



Fuel Storage Tank Program Scope of Services Outline

Fuelmaster

Annual inspections to include checks of equipment and replacements (per schedule), but not limited only to the items listed below:

1. Technician will dial Syntech/FuelMaster Technical Support (1-800-888-9136 ext. 2) and ask for a dial-in diagnostic check.
2. Technician will record date and time of diagnostic on inspection report.

Fueling Stations

Annual inspections and replacement of parts (per schedule), but not limited to the following:

1. Fuel Filters (change each year with water absorption/particulate)
2. Hoses (change during inspection if required or once every 24 months)
3. Nozzles (change at least every 24 months or when required)
4. Perform line leak test on pressurized systems (pressure test every year)
5. Perform tests on Automatic Line Leak Detectors (ALLDs) where equipped
6. Pumps
7. Dispensers
8. Belts (replace as needed)
9. Spill buckets (make sure spill buckets are clean and free of debris)
10. Flapper valves
11. Drop tubes
12. Impact valve
13. Sump O-rings (replace every year – make sure to lubricate/grease O-ring)
14. Check/tighten all fittings
15. Test all leak detection equipment (Sensors – make sure they alarm)
16. Clean/check dispenser
17. Check closure ability of over-spill lids, caps
18. Calibrate pumps/dispensers
19. Meters (clean in-line screens)
20. Stick each fueling tank (diesel/unleaded) with water detection paste and record level for calibration of INCON system. Note: GEFA requires no water in tanks. If discovered. It must be removed.
21. Once every three years perform a hydrostatic test of all spill buckets and sumps (not required if double walled and monthly monitored)
Note: For items not changed annually, indicate on the inspection form when last changed.

Contractor Provided Replacement Schedule

Fuel filters	Change every year
Sump O-rings/seals	Change every year – make sure to lubricate/grease O-ring
Nozzles	Change if required or at least once every 24 months
Hoses	Change if required or at least once every 24 months
Belts	Change as needed
Gel packs/seal kits	Change as needed

Annual Inspections

Generators and Heating Oil Facilities

1. Physical inspection
2. Internal valves
3. Drop tubes
4. Impact valve
5. Sump O-rings
6. Check/tighten all fittings
7. Test line leak detection equipment (if equipped)

ASTs

1. Check to ensure tank is anchored and electrically grounded
2. All electrical is to code and conduits secured
3. Manway bolts are tight
4. Check for fill adaptor and overfill protection equipment
5. Crash protection present and in good repair
6. Check tank vents (primary and emergency)
 - Correct size
 - Clear and free of obstruction
 - Interstitial (if present) should be correct size for AST and checked
7. Check level gauge
8. Check anti-siphon valve
9. Check submerged pump (if equipped with solenoid – valve must not be wired to pump circuit)
10. Check tank-mounted fuel pump
11. Check fuel piping
 - Pressure relief on above ground pipe
 - Adequate operational valves
 - Steel pipe/Fiberglass Reinforced Plastic (FRP) transition – supported
 - Steel pipe/FRP transition at grade level
 - FRP pipe expansion protection from concrete
12. Check for proper tank decals/signage/paint
13. Check emergency stop/fire extinguisher “readily” accessible
14. Check external fire valve
15. Check spill clean-up kits

INCON

16. TS-1001 Console
 1. Verify display is on
 2. Check modem for dial tone
 3. Check for proper battery voltage with multimeter
 4. Verify printer is operational by printing out a regulatory report (if equipped)
 5. Verify leak parameters are set up properly
 6. Check alarm history and ensure no active alarms have not been cleared
 7. If in alarm, perform all appropriate corrective action to clear all alarms
 8. Ensure correct programming and that all tank test parameters are printing. Location, tank ID, water levels
 9. Print out last leak test and digitally submit a copy with the inspection report.
17. TSP-LL2 level probe
 1. Inspect wire connections in junction box for corrosion or moisture
 2. Inspect level probe cables for splitting or other signs of wear
 3. Pull probe clean and check condition of shaft. Make sure power is off when pulling probe.
18. TSP-ULS sump sensor
 1. Insert sensor in a cup of water or product being monitored to verify operation and will "alarm"
 2. Visually inspect cable for signs of splitting or wear
 3. Check wiring connections in the junction box for corrosion or moisture
19. TSP-HLS high level sensor
 1. Remove float switch from the tank – manually move float switch to verify it is free moving and will "alarm"
 2. Visually inspect cable for signs of splitting or wear
 3. Check wiring connections inside junction box for signs of corrosion
 - Technician MUST contact GEFA for confirmation that the INCON is polling before leaving site

Walk-Through Inspections (All Facilities)

Release Detection System: Inspect and test for proper operation.

