

From: Igoe, Amber <amber.igoe@dep.state.fl.us>
Sent: Friday, March 08, 2019 8:53 AM
To: Desha, David A. <David.Desha@safety-kleen.com>
Cc: BOSEK, JOHN E <bosek.john@cleanharbors.com>
Subject: RE: Tank UT Notification

Good Morning Gentlemen,

I've spoken with the Department's Tank section and all the necessary information needed is captured in the inspection reports that were provided. Depending on the type of tank, the product that is being stored etc. triggers different notification requirements to the Department but based on the construction of the tanks and what is being stored in the tanks, the notification requirement has been met and there are no additional notifications needed at this time. In addition, the plan of conducting additional thickness measurements in the areas where the subject tank wall thickness measurements were detected at <0.1801" during its next annual UT/STI inspections and in the event any tank is determined to be not fit for use it will be emptied, taken out of service pending certified repairs or replacement and the Department will be notified is approved.

Thank you,
Amber

Amber Igoe, CHMM
Environmental Consultant
Hazardous Waste Program and Permitting
2600 Blair Stone Rd MS 4560
Florida Department of Environmental Protection
Tallahassee, FL 32399
850-245-8783

Amber.igoe@floridadep.gov

Please note: Florida has a broad public records law. Most written communications to or from state employees are public records and may be made available to the public or media upon request. This email communication, and future emails to my attention may therefore be subject to public disclosure.

From: Desha, David A. <David.Desha@safety-kleen.com>
Sent: Thursday, March 7, 2019 5:40 PM
To: Igoe, Amber <amber.igoe@dep.state.fl.us>
Cc: BOSEK, JOHN E <bosek.john@cleanharbors.com>
Subject: Tank UT Notification

Good afternoon Amber,

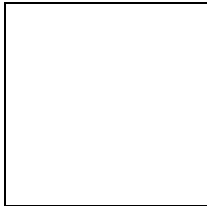
As we discussed during our phone conversation today, the referenced facility recently completed its annual tank thickness testing. The facility received the associated tank testing reports and pursuant to Part II, Subpart B2, Condition 8., of the site's RCRA Part B Permit I provided notice that tanks T103, T104, T105 and T107 have some wall thickness measurements detected at <0.1801". The tank thickness testing was conducted by a qualified STI inspector who has certified that according to SPI SP001 these tanks are fit for use – see attachments.

The facility plans to conduct additional thickness measurements in the areas where the subject tank wall thickness measurements were detected at <0.1801" during its next annual UT/STI inspections. In the event any tank is determined to be not fit for use it will be emptied and taken out of service pending certified repairs or replacement, and the Department will be notified. As stipulated in the RCRA Part B Permit, tanks requiring extensive repairs will require certification and subsequent approval by the Department prior to being returned to service. Please contact me with any questions or comments concerning this matter.

Best regards,

Safety Starts with Me: Live It 3-6-5

David DeSha
Sr. Environmental Compliance Manager
Clean Harbors Environmental Services, Inc.
Mobile: 423.413.1218
Email: desha.david@cleanharbors.com
Web: www.cleanharbors.com





Inspection Services

"People and Technology Creating a Better Environment"

BW - Bartow, FL Facility
Bartow, FL

STI SP001 Formal External Inspection of Tank
103

Inspection Date:
February 13, 2019



Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Tank Information

Unit #:	Tank Farm	Tank #:	103
Construction Date:	1995	Design Temperature:	200°F
In Service Date:	1995	Operating Temperature:	Ambient
Manufacturer:	Bethlehem Steel Corp.	Bottom Material:	Carbon Steel
Manufacturer Serial #:	Unknown	Ring Material:	N/A
Design Standard:	UL	Shell Material:	A-36
Cont. Release Detection Method:	RPB	Roof Material:	Carbon Steel
Release Prevention Barrier:	Concrete	Shell Diameter:	8' 0"
Spill Control:	Dike/Berm	Tank Height:	15' 5"
Type of Foundation:	Concrete	Max. Design Liquid Level:	14' 0"
Orientation:	Vertical	Product Type:	Hazardous Waste
Bottom Type:	Cone	Specific Gravity:	1.000
Tank Insulated:	No	Est. Capacity:	6,601 gal (US)
CML's in Insulation:	NA	Name Plate Condition:	None
No. of Shell Courses:	3	Plates per Shell Course:	1

Next External Inspection:

Next Internal Inspection:

Summary

Conclusion:

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of tank# 103, the tank appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the tank was designed and manufactured to.

Recommendations:

1. Facility personnel should perform periodic inspections in accordance with STI SP001.



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Corrosion Rates

*The below calculations are based on the average measured thickness and previous inspection thicknesses. If there is no previous measured thickness then an assumed or nominal thickness is utilized to establish a corrosion rate. The assumed thickness is based upon industry standard thickness for rolled plate steel. Remaining life could not be determined on courses where the actual thickness was greater than or equal to the past thickness readings.

*Please note that without established Condition Monitoring Location (CML) points, data collection locations may vary between inspections.

