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

M409764481

| | | |
|---|---|---|
| **FACILITY:** Marathon Pipe Line LLC (Stockbridge) | | **SRN / ID:** M4097 |
| **LOCATION:** 2499 GRIMES RD, STOCKBRIDGE | | **DISTRICT:** Lansing |
| **CITY:** STOCKBRIDGE | | **COUNTY:** INGHAM |
| **CONTACT:** Kevin Swartzell , Sr HES Professional | | **ACTIVITY DATE:** 09/09/2022 |
| **STAFF:** Michelle Luplow | **COMPLIANCE STATUS:** Compliance | **SOURCE CLASS:** MINOR |
| **SUBJECT:** Onsite, announced inspection to determine compliance with PTI No 58-00 and the NSPS Subpart Kb. | | |
| **RESOLVED COMPLAINTS:** | | |

**Inspected by: Michelle Luplow**

**Marathon Personnel Present: Kevin Swartzell, Air Program Coordinator (kmswartzell@marathonpetroleum.com)**

**Pete Thomas, Regional Environmental Professional**

**Remediation System Personnel Present:**

**Clint Campbell, Site Operator, Antea Group USA**

## Purpose

**Conduct an announced, onsite inspection by determining compliance with Marathon Pipeline's Permit to Install No. 58-00, as well as the NSPS 40 CFR Part 60, Subpart Kb.**

## Facility Background/Regulatory Overview

**Marathon owns and operates a gasoline tank, Tank #681, and distribution piping associated with the tank. The tank itself is located on property owned by Wolverine Pipeline, which is adjacent to Enbridge Pipeline property, located immediately to the south. See attached for aerial of the tank location.**

**Tank #681 is subject to the NSPS Subpart Kb for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.**

**In 2011, gasoline was discovered in the nearby Bauer Drain (a county drain that ran north and south, a few hundred feet east of Tank #681). A small leak had been found in Tank #681's valve seal, which, over a period resulted in upwards of 500,000 gallons spilled. The leak permeated through the soils until it reached a sand formation below ground that allowed the gasoline to travel to the Bauer Drain. A remediation system for the clean up was issued under PTI No. 118-11, which was then voided in 2015 because AQD believed the system could operated under exemption Rule 285(2)(w). The system has been operated under this exemption since that time.**

**The Bauer Drain was redirected just south of the Enbridge Pipeline property, and cutting to the west, and then to the north to avoid any further impacts from the Marathon tank leak. Marathon now owns the property where the Bauer Drain used to be and is currently working to demonstrate a risk-based shutdown of the remediation system is appropriate.**

**This facility was last inspected in June 2015.**

## Inspection

**This inspection was announced. AQD worked with Marathon staff out of Findlay, OH to meet at the location of the tank. The property is fenced in and requires access via a padlock. It's recommended that future inspections of the site be conducted by sending prior notice to Marathon to ensure staff are present to open the gate.**

**At 9:30 a.m. on September 9, 2022 I met with Kevin Swartzell and Pete Thomas from Marathon's Finley, OH office. P. Thomas unlocked the gate to allow us into the site and drive to the tank.**

**Table 1 lists emission units onsite with respect to Marathon operations.**

**Table 1.** Emission Units

| Emission Unit | PTI/Exemption | Control |
|---|---|---|
| **Tank 681**<br><br>188,000 barrel (~27, 822 $m^3$ or ~7,350,000 gallons) internal floating roof tank for 84-octane gasoline storage | PTI 58-00 | Internal floating roof |
| **Air Stripping Remediation**<br><br>To remove liquid non-aqueous phase liquid (LNAPL) – unleaded gasoline | Rule 285(2)(w) | Falco 300 Catalytic oxidizer |

**PTI No. 58-00: Tank #681**

**Emission Limits, Material Limits, & Monitoring/Recordkeeping**

**VOC emissions are limited to 8.0 tons per 12-month rolling period and gasoline throughput is limited to 710,640,000 gallons per year. Records are required to be kept for both. Marathon provided January 2020 – July 2022 records for both VOC emissions and gasoline throughput, as requested (see attached). All 12-month rolling totals throughout this period indicate emissions at ~6.3 tons VOC, within the limits defined in the permit.**

**Calendar year 2020 and 2021 gasoline throughputs were reported at 235,666,790 gallons and 259,353,907 gallons, respectively. January – July 2022 total throughput is currently at 152,681, 886 gallons of gasoline. Currently all 3 calendar years appear to be in compliance with the gasoline throughput limit.**

