

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

B918168440

|   |                                      |                                  |
|---|--------------------------------------|----------------------------------|
| <b>FACILITY:</b> Energy Transfer Marketing & Terminals L.P - Owosso           |                                      | <b>SRN / ID:</b> B9181           |
| <b>LOCATION:</b> 4004 W. Main Street, OWOSSO                                  |                                      | <b>DISTRICT:</b> Lansing         |
| <b>CITY:</b> OWOSSO   |                                      | <b>COUNTY:</b> SHIAWASSEE        |
| <b>CONTACT:</b> Jared Everitt , Sr. Environmental Specialist                  |                                      | <b>ACTIVITY DATE:</b> 08/02/2023 |
| <b>STAFF:</b> Julie Brunner   | <b>COMPLIANCE STATUS:</b> Compliance | <b>SOURCE CLASS:</b> SM OPT OUT  |
| <b>SUBJECT:</b> Scheduled Compliance Inspection - PTI 27-04 as part of an FCE |                                      |                                  |
| <b>RESOLVED COMPLAINTS:</b>   |                                      |                                  |

On August 2, 2023, I conducted a scheduled inspection of Sunoco Partners Marketing & Terminals LP, Owosso Terminal (B9181). The inspection is part of a Full Compliance Evaluation (FCE). The last compliance inspection of the facility was performed on January 29, 2020.

**Arrived: 9:30 AM**

**Departed: 11:20 AM**

**Weather: 71°F, wind 7@SW MPH, UV Index 2 Low**

**Contacts:**

Jared Everitt, Sr. Environmental Specialist, office: 313-789-1111,  
jared.everitt@energytransfer.com

**Facility Description:**

Sunoco Partners Marketing & Terminals LP, Owosso Terminal (Sunoco) is a bulk gasoline storage distribution terminal located on the west side of town off of Main Street (M-21) in Owosso in a rural and commercial / light industrial area. The facility is an existing petroleum bulk terminal consisting of the truck loading rack with a vapor recovery unit (VRU) for control and a vapor combustion unit (VCU) for backup, and numerous above ground storage tanks. Petroleum products are received by pipeline, and typically include gasoline, ultra low sulfur diesel (USLD), and ethanol.

The facility is a synthetic minor for emissions of volatile organic compounds (VOC) and hazardous air pollutants (HAPs) with opt-out limits of less than 100 tons per year (tpy) for VOC, and less than 10 tpy of any single HAP and 25 tpy of aggregate HAPs. The facility has opted out of the Title V - Renewable Operating Permit (ROP) Program and any applicable federal standards with the permitted restrictions on emissions of VOC and HAPs at greater than 90% of thresholds.

**Commencement of Mfg. Operations: 1959**

**Plant Capacity:** Maximum allowed throughput of gasoline is 249,437,000 gallons per 12-month rolling time period with a potential to emit (PTE) based on 100 tank turns per year of petroleum products.

**Staff #:** 4      **Shifts/Day:** 2 (8-hr shifts)      **Days of Operation/Week:** Manned 5 days/week (truck loading is 24/7)

**Boilers?** Yes - Two (2) fuel oil-fired boilers (certified/inspected every 3 years by LARA):

Weil-McLain hot water boiler, 0.336 MMBtu/hr, Serial No. M351076, Date of Manufacture: 1988 (back-up)

Weil-McLain hot water boiler, 0.295 MMBtu/hr, Serial No. M427086, Date of Manufacture: 2010 (primary)

Exempt per Rule 282(2)(b)(ii), each with less than 120 gallon hot water capacity and a heat input capacity of less than 1.6 MMBtu/hr, and therefore, not subject to 40 CFR 63, Subpart JJJJJJ — National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.

**Emergency Generators?** No

**Cold Cleaners?** Yes

EUCOLDCLEAN: 3.5 gallon parts washer which uses mineral spirits with an air/vapor interface of not more than 10 square feet. Exempt per Rule 281(2)(h).

Oil/water separator (EUOWS) exempt per Rule 285(2)(m)(i).

**List of Active Air Use Permits:**

PTI 27-04 for loading and storing petroleum products with a VOC and HAPs opt-out.

