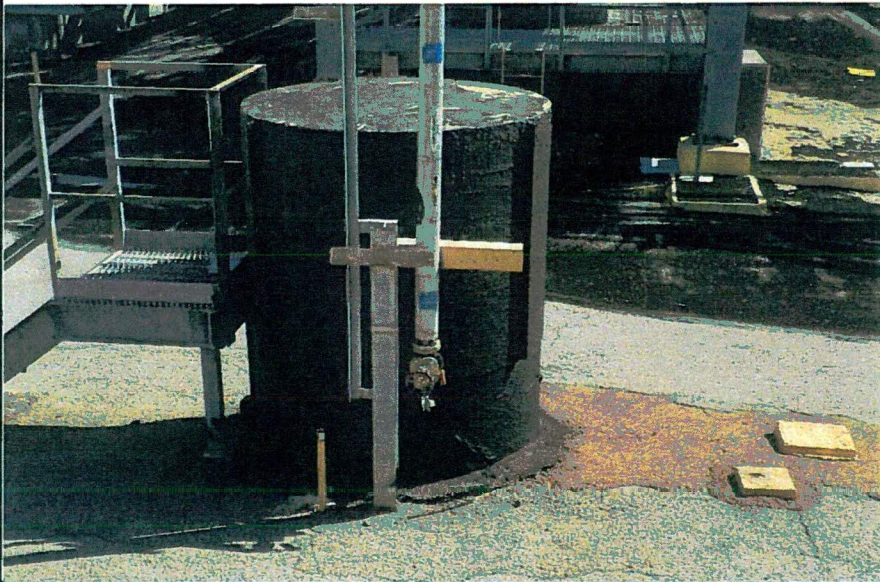
Tank 17, Center Riser



Tank 17, Center Riser



Tank 17, East Riser



Tank 17, Northeast Riser

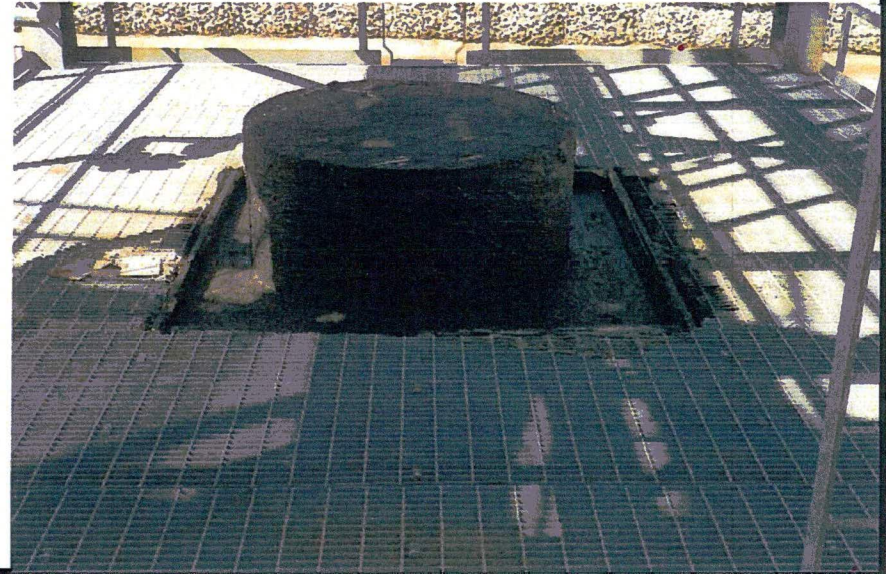


Closed Waste Tank Annual Inspection Checklist Photos

Tank 17, Northwest Riser



Tank 17, West Riser



Tank 17, West Riser



Closed Waste Tank Annual Inspection Checklist

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

Work Order Package Number: 01636229 Date: 4/09/18 Rev: 0

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

Mark Layton / WDA / *[Signature]*
 Joe Pavletich / WDA / *[Signature]*
 Bruce Martin / WDA / *[Signature]*