Shell Courses

Course	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.22"	0.218"	0.00008"	0.118"	0.1"	738
2	1995	0.217"	0.205"	0.00050"	0.105"	0.1"	105
3	1995	0.19"	0.177"	0.00054"	0.077"	0.1"	72

Cone

Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.371"	0.362"	0.00038"	0.262"	0.1"	345
2	1995	0.375"	0.364"	0.00046"	0.264"	0.1"	287
3	1995	0.392"	0.363"	0.00121"	0.263"	0.1"	109
4	1995	0.384"	0.364"	0.00083"	0.264"	0.1"	159

Roof

Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.322"	0.302"	0.0008"	0.202"	0.1"	127

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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External Visual Inspection

Foundation	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete pad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dike walls / Containment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drain opening in ring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Elastomeric liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Levelness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Seal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signs of settlement around tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Foundation Support	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Base Support Type					Concrete Pylons
Coating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fireproofing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Shell	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bottom projection plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion / Pitting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Moderate corrosion or pitting
Deformation (bulges/buckling)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor Deformation
Floor to shell weld	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Overflow vents / piping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Repair(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Meets minimum requirement
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Cathodic Protection	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Galvanized anode system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Impressed current system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Manways / Nozzles	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Flange condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Repad condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of hatch(s), manway(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of pressure/vacuum vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of screens on vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation seal condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Mixer agitator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Normal venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gauges, Sight glass (damage)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grounding (tightness & corrosion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Handrails	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Safety drop bar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Platforms/Stairs/Ladders	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cage condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete base condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rung condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stairway tread condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Grating	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of grating welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Thinning on grating bars	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tie down clips	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Measured Thicknesses Summary

Shell Courses				
Course	Minimum	Average	Maximum	Standard Deviation
1	0.21"	0.218"	0.232"	0.008"
2	0.19"	0.205"	0.222"	0.009"
3	0.117"	0.177"	0.215"	0.029"

Cone				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.361"	0.362"	0.363"	0.001"
2	0.363"	0.364"	0.364"	0"
3	0.362"	0.363"	0.364"	0.001"
4	0.363"	0.364"	0.365"	0.001"

Roof				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.249"	0.302"	0.336"	0.032"

Measured Thicknesses

Shell Courses				
Course #	0°	90°	180°	270°
1	0.232"	0.220"	0.227"	0.221"
	0.222"	0.210"	0.217"	0.212"
	0.228"	0.210"	0.210"	0.211"
2	0.222"	0.200"	0.190"	0.203"
	0.202"	0.200"	0.200"	0.202"
	0.211"	0.193"	0.216"	0.215"
3	0.178"	0.170"	0.196"	0.200"
	0.153"	0.117"	0.197"	0.202"
	0.138"	0.162"	0.198"	0.215"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Cone

Plate #	0°
1	0.363"
	0.363"
	0.361"
2	0.364"
	0.363"
	0.364"
3	0.362"
	0.364"
	0.363"
4	0.365"
	0.363"
	0.365"

Roof

Plate #	
1	0.249"
	0.318"
	0.304"
	0.336"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Images



Foundation - Dike walls / Containment



Foundation Support - Coating



Roof Appurtenances - Condition of hatch(s), manway(s)



Shell - Attachments



Shell - Coating condition

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Inspection Certification Statement

Tony Gutierrez under direct supervision of Taylor Sudol (Certified Inspector) has performed an STI SP001 Formal External Inspection of Tank# 103. The tank is located at the BW - Bartow, FL Facility facility in Bartow, FL.

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of tank# 103, the tank appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the tank was designed and manufactured to.

The services performed, documentation of inspection, identification of deterioration, and the generation of a report was performed within the generally accepted principles and practices of STI SP001 Standard for the inspection of above ground storage tanks 6th Edition January 2018, and Clean Harbors' Written Practice and Inspection procedures.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment. My status as a Certified Inspector can be verified on the American Petroleum Institute and Steel Tank Institute websites.

API: <http://directorysearch.api.org/Search.aspx>

STI: <https://www.steeltank.com/SP001StandardFAQs/tabid/463/Default.aspx>
Within question #9.

A handwritten signature in black ink, appearing to read "Taylor Sudol".

Taylor Sudol

API 510# 61515

API 570# 71792

API 653# 56977

STI SP001# AC44096

Designated Corporate Level III

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 103

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Inspection Services

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Warranty

Clean Harbors Inspection Services, Inc ("Company") has performed inspection services on the equipment designated by BW - Bartow, FL Facility (owner/operator) and has evaluated its condition based on observations and measurements made by Company's inspectors. While our evaluation accurately describes the condition of the equipment at the time of inspection, the owner/operator must independently assess the inspection information/report provided by Company and any conclusions reached by owner/operator and any action taken or omitted to be taken are the sole responsibility of the owner/operator. With respect to inspection and testing, Company warrants only that the services have been performed in accordance with accepted industry practice. If any such services fail to meet the foregoing warranty, Company shall re-perform the service to the same extent and on the same conditions as the original service.

