

RCRA Subtitle I Inspection Report

**Lucky Mart
200 E Williamsburg Road
Sandston, VA 23180**

Facility ID: 4011249

Telephone Number: (804) 737-7717

Inspection Date: July 18, 2016

EPA Representative:

Wilbur Martínez
Environmental Engineer

Facility Representative:

Lakhmir Bagga
Owner

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List of Attachments

- Attachment 1: Region III Underground Storage Tank (UST) Compliance Checklist
- Attachment 2: Automatic Tank Gauge System Setup
- Attachment 3: Tank Leak Test History Passing Results August 2015 - July 2016
- Attachment 4: Line Tightness and Line Leak Detector Testing Documentation
- Attachment 5: Rectifier Operating Record
- Attachment 6: Testing of the Impressed Current Cathodic Protection System
- Attachment 7: Financial Assurance Documents

1 Background

The EPA, Region III's Office of Enforcement, Compliance and Environmental Justice (OECEJ) at Fort Meade, Maryland received a request from EPA, Region III's Land and Chemicals Division to conduct a RCRA, Subtitle I, Underground Storage Tank (UST) Inspection of the Lucky Mart service station and convenience store (the Facility), located at 200 E Williamsburg Road, Sandston, Virginia. The inspection was assigned to Mr. Wilbur Martínez, who conducted the inspection on July 18, 2016. Upon arrival at the Facility, credentials were presented to Mr. Lakhmir Bagga, Owner, and the scope and purpose of the inspection were explained. After completing the inspection, Mr. Martínez completed the Region III Underground Storage Tank (UST) Compliance Checklist, which is included as Attachment 1 to this report.

2 Facility Description

The Facility is a service station and convenience store, offering regular, medium, and premium grades of gasoline, as well as kerosene and diesel. According to Mr. Bagga, the service station does business under the name of Silky Associates LLC, , whose address is listed as 7 Sandston Avenue, Sandston, Virginia 23150.

The Facility consists of three service islands (see Figure 1). Two of the service islands have two fuel dispensers and the third has a single dispenser. One of the service islands, located under a canopy in front of the convenience store and is home to two gasoline dispensers (Dispensers 1/2 and 3/4). The second service island, located just south of the canopy, in front of the lot, is home to one gasoline dispenser (Dispenser 7/8) and one gasoline and diesel dispenser (Dispenser 5/6). The third island consists of a single, stand-alone dispenser for kerosene that is located along the back of the lot, about 30 feet east of the convenience store.

The Facility has five USTs installed in a tank field located east of the convenience store (see Figure 1). Table 1 summarizes information extracted from the Virginia Department of Environmental Quality (VADEQ) tank registration database for the tanks at the Facility (Facility ID: 4011249).

3 Inspection Observations

3.1 Tank Systems Descriptions

According to information extracted from the VADEQ tank registration database, all five tanks are cathodically protected steel tanks. At the time of the inspection, UST-001 stored premium gasoline, UST-002 and UST-003 were manifolded tanks that stored regular gasoline, UST-004 stored kerosene, and UST-005 stored on-road diesel (see Figure 1).

The tank field was not fully accessible; only one end of the tanks was available for observation since the rest of the tanks was located behind a wooden fence in a field overgrown with vegetation (see Figure 1 and Photograph 1).

Table 1: Summary of Tank Information Extracted from the Virginia Department of Environmental Quality Tank Registration Database

Tank	Capacity (Gallons)	Substance	Tank Construction	Piping Construction	Type of Piping	Installation Date
UST-001	10,000	Gasoline (premium)	Steel	Galvanized Steel	Pressurized	05/73
UST-002	10,000	Gasoline (regular)	Steel	Galvanized Steel	Pressurized	05/73
UST-003	10,000	Gasoline (regular)	Steel	Galvanized Steel	Manifold	05/78
UST-004 ¹	4,000	Kerosene	Steel	Galvanized Steel	Pressurized	05/83
UST-005 ²	4,000	Diesel	Steel	Galvanized Steel	Pressurized	05/85

¹ Tank UST-004 is identified as Tank UST-005 in the VADEQ tank registration database.

² Tank UST-005 is identified as Tank UST-004 in the VADEQ tank registration database.

Only two openings could be observed over the marked location of UST-001 (see Figure 1 and Photograph 2). The first opening (foreground to background in Photograph 2) corresponded to the spill bucket for the fill pipe (see Photographs 3 and 4); the second opening corresponded to a rectangular steel cover housing a square sump for the tank's submersible transfer pump (STP) (see Photograph 5) and a circular sump for the vapor recovery port (see Photographs 6 and 7).

Three openings could be observed over the marked location of UST-002 (see Figure 1 and Photograph 8). The first opening (foreground to background in Photograph 8) corresponded to the spill bucket for the fill pipe (see Photographs 9 and 10); the second opening corresponded to a rectangular steel cover housing a square sump for the tank's STP (see Photograph 11) and a circular sump for what appeared to be an abandoned STP (see Photograph 12); and the third opening corresponded to a sump housing the vapor recovery port (see Photograph 13).