**40 CFR Part 60, Subpart Kb (NSPS Kb)**

**Marathon is required to comply with the NSPS Subpart Kb. Tank #681 has a capacity greater than 151 $m^3$ and the maximum true vapor pressure of the gasoline stored in the tank is equal to or greater than 5.2 kPa (0.75 psi) but less than 76.6 kPa (11 psi). True vapor pressure (TVP) is a function of the Reid Vapor Pressure (RVP) and surface temperature of the tank. There are AP-42 calculations that calculate TVP from RVP based on region-specific monthly average surface temperatures. The AP-42 calculation methodology recently changed due to an increase in the monthly average temperature over the past 20 years. The TVP for Tank #681 from 2020 and 2021 based on the new AP-42 calculation methodology, ranged from 3.6 to 6.1 psi. K. Swartzell said that TVP values are higher during the summer months than during the winter months.**

**Because Tank #681 has a capacity greater than 151 m3 and the gasoline stored in the tank has a TVP between 0.75 psi and 11 psi, the requirements under 60.112b(a) apply. The tank is equipped with an internal floating roof inside storage vessels that have fixed roofs. These types of tanks are required to meet one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof (60.112b(a)(1)(ii)):**

- Foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal)
- 2 seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof
- A mechanical shoe seal (metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof)

**P. Thomas and K. Swartzell confirmed that the tank is equipped with a primary mechanical shoe seal.**

**Inspections for internal floating roof tanks with mechanical shoe primary seals are required per the following (60.113b(a)) and records for each are required under 60.115b(a)(1)-(4):**

- Visually inspect the floating roof and primary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill.
    - Checks should be done to ensure that the internal floating roof is resting on the surface of the liquid and that there is not liquid accumulated on the roof, and that the seal is not detached.
    - If there are issues with the seal or roof, they are to be repaired or the tanks emptied within 45 days.

  **(60.113b(a)(2))**

**K. Swartzell said that rather than annual (12-month) visual inspections of the internal floating roof and primary seal through manholes or roof hatches, Marathon conducts these inspections semi-annually. He provided me with all semi-annual inspection records for calendar years 2021 and 2022. Records indicate that the inspections took place 3/12/21, 9/17/21 and 3/11/22 and each includes a record of all items inspected. These inspections meet the requirements of 60.113b(a)(2). Records indicate no issues were found that needed to be fixed (see attached).**

- Visually inspect the internal floating roof, the primary seal, gaskets, slotted membranes each time the storage vessel is emptied and degassed (i.e. out of service). If there are defects in the floating roof, holes, tears or openings in the seal, the gaskets no longer close off the liquid surfaces from the atmosphere, these items should be repaired before refilling the storage vessel.
    - These inspections should not occur at intervals greater than 10 years (60.113b(a)(4))

**There is a caveat to this requirement. In January 2021, EPA revised the NSPS Subpart Kb to include options for complying with the 10-year tank inspections. Facilities are allowed, under the revised NSPS Subpart Kb, to conduct in-service 10-year tank inspections if they opt to comply with the NESHAP Subpart WW in lieu of portions of the NSPS Subpart Kb. Facilities are also allowed under the NSPS Subpart Kb to opt-in and opt-out of the NESHAP Subpart WW, so long as they provide notification to the AQD that they are switching from the NSPS Subpart Kb to the NESHAP Subpart WW and vice versa.**

**Marathon has chosen to comply with the NESHAP Subpart WW in lieu of the NSPS Subpart Kb in order to conduct the 10-year tank inspections while the tank is in-service. Notification for the 10-year tank inspection was received by AQD on May 2, 2022 and includes the caveat that Marathon will opt back in to complying with the NSPS Subpart Kb following the tank inspection, but that for the purposes of the tank inspection, they will be complying with the NESHAP Subpart WW.**

**The tank was inspected June 23, 2022. K. Swartzell provided the tank inspection record for this 10-year in-service tank inspection (attached).**

**K. Swartzell said the tank was last emptied/degassed (taken out of service) in 2012 during which time an out-of-service tank inspection was conducted on 7/5/2012.**

### Exemption Rule 285(2)(w) – Air Stripping Remediation

**S. Ericksen Project Engineer for Waste & Remediation at Marathon, said that as of September 1, 2022, the total volume of LNAPL recovered from the site is 286,000 gallons. A catalytic oxidizer is used to control the emissions from the air stripper.**