Company makes no warranty, express or implied, regarding goods or services provided by Company other than those warranties set forth herein. The preceding paragraph sets forth the exclusive remedy for claims based on failure or of defect in materials or services, whether such claim is made in contract or tort (including negligence) and however instituted, and, upon expiration of the warranty period, all such liability shall terminate. The foregoing warranty is exclusive and in lieu of all other warranties, whether written, oral, implied or statutory. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY, nor shall Company be liable for any loss or damage whatsoever by reason of its failure to discover, report, repair or modify latent defects or defects inherent in the design of any equipment inspected. In no event, whether a result of breach of contract, warranty or tort (including negligence) shall Company be liable for any consequential or incidental damages including, but not limited to, loss of profit or revenues, loss of use of equipment tested or services by Company or any associated damage to facilities, down-time costs or claims of other damages.



Inspection Services

"People and Technology Creating a Better Environment"

BW - Bartow, FL Facility
Bartow, FL

STI SP001 Formal External Inspection of Tank
104

Inspection Date:
February 13, 2019



Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Inspection Services

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Tank Information

Unit #:	Tank Farm	Tank #:	104
Construction Date:	1995	Design Temperature:	200°F
In Service Date:	1995	Operating Temperature:	Ambient
Manufacturer:	Bethlehem Steel Corp.	Bottom Material:	Carbon Steel
Manufacturer Serial #:	Unknown	Ring Material:	N/A
Design Standard:	UL	Shell Material:	A-36
Cont. Release Detection Method:	RPB	Roof Material:	Carbon Steel
Release Prevention Barrier:	Concrete	Shell Diameter:	8' 0"
Spill Control:	Dike/Berm	Tank Height:	15' 5"
Type of Foundation:	Concrete	Max. Design Liquid Level:	14' 0"
Orientation:	Vertical	Product Type:	Hazardous Waste
Bottom Type:	Cone	Specific Gravity:	1.000
Tank Insulated:	No	Est. Capacity:	6,601 gal (US)
CML's in Insulation:	NA	Name Plate Condition:	None
No. of Shell Courses:	3	Plates per Shell Course:	1

Next External Inspection: 1 year

Next Internal Inspection: 1 year

Summary

Conclusion:

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of tank# 104, the tank appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the tank was designed and manufactured to.

Recommendations:

1. Facility personnel should perform periodic inspections in accordance with STI SP001.



Inspection Services

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Corrosion Rates

*The below calculations are based on the average measured thickness and previous inspection thicknesses. If there is no previous measured thickness then an assumed or nominal thickness is utilized to establish a corrosion rate. The assumed thickness is based upon industry standard thickness for rolled plate steel. Remaining life could not be determined on courses where the actual thickness was greater than or equal to the past thickness readings.

*Please note that without established Condition Monitoring Location (CML) points, data collection locations may vary between inspections.

Shell Courses							
Course	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.227"	0.225"	0.00008"	0.125"	0.1"	782
2	1995	0.219"	0.217"	0.00008"	0.117"	0.1"	732
3	1995	0.22"	0.202"	0.00075"	0.102"	0.1"	68

Floor							
Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.367"	0.35"	0.00071"	0.250"	0.1"	176
2	1995	0.367"	0.342"	0.00104"	0.242"	0.1"	117
3	1995	0.354"	0.365"	Undetermined	0.265"	0.1"	∞
4	1995	0.361"	0.353"	0.00033"	0.253"	0.1"	384

Roof							
Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.34"	0.305"	0.00146"	0.205"	0.1"	70

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Inspection Services

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External Visual Inspection

Foundation	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete pad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dike walls / Containment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drain opening in ring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Elastomeric liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Levelness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Seal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signs of settlement around tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Foundation Support	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Base Support Type					Concrete Pylons
Coating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fireproofing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Shell	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bottom projection plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion / Pitting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor corrosion or pitting
Deformation (bulges/buckling)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor Deformation
Floor to shell weld	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Overflow vents / piping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Repair(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Meets minimum requirement
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Cathodic Protection	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Galvanized anode system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Impressed current system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Manways / Nozzles	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Flange condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Repad condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of hatch(s), manway(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of pressure/vacuum vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of screens on vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation seal condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Mixer agitator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Normal venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gauges, Sight glass (damage)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grounding (tightness & corrosion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Handrails	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Safety drop bar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Platforms/Stairs/Ladders	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cage condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete base condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rung condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stairway tread condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Grating	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of grating welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Thinning on grating bars	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tie down clips	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Measured Thicknesses Summary

Shell Courses				
Course	Minimum	Average	Maximum	Standard Deviation
1	0.222"	0.225"	0.23"	0.003"
2	0.2"	0.217"	0.232"	0.011"
3	0.164"	0.202"	0.22"	0.016"

Floor				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.349"	0.35"	0.352"	0.001"
2	0.34"	0.342"	0.344"	0.002"
3	0.363"	0.365"	0.367"	0.002"
4	0.351"	0.353"	0.354"	0.001"

Roof				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.29"	0.305"	0.326"	0.013"

Measured Thicknesses

Shell Courses				
Course #	0°	90°	180°	270°
1	0.229"	0.229"	0.230"	0.222"
	0.226"	0.222"	0.224"	0.222"
	0.225"	0.225"	0.222"	0.222"
2	0.209"	0.232"	0.229"	0.200"
	0.219"	0.227"	0.230"	0.211"
	0.208"	0.217"	0.215"	0.202"
3	0.202"	0.200"	0.218"	0.180"
	0.192"	0.213"	0.217"	0.200"
	0.201"	0.216"	0.220"	0.164"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Cone