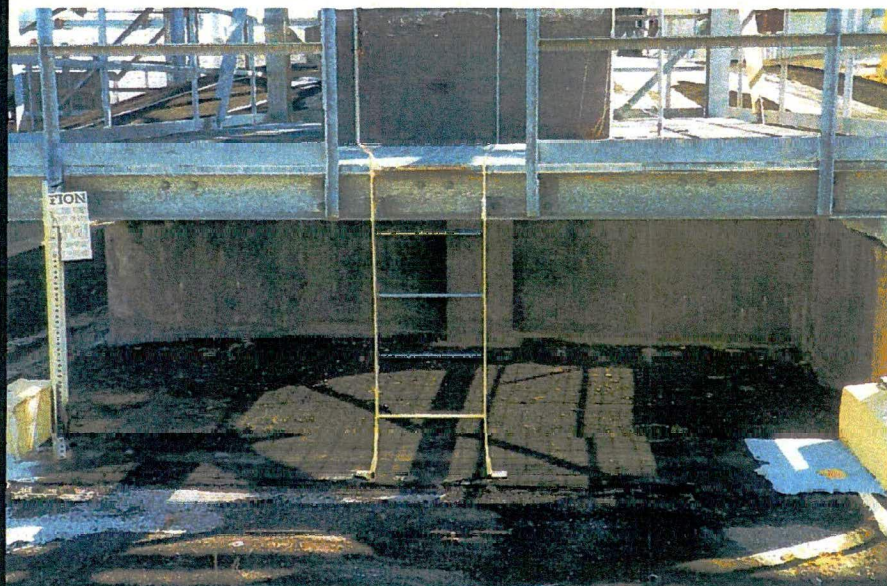
Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/18</u>					
Excessive cracking or openings in riser caps or tank top	<i>MHC</i> <i>PAM</i>				
Evidence of waste tank elevation changes (sinking or lifting)	<i>MHC</i> <i>PAM</i>				
Washed out/eroded soil or sink holes near tank tops	<i>MHC</i> <i>PAM</i>				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<i>MHC</i> <i>PAM</i>				
Unstable structure/component with potential to fail and damage tank top	<i>MHC</i> <i>PAM</i>				
Excessive vegetation	<i>MHC</i> <i>PAM</i>				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<i>MHC</i> <i>PAM</i>				
Other evidence of degradation	<i>MHC</i> <i>PAM</i>				

Comments:

Depression North of East Riser unchanged.

