



Office of the Illinois State Fire Marshal
Division of Petroleum and Chemical Safety
1035 Stevenson Drive
Springfield, IL 62703
2177851020

FOR OFFICE USE ONLY

Facility # 6041722
Permit # 00074-2023UPG
Request Rec'd 01/19/2023
Amended Date
Approval Date 1/19/2023 DS
Permit Expires 7/19/2023

Permit for UPGRADE or REPAIR of Underground Storage Tank(s) and Piping for Petroleum and Hazardous Substances.

Permission to upgrade or repair underground storage tank(s) or piping is hereby granted. Such upgrade or repair must be in complete accordance with acceptable materials as specified in the Federal Register, Part II Environmental Protection Agency, 40 CFR Parts 280 and 281, and also with all sections of 41 Illinois Administrative Code, Parts 174, 175 and 176. The contractor the permit was issued to or an employee of that contractor (this does not include a subcontractor) shall submit a required job schedule for underground piping upgrade, leak detection, spill and overfill prevention of underground storage tank(s) to the Office of the State Fire Marshal, Division of Petroleum and Chemical Safety.

(1) OWNER OF TANKS - Corporation, partnership, or other business entity: Mac's Convenience Stores, LLC 1100 Situs Court, Suite 100 Raleigh, NC 27606 Contact: Elizabeth Patterson (984) 389-1765	(2) FACILITY - name and address where tanks are located: Circle K #1359 536 Edwardsville Road Troy, IL 62294 Contact: Steve Dickerson (812) 379-9227
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(3) UPGRADE OR REPAIR OF TANKS:

- (a) *Number and size of tanks being upgraded or repaired: (TK # 1) - 20,000, (TK # 2, 3) - 10,000*
- (b) *Type of tanks:*
- (c) *Type of piping: (TK # 1, 2, 3) Piping - Flexible Double Wall from tanks to dispensers as shown in site plan, (TK # 1, 2, 3) Piping - Other Submersible Pump, (TK # 1, 2, 3) Piping - Ball Valves, (TK # 1, 2, 3) Piping - Shear Valves, (TK # 1, 2, 3) Piping - Single Wall STP/Tanktop Sump*
- (d) *Product to be stored in each tank: (TK # 1) - Gasoline - Regular, (TK # 2) - Gasoline - Premium, (TK # 3) - Diesel Fuel*
- (e) *Type of leak detection being used:*
 - Tank:*
 - Piping: (TK # 1, 2, 3) Leak Detect - Piping - Non-Discriminating Sump Sensor with positive shutdown in all submersible and dispenser sumps*
- (f) *Corrosion Protection being used:*
 - Tank:*
 - Piping:*
- (g) *Spill containment devices, piping, and dispenser containment devices: (TK # 1, 2, 3) Spill Contain Device - Double Wall Spill Bucket*
- (h) *Overfill prevention devices:*
- (i) *Manway accessible at grade:*

- (4) The owner must notify this Office when completion of tank upgrade/repair has occurred, on the Notification for Underground Storage Tank Form and the licensed contractor must submit the required job schedule for underground piping upgrade, leak detection, spill and overfill prevention to the OSFM prior to the work being performed. Both forms can be obtained at www.sfm.illinois.gov or by calling (217)785-1020.

(5) SPECIAL CONTINGENCIES :

- 7. Remove the Diesel and Premium ATG probes and save for reuse. Remove the Diesel overfill prevention valve and save for reuse.
- 8. Saw cut and demo the existing tank pad around the NL STP, Diesel STP, Diesel ATG, Diesel vapor, Diesel spill container, Premium STP, Premium ATG and Interstice. Excavate down to expose the tank tops.
- 9. Load and dispose the concrete, manholes, STP sumps, dispenser sumps and u-shaped bumpers and properly dispose.
- 10. Pull the existing product piping through the existing chase pipe and properly dispose.
- 11. Saw cut and demo a trench from the junction box located on the east side of the building to the tank pad and onto each dispenser. Load and dispose the concrete.
- 12. Furnish and install six (6) Nupi poly dispenser sumps. Ensure the sumps are 1.5" above the existing finished grade. The dispensers will be

re-set islandless. The dispenser sumps will be pre-manufactured with stabilizer bar kits, 1.5" double wall penetration fittings, 1.5" double wall secondary test fittings, 1.5" single wall tee or elbow fittings, 1.5" flex hoses, and Emco Wheaton safety shear valves.