Plate #	0°
1	0.350"
	0.349"
	0.352"
2	0.340"
	0.344"
	0.341"
3	0.366"
	0.367"
	0.363"
4	0.354"
	0.353"
	0.351"

Roof

Plate #	
1	0.304"
	0.300"
	0.290"
	0.326"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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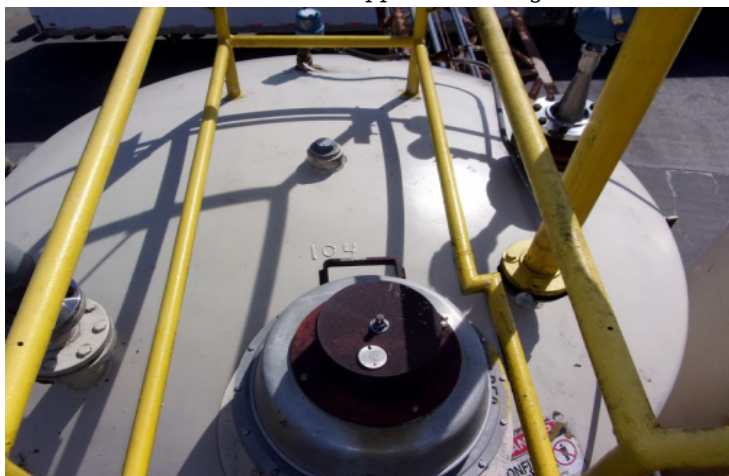
Images



Foundation Support - Coating



Manways / Nozzles - Bolting condition



Roof Appurtenances - Condition of hatch(s), manway(s)



Shell - Coating condition

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Inspection Certification Statement

Tony Gutierrez under direct supervision of Taylor Sudol (Certified Inspector) has performed an STI SP001 Formal External Inspection of Tank# 104. The tank is located at the BW - Bartow, FL Facility facility in Bartow, FL.

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of tank# 104, the tank appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the tank was designed and manufactured to.

The services performed, documentation of inspection, identification of deterioration, and the generation of a report was performed within the generally accepted principles and practices of STI SP001 Standard for the inspection of above ground storage tanks 6th Edition January 2018, and Clean Harbors' Written Practice and Inspection procedures.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment. My status as a Certified Inspector can be verified on the American Petroleum Institute and Steel Tank Institute websites.

API: <http://directorysearch.api.org/Search.aspx>

STI: <https://www.steeltank.com/SP001StandardFAQs/tabid/463/Default.aspx>
Within question #9.

A handwritten signature in black ink, appearing to read "Taylor Sudol".

Taylor Sudol

API 510# 61515

API 570# 71792

API 653# 56977

STI SP001# AC44096

Designated Corporate Level III

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 104

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Inspection Services

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Warranty

Clean Harbors Inspection Services, Inc ("Company") has performed inspection services on the equipment designated by BW - Bartow, FL Facility (owner/operator) and has evaluated its condition based on observations and measurements made by Company's inspectors. While our evaluation accurately describes the condition of the equipment at the time of inspection, the owner/operator must independently assess the inspection information/report provided by Company and any conclusions reached by owner/operator and any action taken or omitted to be taken are the sole responsibility of the owner/operator. With respect to inspection and testing, Company warrants only that the services have been performed in accordance with accepted industry practice. If any such services fail to meet the foregoing warranty, Company shall re-perform the service to the same extent and on the same conditions as the original service.

Company makes no warranty, express or implied, regarding goods or services provided by Company other than those warranties set forth herein. The preceding paragraph sets forth the exclusive remedy for claims based on failure or of defect in materials or services, whether such claim is made in contract or tort (including negligence) and however instituted, and, upon expiration of the warranty period, all such liability shall terminate. The foregoing warranty is exclusive and in lieu of all other warranties, whether written, oral, implied or statutory. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY, nor shall Company be liable for any loss or damage whatsoever by reason of its failure to discover, report, repair or modify latent defects or defects inherent in the design of any equipment inspected. In no event, whether a result of breach of contract, warranty or tort (including negligence) shall Company be liable for any consequential or incidental damages including, but not limited to, loss of profit or revenues, loss of use of equipment tested or services by Company or any associated damage to facilities, down-time costs or claims of other damages.