**Rule 285(2)(w) applies to air strippers controlled by an appropriately designed and operated incineration system that is used exclusively for the cleanup of gasoline, fuel oil, natural gas condensate, and cruce oil spills, provided that the catalytic oxidizer is operated at a minimum temperature of 600F (315C) at the inlet of the catalyst bed, which includes utilizing a temperature indication device that continually displays the operating temperature.**

**Clint Campbell, site operator from Antea, showed me around the remediation site. The inlet temperature to the catalyst bed was reading at 332 C, which meets the inlet temperature requirements of the exemption.**

**Compliance statement:** **Marathon Pipeline LLC appears to be in compliance with PTI 58-00 and the NSPS Subpart Kb at this time.**


**Image 1(Location) :** Tank #681 location

**Image 2(Remediation) :** Monitor used for temperature on the catalytic oxidizer

NAME Michelle Luplow DATE 9/28/22 SUPERVISOR RB

| Maintenance Item Text | Functional Location Desc | Date Completed | Performed by | Holes, tears/other defects in the seal | Seal intact and uniformly in place | Roof floating on the liquid? | Holes or other defects in the roof? | Roof free of accumulated liquid? | Openings equipped with closed covers |
|---|---|---|---|---|---|---|---|---|---|
| PL Semi-Annual Tank Intrnl Float Roof | Stockbridge Tank 681 | 3/12/2021 | MEJAWORSKI | No | Yes | Yes | No | Yes | Yes |
| PL Semi-Annual Tank Intrnl Float Roof | Stockbridge Tank 681 | 9/17/2021 | S968 | No | Yes | Yes | No | Yes | Yes |
| PL Semi-Annual Tank Intrnl Float Roof | Stockbridge Tank 681 | 3/11/2022 | S968 | No | Yes | Yes | No | Yes | Yes |

# Stockbridge Station

**08/01/2021 to 07/31/2022**

# Rolling 12 Month
# Emissions & Throughput Summary

Marathon Pipeline Co.

**ops***Environmental*

## Tank VOCs & Throughput - by Tank Type

| | | Total | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Internal Floater - Cone/Flat Roof** | VOC Lbs | **12,646.68** | 1,350.93 | 1,080.73 | 1,353.65 | 1,111.35 | 858.27 | 746.74 | 713.90 | 926.46 | 764.14 | 1,034.98 | 1,257.33 | 1,448.20 |
| | US Tons | **6.32** | 0.68 | 0.54 | 0.68 | 0.56 | 0.43 | 0.37 | 0.36 | 0.46 | 0.38 | 0.52 | 0.63 | 0.72 |
| | Gallons. | **273,598,332** | 20,932,632 | 26,340,552 | 25,206,804 | 23,132,382 | 25,304,076 | 18,257,820 | 15,484,098 | 19,580,442 | 21,378,924 | 23,697,660 | 24,680,838 | 29,602,104 |
| **Total** | **VOC Lbs** | **12,646.68** | **1,350.93** | **1,080.73** | **1,353.65** | **1,111.35** | **858.27** | **746.74** | **713.90** | **926.46** | **764.14** | **1,034.98** | **1,257.33** | **1,448.20** |
| | **VOC US Tons** | **6.32** | **0.68** | **0.54** | **0.68** | **0.56** | **0.43** | **0.37** | **0.36** | **0.46** | **0.38** | **0.52** | **0.63** | **0.72** |
| | **Gallons** | **273,598,332** | **20,932,632** | **26,340,552** | **25,206,804** | **23,132,382** | **25,304,076** | **18,257,820** | **15,484,098** | **19,580,442** | **21,378,924** | **23,697,660** | **24,680,838** | **29,602,104** |