13. Furnish and install (3) three OPW STP deep burial sumps.

14. Furnish and install three (3) Red Jacket 1 1/2 hp sub units with 2" ball valves.

15. Furnish and attempt to pull Nupi 1.5" double wall UL listed fuel pipe from the sub units to the dispensers in the existing 4" chase pipe. Make final connections inside each of the six (6) new Nupi dispenser sumps to the flex hoses and safety shear valves.

16. Furnish a licensed electrician to run two (2) 3/4" conduits and wiring to each STP sump for power and sump sensors and one (1) conduit each to the Diesel ATG and the Premium ATG.

17. Furnish a licensed electrician to run three (3) conduits and wiring to each dispenser sump for power, Crind/ pump communication and sump sensors. All conduits will run on the outside of the dispenser sumps.

18. Furnish and install one (1) interface module expansion board kit, two (2) 8-input liquid sensor module, one (1) 2-input/2 relay output interface, and one (1) 4-input pump sense interface module into the existing TLS-350 ATG console.

19. Furnish a licensed electrician to wire in the STP motors to the 2-input/2-relay interface for positive shut down.

20. With the ILOFSM on site, air test all piping runs and perform a hydrostatic test on all six (6) dispenser sumps and all three (3) STP sumps.

21. Furnish and set four (4) 4" x 7' round bollards with CK red bollard covers for each dispenser. Two (2) bollards will be set 2' from the outside of the canopy column and two (2) bollards will be set 2' from the dispenser on the opposite side. Ensure bollards are 3' below grade and are 36" apart.

22. Furnish and install one 4" pipe riser, one (1) 4" cap and ring kit and reinstall the Diesel ATG probe. Furnish and install one (1) 4" pipe riser and one (1) 4" cap for the Diesel vapor. Furnish and install one 4" pipe riser, one (1) Emco 5 gallon double wall spill container, one (1) brass swivel adaptor, one (1) low profile fill cap and reinstall the overfill prevention valve. Paint the spill container lid yellow.

23. Furnish and install one (1) 4" pipe riser and one (1) 4" cap and ring kit for the Interstice.

24. Furnish and install one 4" pipe riser, one (1) 4" cap and ring kit and reinstall the Premium ATG probe.

25. Backfill all excavated areas.

26. Furnish and set one (1) Emco 44" Cam-Lock composite manhole over the NL UST.

27. Furnish and set one (1) Emco 44" Cam-Lock composite manhole and (2) Emco 18" Cam-Lock composite manholes over the Diesel UST.

28. Furnish and set one (1) Emco 18" Cam-Lock composite manhole over the Interstice.

29. Furnish and set one (1) Emco 44" Cam-Lock composite manhole and one (1) Emco 18" Cam-Lock composite manhole over the Premium UST.

30. Drill and pin to the existing concrete. Pour new concrete and finish to grade.

30. Terminate all sensors and pour seal offs into the conduits.

31. Program the TLS-350 to recognize the nine (9) sump sensors.

32. Set the existing dispensers onto the new sumps. Re-connect the product lines to the dispensers.

33. Furnish a licensed electrician to make final connections to the dispensers and sub units.

34. Purge and calibrate the dispensers.

35. Circle K to arrange for Tanknology to perform a third party line test.

36. Meet the ILOFSM on site for final inspection.

Replaced piping exceeds 20 feet or 50% of the total pipe run.

NOTE: Dispensers must be a full 10' to all buildings and property lines

(6) PERSON, FIRM OR COMPANY PERFORMING WORK:

Neumayer Equipment Company, Inc.
5060 Arsenal Street
St. Louis, MO 63139

Contact Person: Jimmy Spiros
Phone: (314) 772-4501
Contractor Registration # IL1502 Exp. 3/26/2024

Sincerely,



Daniel Starks

cc: Storage Tank Safety Specialist
Division File