Spill Buckets: Ensure spill buckets are clean and empty and remove any debris. Debris could include soil, stones, or trash.

Even if a spill bucket is equipped with a drain valve or pump, any accumulated fuel or water must be removed manually and disposed of properly.

Check to see if spill bucket is still liquid tight.

Inspect spill bucket for signs of wear, cracks, or holes. Based on this inspection, the contractor may perform a test to determine if the spill bucket is tight or needs repair or replacement. Once every three years perform hydrostatic test (unless spill bucket is double walled and monitored monthly).

Tank Sumps: Inspect and make sure tank sumps are free of any liquid. If present, remove and dispose of properly. Clean trash and debris from tank sumps. Replace O-rings per schedule and ensure O-rings are properly greased before replacing sump lid. Once every three years perform hydrostatic test (unless sump is double walled and monitored monthly).

Impressed Current System: Inspect for proper operation.

Fill and Monitoring Ports: Inspect all fill/monitoring ports and other access points to make sure that the covers and caps are tightly sealed and locked.

Spill and Overfill Response Supplies:

Inventory and inspect the emergency spill response supplies. If the supplies are low, inform site personnel what is required to restock the supplies and annotate inspection report. Inspect supplies for deterioration and improper functioning.

Dispenser/Pump Hoses, Nozzles, and Breakaways: Inspect for loose fittings, deterioration, obvious signs of leakage, and improper functioning. Test nozzles to ensure they will shut off when vehicle tank is full.

Dispenser/Pump and Dispenser Sumps: Open each dispenser/pump and inspect all visible piping, fittings, and couplings for any signs of leakage. If any water or product is present, remove it and dispose of it properly. Remove any debris from the sump.

Piping/Transition Sumps: Inspect all visible piping, fittings, and couplings for any signs of leakage. If any water or product is present, remove it and dispose of it properly. Remove any debris from the sump.

Automatic Shutoff Devices – Flapper Valves: Remove the drop tube and manually verify the automatic shutoff device is functioning properly and that the device will shut off fuel flowing into the tank at 95 percent of the tank capacity or before the fittings at the top of the tank are exposed to fuel:

- Make sure the float operates properly.
- Make sure that there are no obstructions that would keep the floating mechanism from working.
- Post signs that the delivery person can easily see and that alert the delivery person to the overfill warning devices and alarms that are in use at facility.

Overfill Alarms: Check electronic overfill alarm to make sure that it is functioning properly and that the alarm activates when the fuel reaches 90 percent of the tank capacity or is within one minute of being overfilled:

- Ensure that the alarm can be heard and/or seen from where the tank is fueled.
- Make sure that the electronic device and probe are operating properly.
- Ensure signs are posted that the delivery person can easily see and that alert the delivery person to the overfill warning devices and alarms that are in use at facility.

I. Cathodic Protection Tests

Sacrificial Anode Cathodic Protection Systems

During the annual inspection, a qualified corrosion tester must test and make sure the cathodic protection system is adequately protecting the UST system.

This test needs to be conducted:

- Within six months of installation.
- At least every three years after the previous test.
- Within six months after any repairs to the UST system.
- Make sure that the professional tester is qualified to perform the test and follows a standard code of practice to determine that test criteria are adequate.
- If any test indicates that the tanks are not adequately protected, have a corrosion expert examine and fix the system.
- Use EPD testing criteria and Form.

Keep the results of at least the last two tests on file.

Impressed Current Cathodic Protection Systems

During the annual inspection, a qualified corrosion tester must test and make sure the cathodic protection system is adequately protecting the UST system.

Keep the results of at least the last two tests on file.

Inspect the rectifier to make sure that it is operating within normal limits. Check files to see if owner has checked at least every 60 days during the year.

- This inspection involves reading and recording the voltage and amperage readouts on the rectifier. [Employees can perform this periodic (every 60 days) inspection.]
- Make sure that the cathodic protection professional provides the rectifier's acceptable operating levels so that a comparison of the readings. If the readings are not within acceptable levels, a cathodic protection professional to address the problem.

Keep records of at least the last six rectifier readings.