## Tank VOCs & Throughput - by Product Stored

| | | Total | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gasoline** | VOC Lbs | **12,646.68** | 1,350.93 | 1,080.73 | 1,353.65 | 1,111.35 | 858.27 | 746.74 | 713.90 | 926.46 | 764.14 | 1,034.98 | 1,257.33 | 1,448.20 |
| | US Tons | **6.32** | 0.68 | 0.54 | 0.68 | 0.56 | 0.43 | 0.37 | 0.36 | 0.46 | 0.38 | 0.52 | 0.63 | 0.72 |
| | Gallons. | **273,598,332** | 20,932,632 | 26,340,552 | 25,206,804 | 23,132,382 | 25,304,076 | 18,257,820 | 15,484,098 | 19,580,442 | 21,378,924 | 23,697,660 | 24,680,838 | 29,602,104 |
| **Total** | **VOC Lbs** | **12,646.68** | **1,350.93** | **1,080.73** | **1,353.65** | **1,111.35** | **858.27** | **746.74** | **713.90** | **926.46** | **764.14** | **1,034.98** | **1,257.33** | **1,448.20** |
| | **VOC US Tons** | **6.32** | **0.68** | **0.54** | **0.68** | **0.56** | **0.43** | **0.37** | **0.36** | **0.46** | **0.38** | **0.52** | **0.63** | **0.72** |
| | **Gallons** | **273,598,332** | **20,932,632** | **26,340,552** | **25,206,804** | **23,132,382** | **25,304,076** | **18,257,820** | **15,484,098** | **19,580,442** | **21,378,924** | **23,697,660** | **24,680,838** | **29,602,104** |

## Tank VOCs & Throughput Detail - by Tank

| | | | Total | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stockbridge Tank 681 Tank - Covered/Internal Floating | Gasoline | Standing Lbs | 12,298.72 | 1,324.31 | 1,047.23 | 1,321.59 | 1,081.93 | 826.09 | 723.52 | 694.21 | 901.56 | 736.95 | 1,004.84 | 1,225.94 | 1,410.55 |
| | | Working Lbs | 347.96 | 26.62 | 33.50 | 32.06 | 29.42 | 32.18 | 23.22 | 19.69 | 24.90 | 27.19 | 30.14 | 31.39 | 37.65 |
| | | Additional Lbs | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | Injection Lbs | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | Total VOC Lbs | 12,646.68 | 1,350.93 | 1,080.73 | 1,353.65 | 1,111.35 | 858.27 | 746.74 | 713.90 | 926.46 | 764.14 | 1,034.98 | 1,257.33 | 1,448.20 |
| | | Total VOC/8760 | 1.44 | 0.15 | 0.12 | 0.15 | 0.13 | 0.10 | 0.09 | 0.08 | 0.11 | 0.09 | 0.12 | 0.14 | 0.17 |
| | | Gallons | 273,598,332 | 20,932,632 | 26,340,552 | 25,206,804 | 23,132,382 | 25,304,076 | 18,257,820 | 15,484,098 | 19,580,442 | 21,378,924 | 23,697,660 | 24,680,838 | 29,602,104 |
| Total | | Standing Lbs | 12,298.72 | 1,324.31 | 1,047.23 | 1,321.59 | 1,081.93 | 826.09 | 723.52 | 694.21 | 901.56 | 736.95 | 1,004.84 | 1,225.94 | 1,410.55 |
| | | Working Lbs | 347.96 | 26.62 | 33.50 | 32.06 | 29.42 | 32.18 | 23.22 | 19.69 | 24.90 | 27.19 | 30.14 | 31.39 | 37.65 |
| | | Additional Lbs | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | Injection Lbs | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | Total VOC Lbs | 12,646.68 | 1,350.93 | 1,080.73 | 1,353.65 | 1,111.35 | 858.27 | 746.74 | 713.90 | 926.46 | 764.14 | 1,034.98 | 1,257.33 | 1,448.20 |
| | | VOC Lbs / 8760 | 1.44 | 0.15 | 0.12 | 0.15 | 0.13 | 0.10 | 0.09 | 0.08 | 0.11 | 0.09 | 0.12 | 0.14 | 0.17 |
| | | Gallons | 273,598,332 | 20,932,632 | 26,340,552 | 25,206,804 | 23,132,382 | 25,304,076 | 18,257,820 | 15,484,098 | 19,580,442 | 21,378,924 | 23,697,660 | 24,680,838 | 29,602,104 |

## Facility Fugitive VOCs - excludes trucks, includes valves, couplings, fittings, etc.

| | | Total | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Terminal Fugitives | VOC Lbs | 227.51 | 19.32 | 18.70 | 19.32 | 18.70 | 19.32 | 19.32 | 17.45 | 19.32 | 18.70 | 19.32 | 18.70 | 19.32 |
| | VOC US Tons. | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Total | VOC LBS | 227.51 | 19.32 | 18.70 | 19.32 | 18.70 | 19.32 | 19.32 | 17.45 | 19.32 | 18.70 | 19.32 | 18.70 | 19.32 |
| | VOC U.S. Tons | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