**Permitted Emission Units (EU) and Flexible Groups (FG) -**

| <b>Emission Unit (EU) /<br/>Flexible Group (FG)<br/>ID</b> | <b>Description</b>   | <b>Applicable Rules/<br/>Requirements</b>   |
|--|--|---|
| <b>EUGASLOADING</b>  | <b>Gasoline truck loading rack utilizing bottom loading and a thermal oxidizer (VCU) to control VOC emissions</b>                        | <b>Rule 205(1)(a) and (b); Rule 609(2); Rule 627; Rule 910; Methods in 40 CFR 60, Subpart XX used for testing</b> |
| <b>EUTANK#3</b>  | <b>36,000 barrel above ground internal floating roof (IFR) storage tank</b>  | <b>Rule 205(1)(a) and (b); Rule 702(a) and (d)</b>  |
| <b>EUTANK#5</b>  | <b>25,000 barrel above ground internal floating roof (IFR) storage tank</b>  | <b>Rule 205(1)(a) and (b); Rule 604; Rule 702(d)</b>  |
| <b>EUTANK#6</b>  | <b>35,000 barrel above ground internal floating roof (IFR) storage tank</b>  | <b>Rule 205(1)(a) and (b); Rule 604; Rule 702(d)</b>  |
| <b>EUTANK#7</b>  | <b>35,000 barrel above ground internal floating roof (IFR) storage tank</b>  | <b>Rule 205(1)(a) and (b); Rule 604; Rule 702(d)</b>  |
| <b>EUTANK#8</b>  | <b>40,000 barrel above ground internal floating roof (IFR) storage tank</b>  | <b>Rule 205(1)(a) and (b); Rule 604; Rule 702(d)</b>  |
| <b>EUADDITIVETANK#9</b>                                    | <b>238 barrel horizontal gasoline additive storage tank with a conservation vent</b>   | <b>Rule 205(1)(a) and (b)</b>   |
| <b>FGTANKS</b>   | <b>Flexible group for EUTANK#3, EUTANK#5, EUTANK#6, EUTANK#7, and EUTANK#8</b>   | <b>Rule 205(1)(a) and (b); Rule 604; Rule 702(d)</b>  |
| <b>FGFACILITY</b>  | <b>All process equipment at the facility including equipment covered by other permits, grandfathered equipment and exempt equipment.</b> | <b>Rule 205(1)(a) and (b); 40 CFR 63, Subpart BBBB - GDGACT (not</b>  |

**Emission Unit (EU) /  
Flexible Group (FG)    Description  
ID**

**Applicable Rules/  
Requirements**

**delegated  
authority)**

**Applicable Regulations Review:**

**40 CFR 60, Subpart XX – Standards of Performance for Bulk Gasoline Terminals:**

**§60.500    Applicability and designation of affected facility.**

**(a) The affected facility to which the provisions of this subpart apply is the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks.**

**(b) Each facility under paragraph (a) of this section, the construction or modification of which is commenced after December 17, 1980, is subject to the provisions of this subpart.**

**(c) For purposes of this subpart, any replacement of components of an existing facility, described in paragraph (a) of this section, commenced before August 18, 1983 in order to comply with any emission standard adopted by a State or political subdivision thereof will not be considered a reconstruction under the provisions of 40 CFR 60.15.**

**§60.502    Standard for Volatile Organic Compound (VOC) emissions from bulk gasoline terminals.**

**On and after the date on which §60.8(a) requires a performance test to be completed, the owner or operator of each bulk gasoline terminal containing an affected facility shall comply with the requirements of this section.**

**(a) Each affected facility shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks during product loading.**

**(b) The emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline tank trucks are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded, except as noted in paragraph (c) of this section.**

**(c) For each affected facility equipped with an existing vapor processing system, the emissions to the atmosphere from the vapor collection system due to the loading of**

liquid product into gasoline tank trucks are not to exceed 80 milligrams of total organic compounds per liter of gasoline loaded.

Sunoco pre-dates 40 CFR 60, Subpart XX, and is therefore, not subject to any standards of performance for bulk gasoline terminals

**40 CFR 63, Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (GDGACT):**

The terminal is subject because an area source of HAPs. The state does not have delegation for this standard. All required reporting is submitted to EPA, and the AQD is copied as a courtesy. The last “Semi-Annual Compliance Report & Notification of Compliance Status” was submitted for the 1<sup>st</sup> Semi-Annual 2023 in July 2023. Electronic reporting via CEDRI is not currently in the regulation.