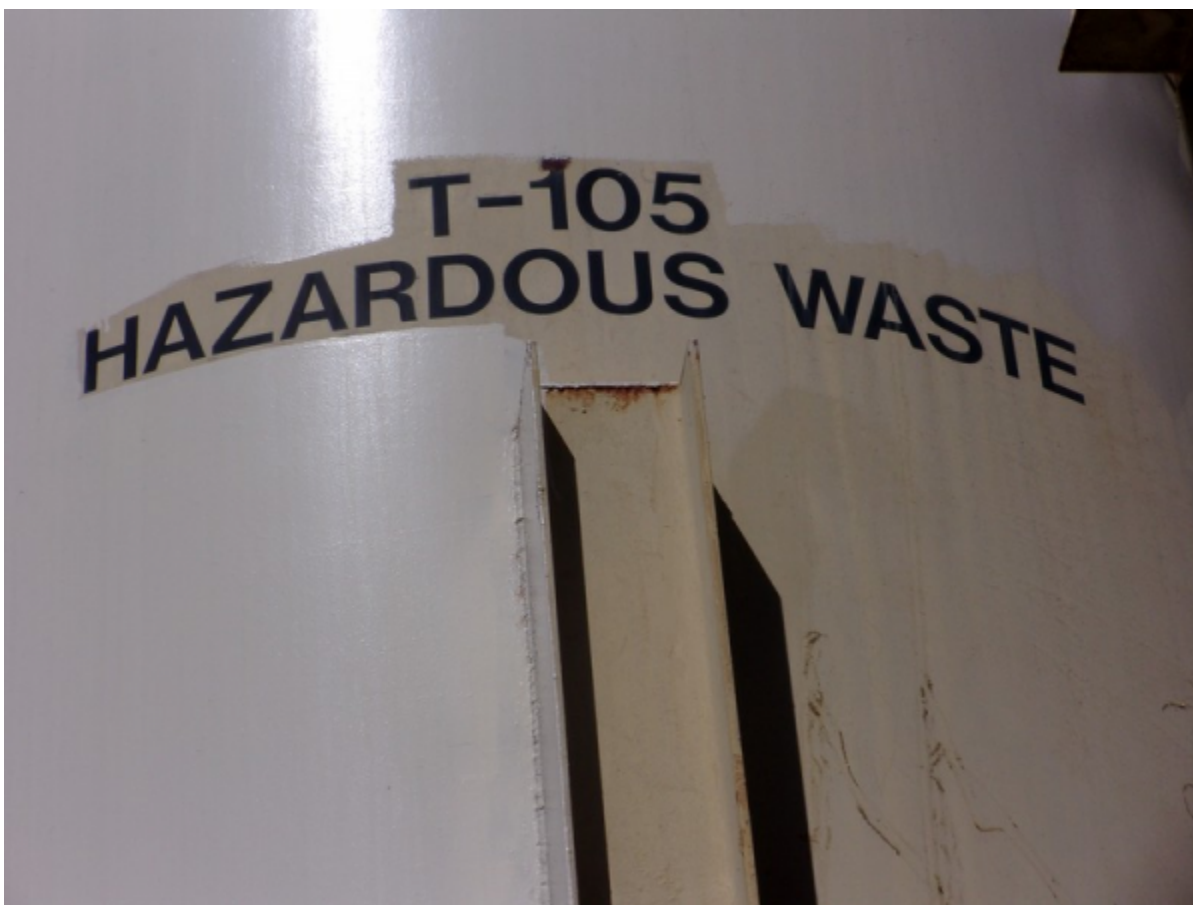
Inspection Services

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BW - Bartow, FL Facility
Bartow, FL

STI SP001 Formal External Inspection of Tank
105

Inspection Date:
February 13, 2019



Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Inspection Services

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Tank Information

Unit #:	Tank Farm	Tank #:	105
Construction Date:	1995	Design Temperature:	200°F
In Service Date:	1995	Operating Temperature:	Ambient
Manufacturer:	Bethlehem Steel Corp.	Bottom Material:	Carbon Steel
Manufacturer Serial #:	Unknown	Ring Material:	N/A
Design Standard:	UL	Shell Material:	A-36
Cont. Release Detection Method:	RPB	Roof Material:	Carbon Steel
Release Prevention Barrier:	Concrete	Shell Diameter:	8' 0"
Spill Control:	Dike/Berm	Tank Height:	15' 5"
Type of Foundation:	Concrete	Max. Design Liquid Level:	14' 0"
Orientation:	Vertical	Product Type:	Hazardous Waste
Bottom Type:	Cone	Specific Gravity:	1.000
Tank Insulated:	No	Est. Capacity:	6,601 gal (US)
CML's in Insulation:	NA	Name Plate Condition:	None
No. of Shell Courses:	3	Plates per Shell Course:	1

Next External Inspection: 1 year

Next Internal Inspection: 1 year

Summary

Conclusion:

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of # 105, the appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the was designed and manufactured to.

Recommendations:

1. Facility personnel should perform periodic inspections in accordance with STI SP001.



Inspection Services

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Corrosion Rates

*The below calculations are based on the average measured thickness and previous inspection thicknesses. If there is no previous measured thickness then an assumed or nominal thickness is utilized to establish a corrosion rate. The assumed thickness is based upon industry standard thickness for rolled plate steel. Remaining life could not be determined on courses where the actual thickness was greater than or equal to the past thickness readings.

*Please note that without established Condition Monitoring Location (CML) points, data collection locations may vary between inspections.