## Facility Wide - VOCs only

| Facility VOC Lbs | | Total | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanks | | 12,646.68 | 1,350.93 | 1,080.73 | 1,353.65 | 1,111.35 | 858.27 | 746.74 | 713.90 | 926.46 | 764.14 | 1,034.98 | 1,257.33 | 1,448.20 |
| Terminal Fugitives | | 227.51 | 19.32 | 18.70 | 19.32 | 18.70 | 19.32 | 19.32 | 17.45 | 19.32 | 18.70 | 19.32 | 18.70 | 19.32 |
| Total | VOC Lbs | 12,874.19 | 1,370.25 | 1,099.43 | 1,372.97 | 1,130.05 | 877.59 | 766.06 | 731.35 | 945.78 | 782.84 | 1,054.30 | 1,276.03 | 1,467.52 |

| Facility VOC US Tons | | Total Tons | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanks | | 6.32 | 0.68 | 0.54 | 0.68 | 0.56 | 0.43 | 0.37 | 0.36 | 0.46 | 0.38 | 0.52 | 0.63 | 0.72 |
| Terminal Fugitives | | 0.11 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Total | VOC U.S. Tons | 6.44 | 0.69 | 0.55 | 0.69 | 0.57 | 0.44 | 0.38 | 0.37 | 0.47 | 0.39 | 0.53 | 0.64 | 0.73 |

## Facility Wide Pollutants - excluding VOCs

| | | Total Lbs | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Facility Total | CO Lbs | | | | | | | | | | | | | |
| | NOx Lbs | | | | | | | | | | | | | |
| | Aldehyde Lbs | | | | | | | | | | | | | |
| | SO2 Lbs | | | | | | | | | | | | | |
| | SOx Lbs | | | | | | | | | | | | | |
| | PM Lbs | | | | | | | | | | | | | |
| | PM2.5 Lbs | | | | | | | | | | | | | |
| | PM10 Lbs | | | | | | | | | | | | | |
| | CO2 Lbs | | | | | | | | | | | | | |
| | CH4 Lbs | | | | | | | | | | | | | |
| | N2O Lbs | | | | | | | | | | | | | |
| | CO2e Lbs | | | | | | | | | | | | | |

# Stockbridge Station

**08/01/2021 to 07/31/2022**

# Rolling 12 Month
# Emissions & Throughput Summary

Marathon Pipeline Co.

**ops***Environmental*

| | | Total | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Facility Total** | **CO US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **NOx US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **Aldehyde US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **SO2 US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **SOx US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **PM US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **PM 2.5 US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **PM 10 US Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **CO2 Metric Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **CH4 Metric Tons.** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **N2O Metric Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **CO2e Metric Tons** | - | - | - | - | - | - | - | - | - | - | - | - | - |