#### **Michigan Air Emissions Reporting System (MAERS):**

The facility reports emissions to MAERS. The facility reports as a Category E. The total source VOC emissions reported for 2022 was 18.7 tons.

#### **Inspection:**

Upon arrival, I detected no odors around the facility. There were no visible emissions from the tanks or any exhaust stack vents. Tanker trucks were continuously being loaded with gasoline or diesel during the inspection.

I was met by Jared Everitt and David Jacobs. Facility operations and records were discussed followed by the yard inspection/tour.

#### **EUGASLOADING**

A program called TopTech tracks facility petroleum loading. Each tanker truck driver has a card that is scanned and the amount of petroleum product that is loaded is recorded. The data is uploaded monthly. On the day of the inspection at the time of my departure, the facility had loaded approximately 150,824 gallons of gasoline, 16,065 gallons of ethanol, 15,104 gallons of transmix, and 15,971 gallons of diesel.

There are three covered bays with five active loading positions for petroleum loading. Vapors from the loading of gasoline are controlled by a vapor recovery unit (VRU). The VRU was installed in 2011 under exemption Rule 285(2)(d) and is the

primary control device. The VRU process consists of two (2) carbon absorption beds which continually cycle and regenerate every 15 minutes. The organic vapors are desorbed from the carbon, condensed, and reabsorbed into the process. The VRU replaced the vapor combustion unit (VCU) which was installed 1-14-2000, and is now used for backup. The VRU operates ~90% of the time to collect organic vapors emitted from the bottom of the tank during truck loading. There is a bypass stack and a bypass switch to go from the VRU to the VCU. A VOC CEMS is used to monitor the performance of the VRU. The VRU and CEMS are not on PTI 27-04. (The process/operational restrictions, design/equipment parameters, monitoring and recordkeeping on PTI 27-04 need to be updated to match what is currently used to demonstrate compliance.) The VRU-VCU Usage Log for the 1st half of 2023 showed: 4172 hours for the VRU and 172 hours for the VCU (back up).

| EU ID        | Install Date | Description  | Notes:   |
|--------------|--------------|--|--|
| EUGASLOADING | 1959         | 6 loading racks:<br>Rack 1 – gasoline<br>Rack 2 – not used<br>Rack 3 – transmix<br>Rack 4 – gasoline<br>Rack 5 – diesel<br>Rack 6 – diesel | <p>VRU – Last RATA of the CEMS was completed on 5-9-2019 when the monitor was replaced.</p> <p>VCU tested on 5-8-2019 as required by SC 1.7 at least once every 5 years. Next VCU testing is due in 2024.</p> <p>Spill protection and trench drains in the bay area. An oil/water separator system is located east of the loading rack with the outfall by the road. There was little to no evidence of spills or leaks.</p> <p>A snap shot of the CEMS readout showed 0.03% as propane emissions current, 0.03% on a 1-hr rolling average, 0.04% on a 6-hr rolling average, 0.03% on a 24-hr rolling average.</p> |

Stack testing of the VCU is used to demonstrate compliance with the emission limit of 0.7 pounds of organic vapor per 1,000 gallons of organic compounds loaded (which converts to 84 mg/L) as required by SC 1.1. The VCU is backup and only operated 0.04% of the time in the 1<sup>st</sup> half of 2023. For when the VRU is operating, emissions are measured using a CEMS in percent propane. Using a performance test for the CEMS, an operating value of 5.09% propane was estimated to ensure compliance with the GDGACT emission limit of 80 mg/L. For the day of the inspection, the CEMS measurements converted to the PTI emission limit were as follows:

|                                | <b>%<br/>propane</b> | <b>lb VOC / 1,000<br/>gal</b> |
|--------------------------------|----------------------|-------------------------------|
| <b>current value</b>           | <b>0.03</b>          | <b>0.004</b>                  |
| <b>1 hour rolling<br/>avg</b>  | <b>0.03</b>          | <b>0.004</b>                  |
| <b>6 hour rolling<br/>avg</b>  | <b>0.04</b>          | <b>0.005</b>                  |
| <b>24 hour<br/>rolling avg</b> | <b>0.03</b>          | <b>0.004</b>                  |
|                                | <b>&lt;5.09</b>      | <b>&lt;0.7 lb PTI limit</b>   |

**\*1 hour average readings are taken every 10-15 seconds**

In the bays, product transport lines are clearly marked. The interlocking system and vapor tight collection lines are computer monitored to prevent leaks and spills. A trench drain in the bays collects any drips which go to an oil/water separator. The water goes to the outfall as allowed under a NPDES permit. A sign is posted on the racks with written procedures for the loading of delivery vessels per SC 1.2.

