

Fratello & Amico, Inc.

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January 26, 2019

Mr. Bernard W. Koblinsky
Project Manager/99th – Region 4
CMI Management, Inc.
5285 Shawnee Road, Suite 510
Alexandria, VA 22312

RE: CSS #14933, WV038, Underground Fuel Oil Storage Tanks Additional Investigation and Diagnosis Specific to the 2,500gal Interstice Only, Romney USARC, 11 Industrial Park Road, Romney, WV 26757

Dear Mr. Koblinsky,

We are pleased to submit the following proposal for Additional Investigation based on recent discoveries.

Background: We visited the facility on Thursday, January 24, 2019 to evacuate and test the interstice of the 4,000 gallon fuel oil storage tank. The test failed and we notified CMI as well as ENV and OPS personnel that oversee the facility. This 4,000 gallon tank is at risk of failure and plans for replacement should be scheduled ASAP.

Other issues remain at the center, specifically the monitoring panels and sensors for both USTs. Obviously, the monitoring equipment for the 4,000 would be replaced when the tank is replaced, but the panel and level sensor for the 2,500 should be addressed sooner than later, providing the tank is in better shape than the 4,000.

That said, since the 4,000 and the 2,500 were installed at the same time, and the 4,000 appears to have lost the integrity of its outer shell, it would make sense to test the interstice of the 2,500 before spending additional funds repairing and replacing the software and sensors.

The proposal below will test the interstice of the 2,500 gallon UST, and if it passes, we will flush the interstice with corrosion inhibitor, and will prepare a subsequent proposal to address the electronic issues.

In the event that the interstice vacuum test fails, the govt should schedule replacement of both of these tanks.

Previously Approved and Completed Repairs Total \$3,503.16

Costs Specific to This Updated Additional Scope of Work for the 2,5000 Gal Interstice Only

Mobilization	2.5 hours @ \$121.41/hr = \$303.53 L/T, plus \$85.47 Service Tk	Total	\$ 389.00
Vacuum Test	3.5 hours @ \$121.41 = \$424.94 Labor/Tools, plus \$182.12 Vacuum	Total	\$ 607.05
Corrosion Inhibitor	Zep 1049351 \$193.31 (See attached)	Total	\$ 193.31
Evacuate Interstice	2 hours @ \$121.41 = \$242.82 Labor/Tools	Total	\$ 242.82
Dry Interstice	1 hour @ \$121.41 = \$121.41 Labor/Tools	Total	\$ 121.41
Demob/Report	2 hours @ \$121.41 = \$242.82 Labor/Tools	Total	\$ 242.82
<u>Consumables</u>	<u>PPE, Tyvek, Spill Pads, Supplies</u>	Est	\$ 200.00
	11-Hours/1-Day Total SOW to Investigate Interstice as Described Above		\$1,996.41
	Add: Previously Approved & Completed Investigation & Repairs		\$3,503.16
	Updated Total Project		\$5,499.57

Important Note: This proposal is as detailed, no service beyond the above explicit scope is expressed or implied. Should additional work be requested, all will be performed on a time and material basis.

Thank you for taking the time to consider this proposal. If you have any questions, please feel free to call at any time.

Sincerely,

Fratello and Amico, Inc.



Raymond B. Chain, III
President



Facility has 2 underground fuel tanks that are used to contain heating oil. Monitors located in mechanical rooms of both the Training building and OMS are showing an alarm of "signal 2 lost". Request is for vendor to troubleshoot and make needed repairs. Both the tanks and monitors are in need of preventative maintenance as well

After investigation into the warnings on both UST Monitoring Panels. It was revealed that the Reserve Center is equipped with a 4000 gallon (64"x288") double wall underground storage tank which was programmed into operation Sept 12 2000. The monitoring panel indicates a lost signal with probe 2, which is the interstitial space leak monitoring probe for the tank. Most



Importantly though, we found the interstitial space contained 57" of water, this is always supposed to be dry. The probe was removed and dried and retested but found to be inoperative.

In addition, the OMS is equipped with a 2500 gallon (64"x179") double wall underground storage tank, its monitoring panel indicates a lost signal with probe 1, the tank level monitoring probe for the tank. The panel indicated that the tank contained 39.89" of fuel and no measureable water. Our stick measurements indicated 40 1/2" of fuel, virtually the same, therefore the panel and Probe 1 appear to be working properly. While on site, we verified the interstitial space was dry. The temporary solution for this tank is to verify tank levels manually before deliveries.

