



**RSW Fuel Facility
Budget Year 2024 / 2025
Priority Repairs**

Facility Management

UST & AST Compliance Inspections

Fluid Supply

Background Summary

- Stantec Consulting Services, Inc. was contracted by the Lee County Port Authority in May of 2021 to conduct an assessment of the fuel system that serves the Rental Car Center and to identify the needs of the facility for safety, compliance, and operations.
- The report was necessary to confirm recommendations by FFM (the facility operator) and after completion, the recommendations by both companies were fairly aligned in scope and ranking by safety, compliance, life cycle, and operational needs.
- Due to the costs, the work was prioritized by safety concerns and compliance issues as the highest priority.
- Since the initial report in 2021, Stantec was contracted to complete a follow up evaluation of the facility in May of 2024 and review the work that was completed and remaining high priority items and make recommendations.
- The 2024 Stantec report stated that *“there have been significant improvements made to the facility, including many of the code related items. In some cases, the correcting of some items have made the other outstanding items less critical. However, concerns around the integrity of the underground piping secondary containment and absence of a line leak detection system remain.”* Since the report in May of 2024, work has been completed on a large portion of the secondary piping system and many concerns of the piping containment have been addressed, leaving line leak detection as the highest priority for compliance and safety.

Summary of Completed Items

Completed Repairs identified in the Stantec Report

- Emergency Stop Interconnection
- Vapor Return Piping
- Aboveground Storage Tank Anti-Siphon Valves
- Overfill Prevention Valves
- Tank Drop Tubes
- AST Tank Pumps
- AST Fill Piping Control
- Piping and Dispenser Sump Penetration Fittings Replacement
- Tank Gauges Unreadable
- Valve and Piping Corrosion
- Piping and Valve Labels
- Fuel Piping Integrity* - Tested primary and passed on all affected areas.
- Dispenser Sumps not watertight
- Secondary piping failed sections.
- *Several additional repairs were addressed as issues were identified during the repair work.



Summary of Pending Items in Stantec Report

- Line Leak Detection – Highest Priority remaining
- Fuel Farm E-Stop of Entire Panel
- Automatic Tank Gauge Port Used as Stick Port
- Catwalk Finish
- Hook Signal Separation
- STP Pumping Scheme
- Transfer Pumps Nearing End of Life
- AST Openings and Fittings
- Fuel Piping Runs Appear Unmarked
- Dispenser Conduit Layout is Daisy Chained



Proposed 2024/2025 Budget Items

Continue with Compliance and Safety Issues as outlined below

Compliance Issues

- Install leak sensors in current dispenser sumps with leak console in QTA.
- Tie leak sensor consoles in QTA to emergency stop for automatic line leak detection.
- Replace Leak Console at Tank Farm and tie into emergency stop activation for line leak detection.
- Hydro-Test Dispenser and Piping Sumps
- Repair 9 drop out sensors in fueling area, sensor 11 in sump 5, and interstitial sensors.

Safety Issue

- Install pipe markers to identify fuel lines

Methodology / Approach

FFM has solicited proposals to install leak sensors in each dispenser sump and use a side cabinet entry to eliminate underground sump penetrations and excavation so no unforeseen costs to remove contaminated soils and / or groundwater will be encountered. The proposal with the lowest price was received from MEG Fuel Services which complied with the requested Approach and will install conduits overhead and utilize existing underground conduits where available. The canopy structure will be utilized along with pipe hangers to run conduits overhead. Other conduits at the fuel islands are run in a similar pattern. The contractor will tie the leak consoles (mounted on the canopy columns) to the E-Stop to activate the shunt trip breaker for positive shut down automatic line leak detection. (Items 1 & 2 listed above). Additional Budget Items will be solicited and submitted for funding in 2025.

Recommendations

- The goal since FFM took over facility operations has been to address compliance and safety concerns first. The 2024/2025 Budget Items stay with that priority and address several remaining compliance issues to complete the line leak detection as required by Chapter 62-762 FDEP Regulations.

Future expansion, life cycle replacement, and planned upgrades should include the facility operator for input and recommendations. The operator will have valuable insight to share with the design engineer and FFM has been involved with the design, construction, and operation of many large scale consolidated rental car fueling facilities.

For current life cycle and Operational Planning, FFM recommends the replacement of all remaining polyethylene sumps to fiberglass sumps which includes dispenser sumps (if not relocated in the near future) and three remaining poly piping sumps. Additionally, a valved cross over connection at the QTA would greatly assist in eliminating down time.

Fuel System Layout