A technician maintains the vapor control systems. There are quarterly preventative maintenance (PM) checks on the VRU, semi-annual PMs on the VCU, and monthly leak tests. There have been no malfunctions of the control system in the last couple of years. The preventative maintenance on the VCU as required in Special Condition (SC) 1.4 is completed. The records required by SC 1.11 are well kept.

Monthly smell logs and “sniff” tests are completed for leak detection, and include the loading rack, terminal yard, and vapor recovery area. A note on the logs indicates that leaks are to be repaired with 5 days and/or must be completed within 15 days. The equipment used for the “sniff” test is calibrated quarterly. The records required by SC 1.12 are well kept.

No compliance issues were observed during the inspection of the loading rack and control equipment. The vapor collection system and liquid filling equipment were all competent. This process appears to be in compliance with the requirements of Rule 609, Rule 627, and Rule 910.

### EUTANK#3, FGTANKS, and FGFACILITY

The following is a list of tanks in the yard:

| EU ID    | Install Date | Description                                       | Notes:   |
|----------|--------------|---|--|
| EUTANK#1 | 1959         | USLD storage tank – 1.04* M gal, cone, fixed roof | Grandfathered otherwise would fit exemption Rule 284(2)(d)   |
| EUTANK#2 | 1959         | USLD storage tank – 1.48* M gal, cone, fixed roof | Grandfathered otherwise would fit exemption Rule 284(2)(d)   |
| EUTANK#3 | 1959         | Low grade gas storage tank - 1.4 M gal, IFR       | 20-year API 653 – cleaning, repairs, and seal and gape measurement due Aug. 2020. Taken out of service April/May 2020 and refilled 10/5/2021 |
| EUTANK#4 | 1959         | Transmix storage tank – 63,000 gallon with IFR.   | Grandfathered otherwise would fit exemption Rule 291(2) per PTE demonstration.   |
| EUTANK#5 | 1959         | Ethanol storage tank – 1.5 M gal, IFR             | API 653 – cleaning, repairs, and seal and gape in 2017.  |



| <b>EU ID</b>            | <b>Install Date</b> | <b>Description</b>   | <b>Notes:</b>   |
|-------------------------|---------------------|--|---|
| <b>EUTANK#6</b>         | <b>1959</b>         | <b>Low grade gas storage tank – 1.47 M gal, IFR</b>                | <b>Seal and gape measurement 2018.</b>  |
| <b>EUTANK#7</b>         | <b>1959</b>         | <b>High grade gas (Premium 913) storage tank - 1.47 M gal, IFR</b> | <b>Seal and gape measurement due 2022 for 10-yr inspect &amp; repair, taken out of service, repaired and refilled</b> |
| <b>EUTANK#8</b>         | <b>1971</b>         | <b>Low grade gas storage tank - 1.68 M gal, IFR</b>                | <b>20-yr API 653 – seal inspection and gape measurement due 2023, currently out of service</b>                        |
| <b>EUADDITIVETANK#9</b> | <b>1990</b>         | <b>10,000 gallon gas additive tank, fixed roof</b>                 | <b>All additive tanks are reported under this emission unit.</b>  |
| <b>EUTANK#11</b>        | <b>1/1/96</b>       | <b>USLD additive tank, fixed roof</b>                              | <b>Exempt per Rule 284(2)(i)</b>  |
| <b>EUTANK#12</b>        | <b>1/1/97</b>       | <b>USLD additive tank, fixed roof</b>                              | <b>Exempt per Rule 284(2)(i)</b>  |
| <b>EUTANK#13</b>        | <b>1/1/99</b>       | <b>4136 gallon gas additive tank, fixed roof</b>                   | <b>Exempt per Rule 284(2)(i)</b>  |
| <b>EUTANK#14</b>        | <b>1/1/99</b>       | <b>Gas additive tank, fixed roof</b>                               | <b>Exempt per Rule 284(2)(i)</b>  |
| <b>EUTANK#15</b>        | <b>1/1/06</b>       | <b>USLD additive tank, fixed roof</b>                              | <b>Exempt per Rule 284(2)(i)</b>  |
| <b>EUTANK#16</b>        | <b>2014</b>         | <b>Butane bullet - 60,000 gal pressurized storage tank</b>         | <b>Exempt per Rule 284(2)(j).<br/>Off-loading and rack blended.</b>   |

| EU ID     | Install Date | Description   | Notes:                    |
|-----------|--------------|---|---------------------------|
| HOTANK#17 |              | Green double walled heating oil (HO) tank – 1,000 gal | Exempt per Rule 284(2)(i) |