PAM

Tank 18, West Riser



Tank 18, Center Riser



Tank 18, Southwest Riser



Tank 18, Southeast Riser



Tank 18, East Riser



Tank 18, East Riser Depression



Tank 18, Center Riser



Tank 18, Northeast Riser

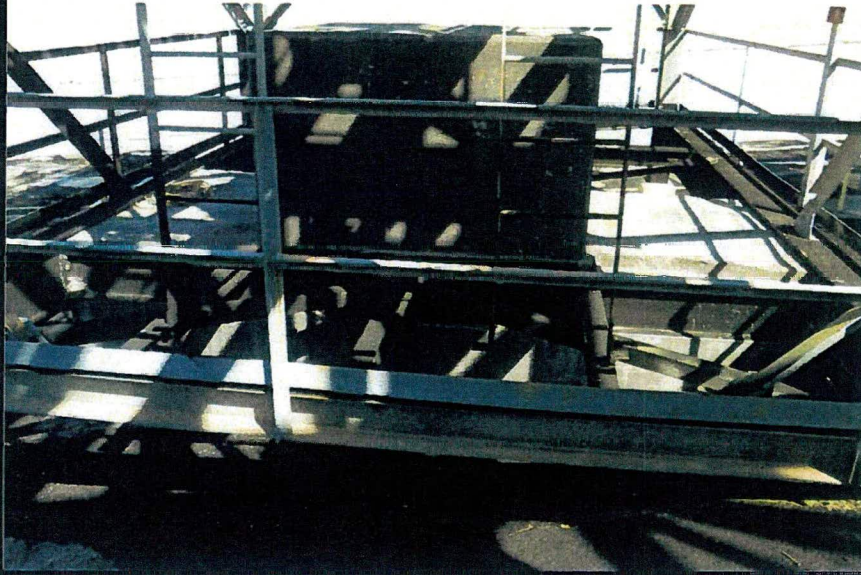


Closed Waste Tank Annual Inspection Checklist Photos

PMID: 68926
WO Package Number: 01636229-01
Date: 04/11/2018

Tank 18, Northwest Riser

Page 28 of 37



Closed Waste Tank Annual Inspection Checklist

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

Work Order Package Number: 01636229 Date: 4/09/18 Rev: 0

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

Mark Layton / WDA / *ML*
 Joe Pavletich / WDA / *Joe Pavletich*
 Bruce Martin / WDA / *B. G. M.*

Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/18</u>					
Excessive cracking or openings in riser caps or tank top	<i>MHC</i> <i>BGM</i>				
Evidence of waste tank elevation changes (sinking or lifting)	<i>MHC</i> <i>BGM</i>				
Washed out/eroded soil or sink holes near tank tops	<i>MHC</i> <i>BGM</i>				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	<i>MHC</i> <i>BGM</i>				
Unstable structure/component with potential to fail and damage tank top	<i>MHC</i> <i>BGM</i>				
Excessive vegetation	<i>MHC</i> <i>BGM</i>				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	<i>MHC</i> <i>BGM</i>				
Other evidence of degradation	<i>MHC</i> <i>BGM</i>				

Comments:

*N W Riser cracks unchanged.
 C Riser degradation unchanged.
 BGM*

Tank 19, Ventilation Riser



Tank 19, Southeast Riser



Tank 19, Southwest Riser



Tank 19, Southwest Riser



Closed Waste Tank Annual Inspection Checklist Photos

Tank 19, West Riser



Tank 19, Center Riser, South Side



Tank 19, Center Riser, East Side



Tank 19, Top Surface of Center Riser



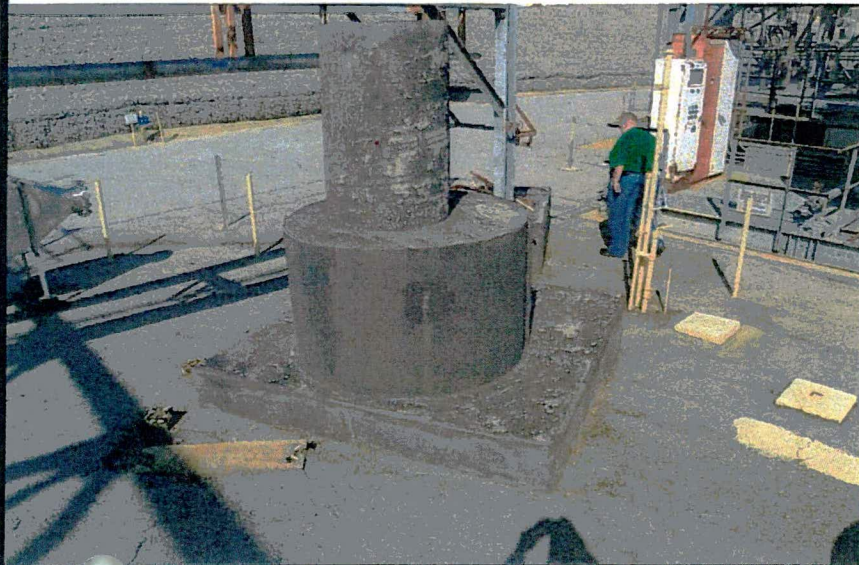
Tank 19, Northeast Riser



Tank 19, North Sample Riser



Tank 19, Northwest Riser

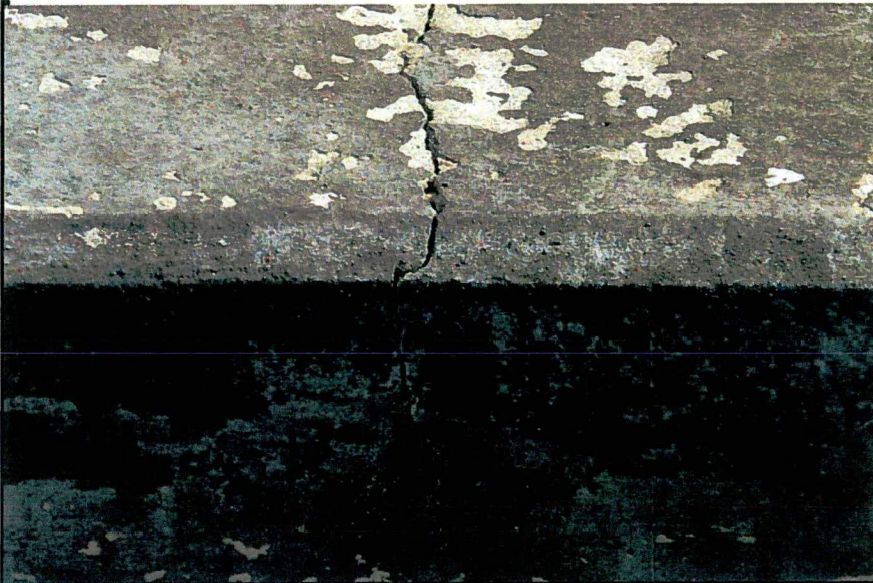


Tank 19, Northwest Riser, North Side



Closed Waste Tank Annual Inspection Checklist Photos

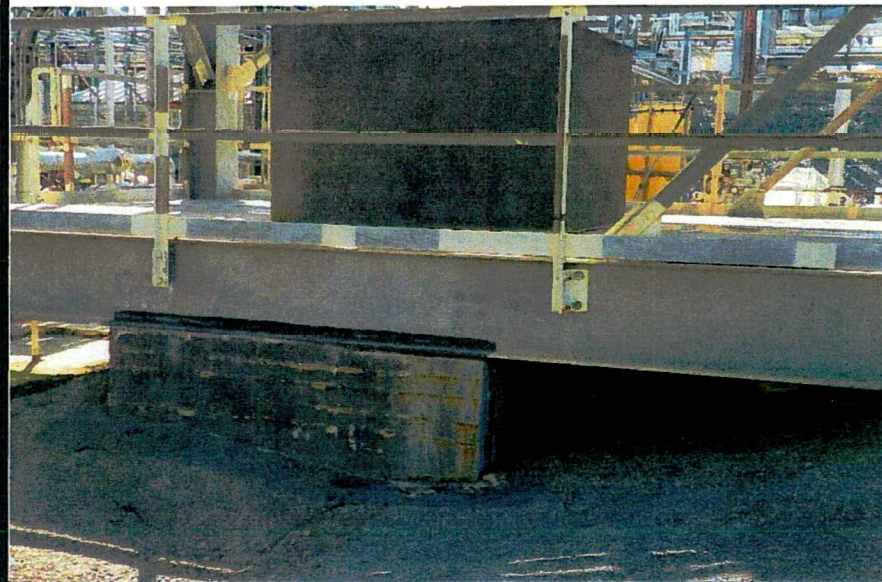
Tank 19, Northwest Riser, West Side



Tank 19, West Riser



Tank 19, East Riser



Closed Waste Tank Annual Inspection Checklist

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

Work Order Package Number: 01636229 Date: 4/09/18 Rev: 0

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

Mark Layton / WDA / *Mh Z*
 Joe Pavletich / WDA / *Joe Pavletich*
 Bruce Martin / WDA / *B. AMT*