There were only two openings over the marked location of UST-003 (see Figure 1 and Photograph 14). The first opening (foreground to background in Photograph 14) corresponded to the spill bucket for the fill pipe (see Photographs 15 and 16); and the second opening corresponded to a sump housing the vapor recovery port (see Photograph 17).

Two openings could be observed over the marked location of UST-004 (see Figure 1 and Photograph 18). The first opening (foreground to background in Photograph 18) corresponded to the spill bucket for the fill pipe (see Photographs 19 and 20); and the second opening corresponded to a square sump for the tank's STP (see Photograph 21) that was covered with a piece of plywood at the time of the inspection.

There were three openings over the marked location of UST-005 (see Figure 1 and Photograph 22). The first opening (foreground to background in Photograph 22) corresponded to the spill bucket for the fill pipe (see Photographs 23 and 24); the second opening corresponded to a sump housing an unused tank access port (see Photograph 25); and the third opening corresponded to a square sump housing the tank's STP (see Photograph 26).

According to information extracted from the VADEQ tank registration database, fuel from UST-001, UST-002, UST-003, UST-004, and UST-005 is conveyed to the fuel dispensers by means of pressurized galvanized steel piping; the piping, however, could not be observed during the inspection. The pipelines for these three tanks are equipped with mechanical line leak detectors (LLDs) (see Photographs 5, 11, 21, and 26).

3.2 Tank Release Detection

Leak detection for all of the USTs is provided by a Veeder Root TLS-350 automatic tank gauge (ATG) monitoring system (see Photograph 27). The ATG monitoring system is set up to perform continuous statistical leak detection (CSLD) tests, among other things (see Attachment 2). According to the ATG system documentation, the leak test is capable of detecting a release of 0.2 gallons per hour (gph). According to the ATG system setup (see Attachment 2), the system is capable of detecting a leak with a 95 percent confidence.

At the time of the inspection, the ATG system control box displayed a “high water” alarm and a “probe out” for UST-005 (see Photographs 28 and 29, respectively). Due to lack of access (see Photograph 1), the presence of the ATG probes could not be verified on the field.

The ATG console keeps a 12-month passing leak test results history for each tank. A copy of the 12-month leak test results history reports for each tank is included in Attachment 3. The leak test history reports show missing passing leak test results August and September of 2015 for UST-001, UST-002, UST-003, and UST-005, and missing a passing leak test result for August 2015 for UST-004. No ATG brochure or owner’s manual or documentation concerning the installation, calibration, and maintenance of the ATG system and associated sensors was available for review during the inspection.

3.3 Piping Release Detection

Fuel is conveyed from the USTs to the fuel dispensers by means of pressurized, piping. At the time of the inspection, all of the fuel transfer lines were equipped with mechanical line leak detectors (LLDs) (see Photographs 5, 11, 21, and 26). The only documentation provided by the Facility concerning line tightness testing and testing of the LLDs consisted of passing test results for November 6, 2013 for the regular (UST-002/UST-003), kerosene (UST-004), and diesel (UST-005) tank lines and LLDs, and a work order completion form dated January 30, 2012 documenting “testing” of the “regular and super lines” indicating that both had “passed” (see Attachment 4).

3.4 Spill/Overfill

The fill pipes for all USTs are equipped with spill buckets (see Photographs 3, 9, 15, 19, and 23). However, at the time of the inspection, the inspector observed that the spill buckets for UST-001, UST-003, UST-004, and UST-005 were each filled with about 1-inch of water (see Photographs 3, 15, 19, and 23).

According to information extracted from the VADEQ tank registration database, no overfill protection device has been reported for any of the five USTs. No drop tube shutoff device was observed in any of the USTs to prevent overfill (see Photographs 4, 10, 16, 20, and 24). Also, according to the ATG system setup (see Attachment 2), there is no evidence of an external alarm setup and no visual/audible alarm was observed at the Facility. The EPA inspector could not determine whether the tanks are equipped with a ball float valve during field observations.

3.5 Corrosion Protection

According to information extracted from the VADEQ tank registration database, UST-001, UST-002, UST-003, UST-004, and UST-005 are constructed of single wall cathodically-protected steel, and the piping used to convey fuel from the USTs to the corresponding dispensers is constructed of cathodically-protected galvanized steel. An impressed current system rectifier box was observed inside the Facility’s convenience store to provide the cathodic protection for the tanks and piping (see Photographs 30 and 31). The rectifier was operational at the time of the inspection (see Photograph 32). The

Facility provided records showing that the operation of the rectifier is checked on a monthly basis and voltage and amperage readings are recorded at that time (see Attachment 5). The Facility also provided documentation showing that testing of the cathodic protection system had last taken place on April 23, 2012 (see Attachment 6).

4 Financial Responsibility

To satisfy the Facility's financial responsibility requirements, the Facility indicated that it had obtained an irrevocable standby letter of credit. The Facility provided a copy of the first page of the letter of credit as well as a receipt indicating that the letter of credit was renewed on July 26, 2016 (see Attachment 7).