A full API 653 is completed every 20 years on the floating roof storage tanks which include cleaning, inspection and repairs. Seal gape measurements per GDGACT are completed every 10 years and annual visual inspections of the tanks are completed as required by SC 3.3. Records as required by SC 3.4 are maintained.

A walk through inspection around the tanks in the yard was conducted. There was no visible sheen on any standing water in the yard, and no visible leaks or odors were detected around piping or tanks.

#### Records Review:

An electronic copy of the records was emailed and/or reviewed while on-site. Records obtained for the inspection are located in Content Manager.

The following records were viewed or obtained for the years 2021 to date in 2023:

1. Monthly sight, sound & smell logs (1/4/23 to 8/1/23) - no leaks identified.
2. Annual Terminal “sniff” test logged monthly (1/21/23 to 7/20/23) - no vapors detected.
3. Vapor Control Maintenance and Repair Logs for the VRU and VCU
4. Quarterly Preventative Maintenance Inspections for VRU
5. Semi-Annual Preventative Maintenance (PM) Inspections for VCU.
6. Continuous Emissions Monitor (CEM) Quarterly Worksheets.
7. Owosso VRU CEMS Reading 8/2/2023.
8. Owosso Terminal PTI Exemptions List. No changes and Rule 291(2) demonstration for EUTANK#4.
9. All product loading.

**10. 12-month rolling time period records of the petroleum product throughputs and vapor pressure of petroleum products for EUTANK#3 and FGFACILITY.**

**11. Individual HAP, total HAP, and VOC emission rates from FGFACILITY for each calendar month and 12-month rolling time period**

**EUGASLOADING throughput of gasoline, fuel oil, ethanol, and all other products loaded for the 12-month rolling period at the end of July 2023 (as required by SC 1.10) was 71,218,718 gallons.**

**EUTANK#3 throughput and VOC emissions for the 12-month rolling period at the end of July 2023 (as required by SC 2.5 and 2.6) are as follows:**

**Petroleum product (gasoline) throughput – 28,424,304 gallons < 144,303,200 gallons (SC 2.2)**

**VOC – 1.7 tpy < 4.8 tpy (SC 2.1a)**

**For FGFACILITY, the gas throughput and emissions for the 12-month rolling at the end of July 2023 were as follows:**

**Gasoline throughput – 53,550,808 gallons < 249,437,000 gallons (SC 4.2)**

**VOC – 20.6 tpy < 100 tpy (SC 4.1c)**

**Highest Single HAP (2,2,4-Trimethyl Pentane) – 0.25 tpy < 10 tpy (SC 4.1a)**

**Total HAPS – 0.96 tpy < 25 tpy (SC 4.1b)**

**All gas throughput and emissions are below the permit limits in PTI 27-04.**

### **Summary:**

**The facility appeared to be in compliance with the applicable rules and regulations, and PTI 27-04.**

**The recommendation to cleanup/update PTI 27-04 to modify the permit conditions to include the different control device (VRU) that was installed under an exemption and to update the testing and monitoring for the CEMS has not been completed. It appears that the VRU and CEMS were installed to meet the emission standard in item 1(b) of Table 2 of 40 CFR 63, Subpart BBBBBB (GDGACT). This means that at the loading rack, emissions of TOC must be reduced to less than or equal to 80 mg/L of gasoline loaded. The loading rack (EUGASLOADING, PTI 27-04) is limited to 0.7 pounds of organic vapor per 1,000 gallons of organic compounds loaded which**

converts to 84 mg/L of organic compounds loaded. Also, EUGASLOADING is permitted with a thermal oxidizer (VCU) which is required to be tested every 5 years and the monitoring of the pilot flame during the loading of gasoline product. The VCU is now used for backup only. The testing and monitoring of the vapor control device in the PTI doesn't match the vapor control device (VRU) used with a CEMS to assure proper operation. The practical enforceability of PTI 27-04 is problematic due to the changes made to control organic vapors from EUGASLOADING. It is highly recommended that a pre-application meeting be scheduled with the Permit Section to discussion modification of PTI 27-04 in order to assure that the PTI to opt-out of the Title V program is enforceable.