Shell Courses

Course	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.23"	0.225"	0.00021"	0.125"	0.1"	298
2	1995	0.208"	0.205"	0.00013"	0.105"	0.1"	404
3	1995	0.217"	0.214"	0.00013"	0.114"	0.1"	439

Cone

Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.365"	0.355"	0.00042"	0.255"	0.1"	304
2	1995	0.369"	0.355"	0.00058"	0.255"	0.1"	220
3	1995	0.367"	0.35"	0.00071"	0.250"	0.1"	176
4	1995	0.365"	0.362"	0.00013"	0.262"	0.1"	1008

Roof

Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	1995	0.351"	0.322"	0.0012"	0.222"	0.1"	93

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Inspection Services

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External Visual Inspection

Foundation	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete pad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dike walls / Containment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drain opening in ring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Elastomeric liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Levelness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Seal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signs of settlement around tank	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Site drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Foundation Support	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Base Support Type					Concrete Pylons
Coating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fireproofing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Shell	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bottom projection plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion / Pitting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor corrosion or pitting
Deformation (bulges/buckling)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor Deformation
Floor to shell weld	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Overflow vents / piping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Repair(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Meets minimum requirement
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Cathodic Protection	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Galvanized anode system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Impressed current system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Manways / Nozzles	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Flange condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Repad condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of hatch(s), manway(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of pressure/vacuum vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of screens on vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation seal condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Mixer agitator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Normal venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gauges, Sight glass (damage)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grounding (tightness & corrosion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Handrails	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Safety drop bar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Platforms/Stairs/Ladders	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cage condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete base condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rung condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stairway tread condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Grating	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of grating welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Thinning on grating bars	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tie down clips	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Measured Thicknesses Summary

Shell Courses				
Course	Minimum	Average	Maximum	Standard Deviation
1	0.212"	0.225"	0.232"	0.006"
2	0.177"	0.205"	0.232"	0.016"
3	0.152"	0.214"	0.247"	0.026"

Cone				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.354"	0.355"	0.356"	0.001"
2	0.354"	0.355"	0.356"	0.001"
3	0.349"	0.35"	0.352"	0.001"
4	0.36"	0.362"	0.364"	0.002"

Roof				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.289"	0.322"	0.338"	0.019"

Measured Thicknesses

Shell Courses				
Course #	0°	90°	180°	270°
1	0.232"	0.224"	0.232"	0.212"
	0.222"	0.226"	0.232"	0.216"
	0.227"	0.229"	0.229"	0.218"
2	0.232"	0.189"	0.226"	0.206"
	0.196"	0.177"	0.225"	0.197"
	0.192"	0.199"	0.216"	0.203"
3	0.214"	0.200"	0.219"	0.212"
	0.247"	0.228"	0.152"	0.219"
	0.244"	0.232"	0.176"	0.220"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Cone

Plate #	0°
1	0.354"
	0.356"
	0.355"
2	0.356"
	0.355"
	0.354"
3	0.350"
	0.349"
	0.352"
4	0.364"
	0.360"
	0.361"

Roof

Plate #	
1	0.325"
	0.338"
	0.289"
	0.334"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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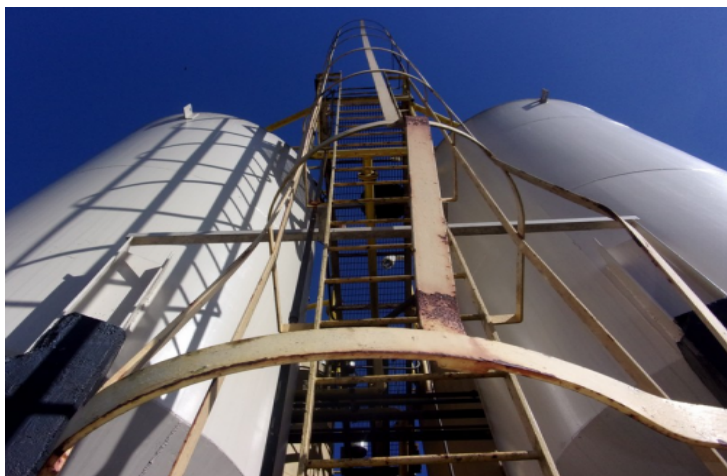
Images



Foundation - Concrete condition



Foundation Support - Coating



Platforms/Stairs/Ladders - Cage condition



Platforms/Stairs/Ladders - Coating condition



Roof Appurtenances - Condition of hatch(s), manway(s)



Shell - Coating condition

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Inspection Certification Statement

Tony Gutierrez under direct supervision of Taylor Sudol (Certified Inspector) has performed an STI SP001 Formal External Inspection of Tank# 105. The tank is located at the BW - Bartow, FL Facility facility in Bartow, FL.

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of # 105, the appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the was designed and manufactured to.

The services performed, documentation of inspection, identification of deterioration, and the generation of a report was performed within the generally accepted principles and practices of STI SP001 Standard for the inspection of above ground storage tanks 6th Edition January 2018, and Clean Harbors' Written Practice and Inspection procedures.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment. My status as a Certified Inspector can be verified on the American Petroleum Institute and Steel Tank Institute websites.

API: <http://directorysearch.api.org/Search.aspx>

STI: <https://www.steeltank.com/SP001StandardFAQs/tabid/463/Default.aspx>
Within question #9.

A handwritten signature in black ink, appearing to read "Taylor Sudol".