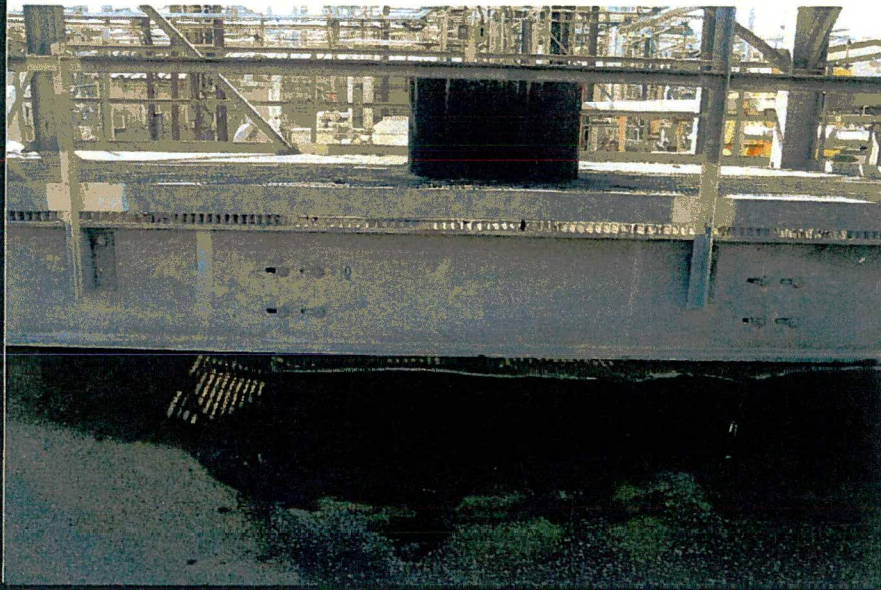
Date of Inspection:	SAT	UNSAT	Description	Corrective Action	Due Date
<u>4/11/18</u>					
Excessive cracking or openings in riser caps or tank top	MHC PAM				
Evidence of waste tank elevation changes (sinking or lifting)	MHC PAM				
Washed out/eroded soil or sink holes near tank tops	MHC PAM				
Excessive accumulation of water on tank tops. Evidence of inadequate drainage or stormwater system degradation.	MHC PAM				
Unstable structure/component with potential to fail and damage tank top	MHC PAM				
Excessive vegetation	MHC PAM				
Indication of leakage of grout material out of risers or waste tank (discoloration or staining)	MHC PAM				
Other evidence of degradation	MHC PAM				

Comments:

NW riser unchanged.