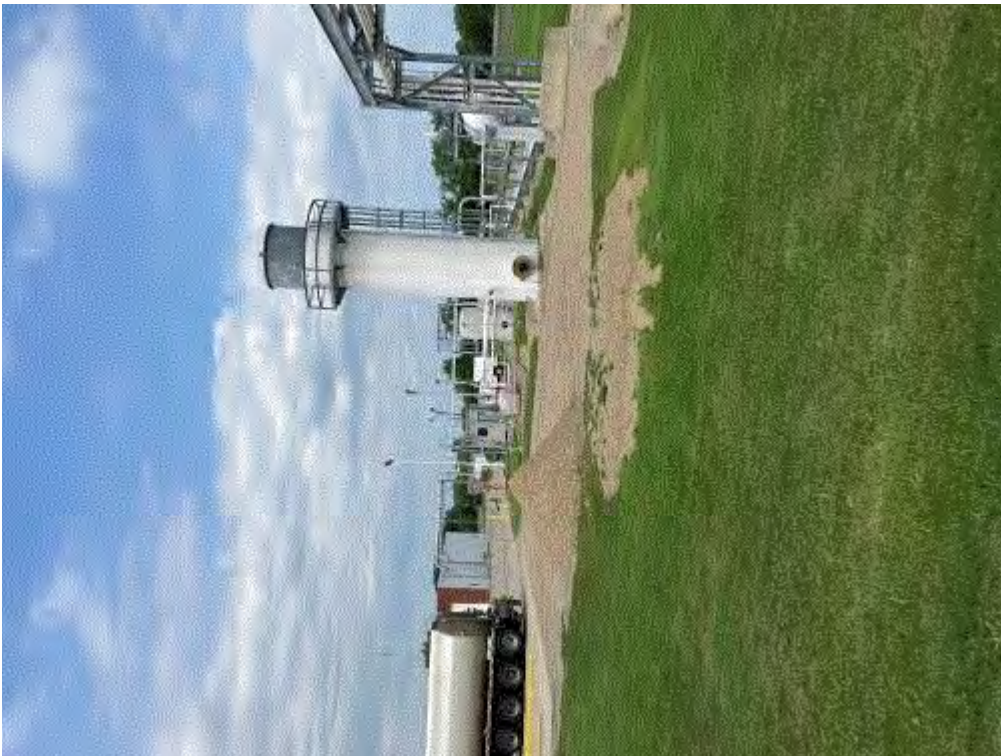


Image 1(529) : Small parts washer





**Image 2(533)** : Loading rack



**Image 3(542)** : VCU and VRU





**Image 4(534)** : Tank #1 tags



**Image 5(537)** : Tank #2 tags



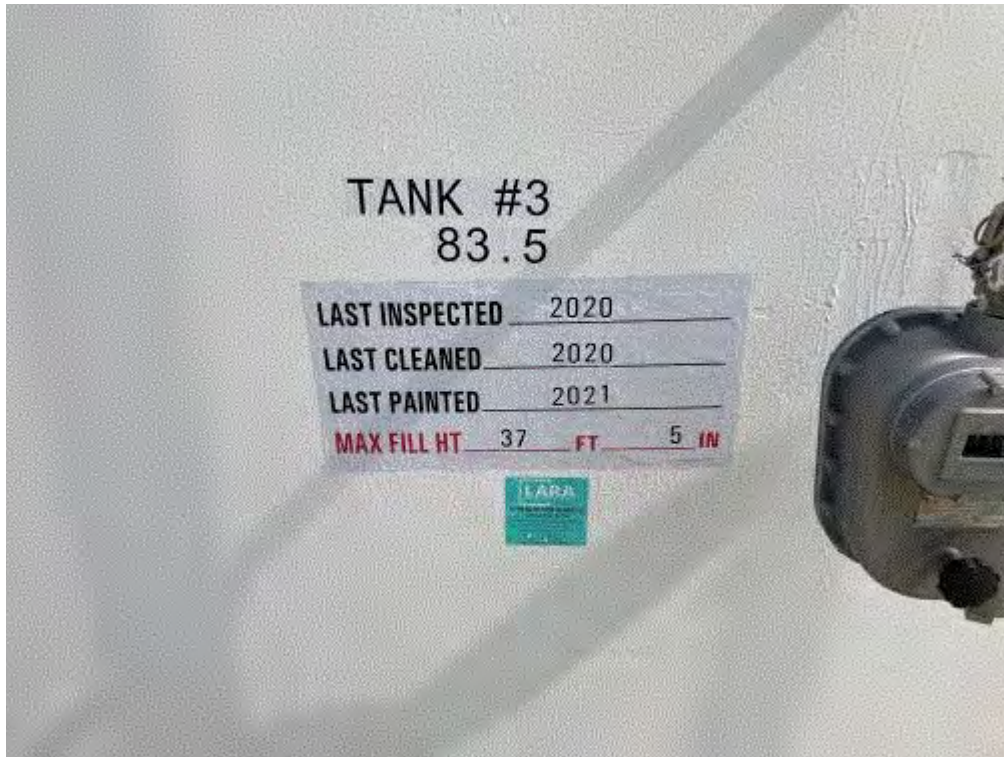
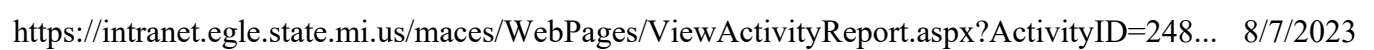