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January 26, 2019

Mr. Bernard W. Koblinsky
Project Manager/99th – Region 4
CMI Management, Inc.
5285 Shawnee Road, Suite 510
Alexandria, VA 22312

RE: CSS #14933, WV038, Updated Report of Underground Fuel Oil Storage Tanks Investigations and Repairs, Romney USARC, 11 Industrial Park Road, Romney, WV 26757

Dear Mr. Koblinsky,

We are pleased to submit the following updated report of our findings for Investigation, Diagnosis and Repairs to the facility Underground Fuel Oil Storage Tanks, Probes and Monitoring Equipment.

Background: We originally visited this facility on Wednesday, November 28, 2018 to assess the initial work order and returned on Tuesday, December 18, 2018 and commenced a more in-depth investigation into the warnings on both UST Monitoring Panels.

Our investigation revealed that the Reserve Center is equipped with a 4,000 gallon (64" x 288") double wall underground storage tank which was programmed into operation on September 12, 2000. The monitoring panel indicates a lost signal with probe 2, which is the interstitial space leak monitoring probe for the tank.

The interstitial space was accessed and found to contain 57" of water, this is always supposed to be dry. The probe was removed and dried and retested but found to be inoperative.

While we were on site, we verified the operation of the fuel level probe as well. The panel indicated that the tank contained 23" of fuel and no measurable water. Our stick measurements indicated the same, therefore the panel and Probe 1 appear to be working properly.

The OMS is equipped with a 2,500 gallon (64" x 179") double wall underground storage tank which also was programmed into operation on September 12, 2000. The monitoring panel indicates a lost signal with probe 1, which is the tank level monitoring probe for the tank. The panel indicated that the tank contained 39.89" of fuel and no measurable water. Our stick measurements indicated 40 1/2" of fuel, virtually the same, therefore the panel and Probe 1 appear to be working properly. While we were on site, we verified the interstitial space was dry.

The presence of water in the interstice of the 4,000 gal. UST is alarming and should be addressed immediately, however the failure of the leak probe is not surprising given their age. We offered to provide a proposal to address the interstice issues within 24 hours. While the OMS is indicating level sync discrepancy, it is still accurate. Regardless, physical stick measurement of tank levels before ordering and delivery of fuel should always be performed. We attached tank charts for both the 2,500 and 4,000 gallon tanks based on the programmed sizes.

On a related issue, both of the monitoring panels are running software from 1999, the manufacturer no longer provide this model panel and replacement parts are slowly being discontinued. The monitors have lost power many times in the past and are not indicating the actual date and time. The Center is off by around three months but the OMS is off by four years. The setup is password protected and password is not readily available.

We offered to provide a proposal to reinstall updated software for both of these panels, however given their age and diminishing technical support, understand that the drive hardware and or software could fail during the attempt. We also stated that in the event the testing of the interstitial space shows the tank integrity remains intact, you should consider upgrading both monitoring panels.

On Wednesday, December 26, 2018, we submitted a limited scope proposal to evacuate the interstice of the 4,000-gallon UST and perform a vacuum test on it to assess its integrity. We deferred addressing the other issues with the monitoring panels and sensors until tank integrity was determined. On Tuesday, January 22, 2019 we were given a Notice to Proceed with the limited scope investigation under CSS#14933, WO#7208, on Asset#7787.

Site Service: We mobilized to the facility on Thursday, January 26, 2019, and commenced our investigation. The interstice was evacuated and found to contain approximately 100 fluid ounces of water without a trace of hydrocarbons.

We setup our vacuum gauges and vacuum source and at 12:46pm, pulled 5" of vacuum on the tank interstice. As we were starting the paperwork to record the test, we noticed that the vacuum had almost immediately been lost.

Tanks can lose vacuum initially due to deflection of the sides or ends, so we immediately re-established vacuum on the space.

Again, it was lost quickly, and again we re-established. This was repeated four times, all of which were failures.

At 7:30pm we emailed ENV and OPS personnel the photographs of the four tests and failures.

Conclusions and Recommendations:

Note: While we do not have access to the original construction drawings and details, based on our site investigation and testing, it is reasonable to assume that this 4,000 gallon UST is essentially a single wall steel tank without the benefit of secondary containment or leak detection monitoring.

A catastrophic loss of fuel oil could occur below ground without any signs or warnings whatsoever.

It is critical that the Corp, or whomever is responsible for the facility, treat this with the utmost urgency.

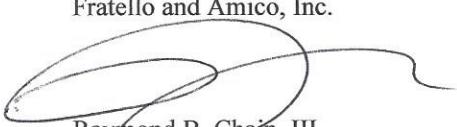
A proposal to test the interstice of the 2,500-gallon UST will be submitted later today.

Attachments: Vacuum Test Report
 Photos of the Tests

Thank you for the opportunity to be of service, please feel free to call with any questions.

Sincerely,

Fratello and Amico, Inc.



Raymond B. Chain, III
President