Taylor Sudol

API 510# 61515

API 570# 71792

API 653# 56977

STI SP001# AC44096

Designated Corporate Level III

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 105

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Warranty

Clean Harbors Inspection Services, Inc ("Company") has performed inspection services on the equipment designated by BW - Bartow, FL Facility (owner/operator) and has evaluated its condition based on observations and measurements made by Company's inspectors. While our evaluation accurately describes the condition of the equipment at the time of inspection, the owner/operator must independently assess the inspection information/report provided by Company and any conclusions reached by owner/operator and any action taken or omitted to be taken are the sole responsibility of the owner/operator. With respect to inspection and testing, Company warrants only that the services have been performed in accordance with accepted industry practice. If any such services fail to meet the foregoing warranty, Company shall re-perform the service to the same extent and on the same conditions as the original service.

Company makes no warranty, express or implied, regarding goods or services provided by Company other than those warranties set forth herein. The preceding paragraph sets forth the exclusive remedy for claims based on failure or of defect in materials or services, whether such claim is made in contract or tort (including negligence) and however instituted, and, upon expiration of the warranty period, all such liability shall terminate. The foregoing warranty is exclusive and in lieu of all other warranties, whether written, oral, implied or statutory. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY, nor shall Company be liable for any loss or damage whatsoever by reason of its failure to discover, report, repair or modify latent defects or defects inherent in the design of any equipment inspected. In no event, whether a result of breach of contract, warranty or tort (including negligence) shall Company be liable for any consequential or incidental damages including, but not limited to, loss of profit or revenues, loss of use of equipment tested or services by Company or any associated damage to facilities, down-time costs or claims of other damages.



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BW - Bartow, FL Facility
Bartow, FL

STI SP001 Formal External Inspection of Tank
107

Inspection Date:
February 13, 2019



Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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Tank Information

Unit #:	Tank Farm	Tank #:	107
Construction Date:	2006	Design Temperature:	200°F
In Service Date:	2006	Operating Temperature:	Ambient
Manufacturer:	Bethlehem Steel Corp.	Bottom Material:	Carbon Steel
Manufacturer Serial #:	Unknown	Ring Material:	N/A
Design Standard:	UL	Shell Material:	Carbon Steel Gr Unknown
Cont. Release Detection Method:	RPB	Roof Material:	Carbon Steel
Release Prevention Barrier:	Concrete	Shell Diameter:	8' 0"
Spill Control:	Dike/Berm	Tank Height:	15' 5"
Type of Foundation:	Concrete	Max. Design Liquid Level:	14' 0"
Orientation:	Vertical	Product Type:	Hazardous Waste
Bottom Type:	Cone	Specific Gravity:	1.000
Tank Insulated:	No	Est. Capacity:	6,601 gal (US)
CML's in Insulation:	NA	Name Plate Condition:	None
No. of Shell Courses:	4	Plates per Shell Course:	1

Next External Inspection: 1 year

Next Internal Inspection: 4 years

Summary

Conclusion:

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of # 107, the appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the was designed and manufactured to.

Recommendations:

1. Facility personnel should perform periodic inspections in accordance with STI SP001.

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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Corrosion Rates

*The below calculations are based on the average measured thickness and previous inspection thicknesses. If there is no previous measured thickness then an assumed or nominal thickness is utilized to establish a corrosion rate. The assumed thickness is based upon industry standard thickness for rolled plate steel. Remaining life could not be determined on courses where the actual thickness was greater than or equal to the past thickness readings.

*Please note that without established Condition Monitoring Location (CML) points, data collection locations may vary between inspections.

Shell Courses							
Course	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	2006	0.241"	0.237"	0.00031"	0.137"	0.1"	221
2	2006	0.242"	0.22"	0.00169"	0.120"	0.1"	36

Cone							
Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	2006	0.364"	0.354"	0.00077"	0.254"	0.1"	165
2	2006	0.377"	0.353"	0.00185"	0.253"	0.1"	69
3	2006	0.373"	0.343"	0.00231"	0.243"	0.1"	53
4	2006	0.357"	0.344"	0.00100"	0.244"	0.1"	122

Roof							
Plate	Year Of Construction	2015 Measured Thickness	2019 Measured Thickness	Corrosion Rate (in./yr.)	Corrosion Allowance	Minimum Required	Remaining Life (yrs.)
1	2006	0.357"	0.318"	0.003"	0.218"	0.1"	37

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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External Visual Inspection

Foundation	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete pad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Dike walls / Containment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drain opening in ring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Elastomeric liner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Levelness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Seal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Signs of settlement around tank	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Site drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Foundation Support	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Base Support Type					Concrete Pylons
Coating	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fireproofing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Shell	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bottom projection plate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion / Pitting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor corrosion or pitting
Deformation (bulges/buckling)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Minor Deformation
Floor to shell weld	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Overflow vents / piping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Repair(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Cathodic Protection	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Galvanized anode system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Impressed current system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Manways / Nozzles	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Flange condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Repad condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Proper drainage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
UT measurements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Roof Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of hatch(s), manway(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of pressure/vacuum vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of screens on vents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Emergency venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Insulation seal condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Mixer agitator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Normal venting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appurtenances	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Anchors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Gauges, Sight glass (damage)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grounding (tightness & corrosion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Handrails	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Safety drop bar	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Platforms/Stairs/Ladders	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Attachment weld condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bolting condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cage condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Concrete base condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosion, pitting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rung condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stairway tread condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Grating	General Condition				
Item	Acceptable	Findings	N/I	N/A	Comments
Coating condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Condition of grating welds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Thinning on grating bars	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tie down clips	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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Inspection Services