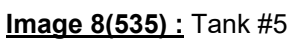


Image 6(539) : Tank #3 tags



Image 7(540) : Tank #4 tags







**Image 9(536)** : Tank #6



**Image 10(538)** : Tank #7 tags

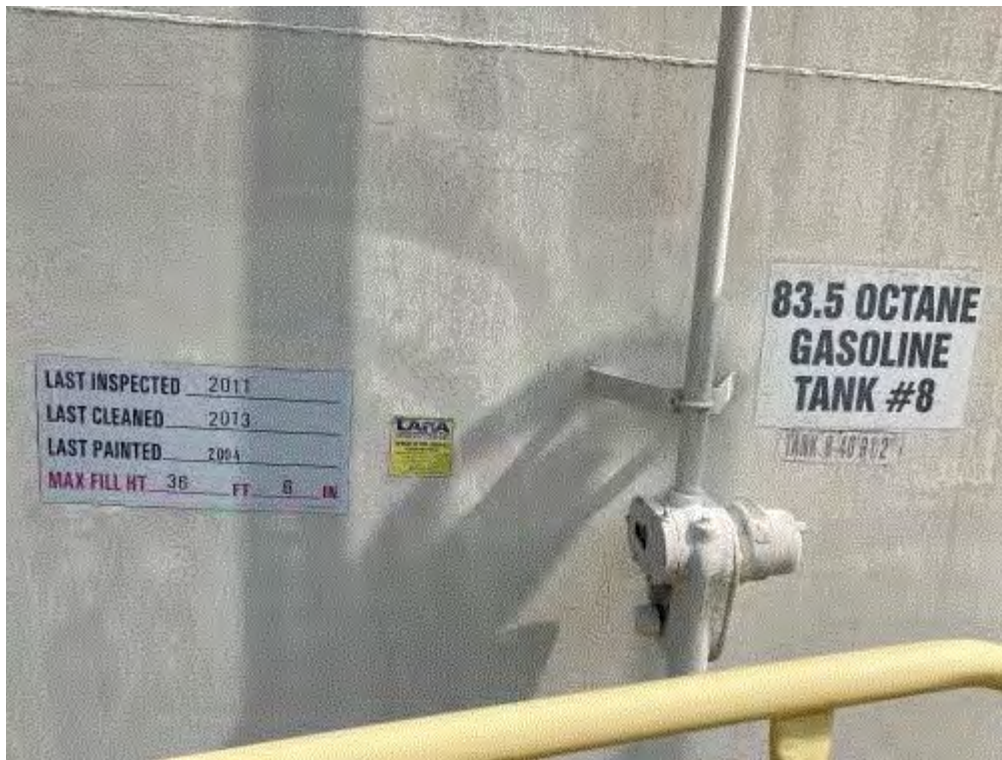


Image 11(541) : Tank #8

NAME Julie L. Brunner

DATE 8/7/2023

SUPERVISOR RB