PAM

Tank 20, West Riser



Tank 20, Northwest Riser



Tank 20, Northeast



Tank 20, Northwest Riser

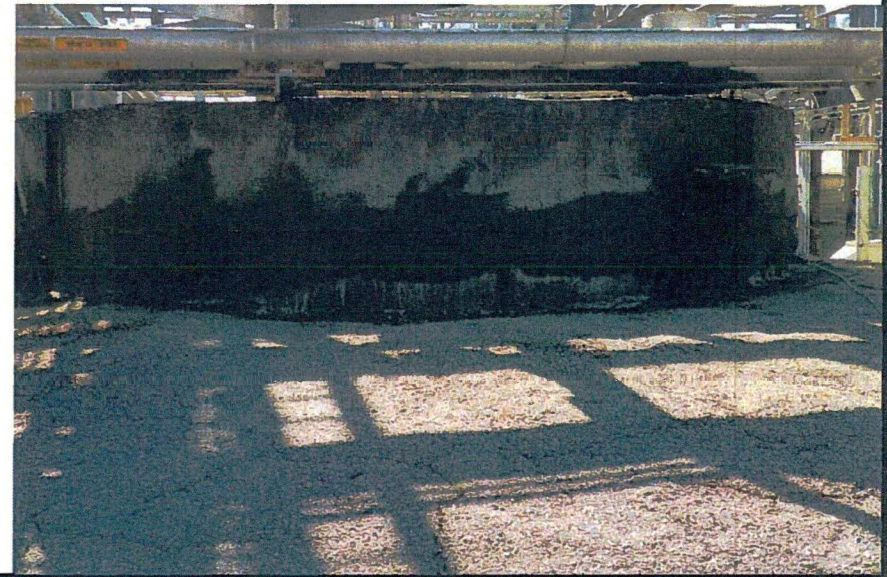


Closed Waste Tank Annual Inspection Checklist Photos

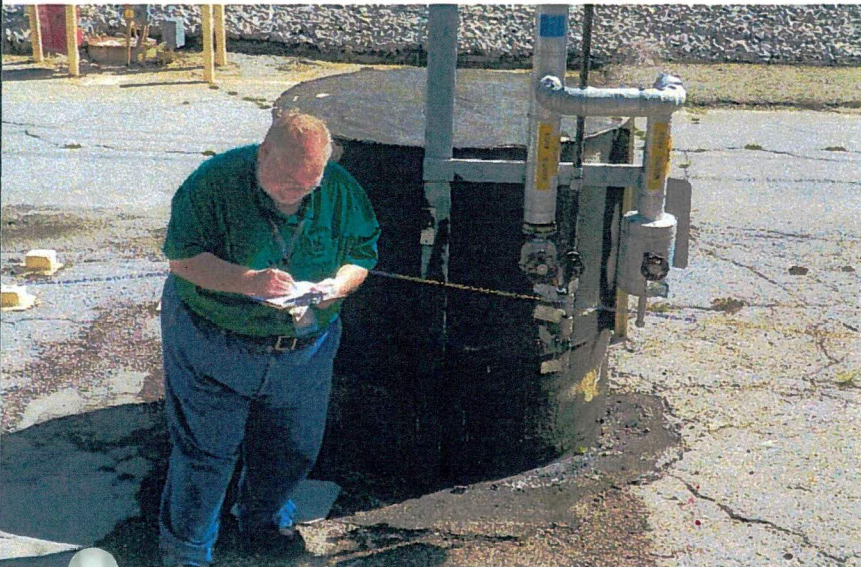
Tank 20, Center Riser



Tank 20, Center Riser



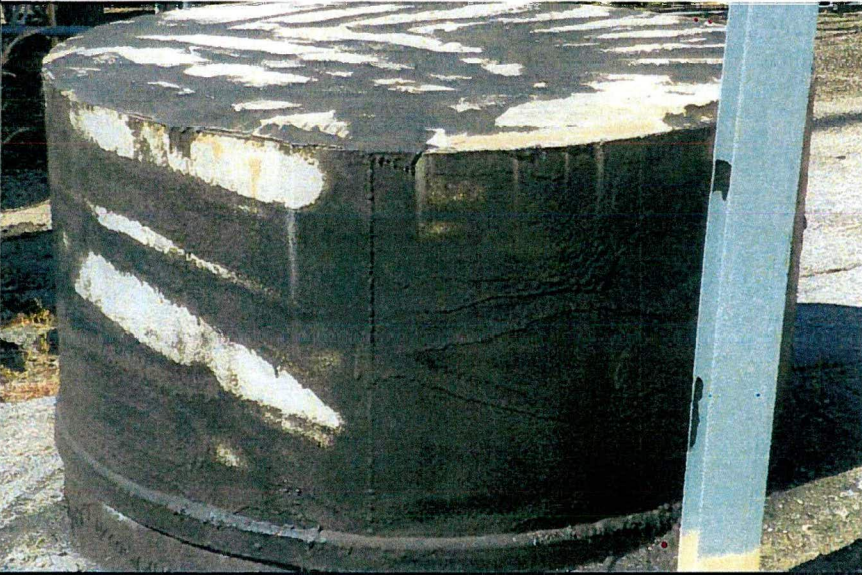
Tank 20, East Riser



Tank 20, Southeast Riser



Tank 20, Southwest Riser



Tank 20, Ventilation Riser