"People and Technology Creating a Better Environment"

Measured Thicknesses Summary

Shell Courses				
Course	Minimum	Average	Maximum	Standard Deviation
1	0.228"	0.237"	0.24"	0.004"
2	0.176"	0.22"	0.24"	0.021"

Cone				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.352"	0.354"	0.356"	0.002"
2	0.351"	0.353"	0.354"	0.001"
3	0.34"	0.343"	0.344"	0.002"
4	0.341"	0.344"	0.348"	0.003"

Roof				
Plate	Minimum	Average	Maximum	Standard Deviation
1	0.312"	0.318"	0.321"	0.003"

Measured Thicknesses

Shell Courses				
Course #	0°	90°	180°	270°
1	0.229"	0.238"	0.236"	0.228"
	0.239"	0.240"	0.238"	0.240"
	0.240"	0.234"	0.240"	0.237"
	0.237"	0.240"	0.240"	0.238"
2	0.238"	0.236"	0.234"	0.234"
	0.238"	0.238"	0.230"	0.212"
	0.200"	0.240"	0.215"	0.200"
	0.176"	0.240"	0.204"	0.180"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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Cone

Plate #	0°
1	0.356"
	0.353"
	0.352"
2	0.354"
	0.353"
	0.351"
3	0.344"
	0.340"
	0.344"
4	0.341"
	0.348"
	0.342"

Roof

Plate #	
1	0.312"
	0.319"
	0.319"
	0.321"

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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Images



Foundation Support - Coating



Roof Appurtenances - Condition of hatch(s), manway(s)



Shell - Coating condition



Shell - Corrosion / Pitting

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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Inspection Services

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Inspection Certification Statement

Tony Gutierrez under direct supervision of Taylor Sudol (Certified Inspector) has performed an STI SP001 Formal External Inspection of Tank# 107. The tank is located at the BW - Bartow, FL Facility facility in Bartow, FL.

The thickness on the upper shell course falls below the Clean Harbors Florida RCRA permit minimum thickness which requires notification to FLDEP, but does not fall below the calculated minimum required thickness to remain in operation. As determined by the condition found during the inspection of # 107, the appears to be in suitable condition at the time of this inspection for continued operation under normal operating parameters that the was designed and manufactured to.

The services performed, documentation of inspection, identification of deterioration, and the generation of a report was performed within the generally accepted principles and practices of STI SP001 Standard for the inspection of above ground storage tanks 6th Edition January 2018, and Clean Harbors' Written Practice and Inspection procedures.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment. My status as a Certified Inspector can be verified on the American Petroleum Institute and Steel Tank Institute websites.

API: <http://directorysearch.api.org/Search.aspx>

STI: <https://www.steeltank.com/SP001StandardFAQs/tabid/463/Default.aspx>
Within question #9.

A handwritten signature in black ink, appearing to read "Taylor Sudol".

Taylor Sudol

API 510# 61515

API 570# 71792

API 653# 56977

STI SP001# AC44096

Designated Corporate Level III

Site: BW - Bartow, FL Facility; Job #: 1900005965 - 69; Tank #: 107

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Inspection Services

"People and Technology Creating a Better Environment"

Warranty

Clean Harbors Inspection Services, Inc ("Company") has performed inspection services on the equipment designated by BW - Bartow, FL Facility (owner/operator) and has evaluated its condition based on observations and measurements made by Company's inspectors. While our evaluation accurately describes the condition of the equipment at the time of inspection, the owner/operator must independently assess the inspection information/report provided by Company and any conclusions reached by owner/operator and any action taken or omitted to be taken are the sole responsibility of the owner/operator. With respect to inspection and testing, Company warrants only that the services have been performed in accordance with accepted industry practice. If any such services fail to meet the foregoing warranty, Company shall re-perform the service to the same extent and on the same conditions as the original service.

Company makes no warranty, express or implied, regarding goods or services provided by Company other than those warranties set forth herein. The preceding paragraph sets forth the exclusive remedy for claims based on failure or of defect in materials or services, whether such claim is made in contract or tort (including negligence) and however instituted, and, upon expiration of the warranty period, all such liability shall terminate. The foregoing warranty is exclusive and in lieu of all other warranties, whether written, oral, implied or statutory. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY, nor shall Company be liable for any loss or damage whatsoever by reason of its failure to discover, report, repair or modify latent defects or defects inherent in the design of any equipment inspected. In no event, whether a result of breach of contract, warranty or tort (including negligence) shall Company be liable for any consequential or incidental damages including, but not limited to, loss of profit or revenues, loss of use of equipment tested or services by Company or any associated damage to facilities, down-time costs or claims of other damages.