## Facility Wide Hazardous Air Pollutants

| Source Product | | Total LBS | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| From Gasolines | Benzene Lbs | **115.87** | 12.33 | 9.89 | 12.36 | 10.17 | 7.90 | 6.89 | 6.58 | 8.51 | 7.05 | 9.49 | 11.48 | 13.21 |
| | Ethylbenzene Lbs | **12.87** | 1.37 | 1.10 | 1.37 | 1.13 | 0.88 | 0.77 | 0.73 | 0.95 | 0.78 | 1.05 | 1.28 | 1.47 |
| | Hexane Lbs | **205.99** | 21.92 | 17.59 | 21.97 | 18.08 | 14.04 | 12.26 | 11.70 | 15.13 | 12.53 | 16.87 | 20.42 | 23.48 |
| | Toluene Lbs | **167.36** | 17.81 | 14.29 | 17.85 | 14.69 | 11.41 | 9.96 | 9.51 | 12.30 | 10.18 | 13.71 | 16.59 | 19.08 |
| | Trimethylbenzen (1,2,4) Lbs | **-** | - | - | - | - | - | - | - | - | - | - | - | - |
| | Trimethylpentane (2,2,4) Lbs | **102.99** | 10.96 | 8.80 | 10.98 | 9.04 | 7.02 | 6.13 | 5.85 | 7.57 | 6.26 | 8.43 | 10.21 | 11.74 |
| | Xylene Lbs | **64.37** | 6.85 | 5.50 | 6.86 | 5.65 | 4.39 | 3.83 | 3.66 | 4.73 | 3.91 | 5.27 | 6.38 | 7.34 |
| | Naphthalene Lbs | **-** | - | - | - | - | - | - | - | - | - | - | - | - |
| | Cumene Lbs | **1.29** | 0.14 | 0.11 | 0.14 | 0.11 | 0.09 | 0.08 | 0.07 | 0.09 | 0.08 | 0.11 | 0.13 | 0.15 |
| | Total HAP Lbs. | **670.75** | **71.39** | **57.28** | **71.53** | **58.88** | **45.72** | **39.91** | **38.10** | **49.28** | **40.79** | **54.93** | **66.48** | **76.46** |
| Totals | Benzene | **115.87** | 12.33 | 9.89 | 12.36 | 10.17 | 7.90 | 6.89 | 6.58 | 8.51 | 7.05 | 9.49 | 11.48 | 13.21 |
| | Ethylbenzene | **12.87** | 1.37 | 1.10 | 1.37 | 1.13 | 0.88 | 0.77 | 0.73 | 0.95 | 0.78 | 1.05 | 1.28 | 1.47 |
| | Hexane | **205.99** | 21.92 | 17.59 | 21.97 | 18.08 | 14.04 | 12.26 | 11.70 | 15.13 | 12.53 | 16.87 | 20.42 | 23.48 |
| | Toluene | **167.36** | 17.81 | 14.29 | 17.85 | 14.69 | 11.41 | 9.96 | 9.51 | 12.30 | 10.18 | 13.71 | 16.59 | 19.08 |
| | Trimethylbenzene(1,2,4) | **-** | - | - | - | - | - | - | - | - | - | - | - | - |
| | Trimethylpentane(2,2,4) | **102.99** | 10.96 | 8.80 | 10.98 | 9.04 | 7.02 | 6.13 | 5.85 | 7.57 | 6.26 | 8.43 | 10.21 | 11.74 |
| | Xylene | **64.37** | 6.85 | 5.50 | 6.86 | 5.65 | 4.39 | 3.83 | 3.66 | 4.73 | 3.91 | 5.27 | 6.38 | 7.34 |
| | Naphthalene | **-** | - | - | - | - | - | - | - | - | - | - | - | - |
| | Cumene | **1.29** | 0.14 | 0.11 | 0.14 | 0.11 | 0.09 | 0.08 | 0.07 | 0.09 | 0.08 | 0.11 | 0.13 | 0.15 |
| | Total HAP Lbs | **670.75** | **71.39** | **57.28** | **71.53** | **58.88** | **45.72** | **39.91** | **38.10** | **49.28** | **40.79** | **54.93** | **66.48** | **76.46** |

# Stockbridge Station

**08/01/2021 to 07/31/2022**

# Rolling 12 Month
# Emissions & Throughput Summary

Marathon Pipeline Co.

**ops***Environmental*

**Total - HAP Tons**

| | | Total TONS | 2021 / 08 | 2021 / 09 | 2021 / 10 | 2021 / 11 | 2021 / 12 | 2022 / 01 | 2022 / 02 | 2022 / 03 | 2022 / 04 | 2022 / 05 | 2022 / 06 | 2022 / 07 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Totals** | **Benzene** | 0.058 | 0.006 | 0.005 | 0.006 | 0.005 | 0.004 | 0.003 | 0.003 | 0.004 | 0.004 | 0.005 | 0.006 | 0.007 |
| | **Ethylbenzene** | 0.006 | 0.001 | 0.001 | 0.001 | 0.001 | - | - | - | - | - | 0.001 | 0.001 | 0.001 |
| | **Hexane** | 0.103 | 0.011 | 0.009 | 0.011 | 0.009 | 0.007 | 0.006 | 0.006 | 0.008 | 0.006 | 0.008 | 0.010 | 0.012 |
| | **Toluene** | 0.084 | 0.009 | 0.007 | 0.009 | 0.007 | 0.006 | 0.005 | 0.005 | 0.006 | 0.005 | 0.007 | 0.008 | 0.010 |
| | **Trimethylbenzene(1,2,4)** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **Trimethylpentane(2,2,4)** | 0.051 | 0.005 | 0.004 | 0.005 | 0.005 | 0.004 | 0.003 | 0.003 | 0.004 | 0.003 | 0.004 | 0.005 | 0.006 |
| | **Xylene** | 0.032 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 | 0.004 |
| | **Napthalene** | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | **Cumene** | 0.001 | - | - | - | - | - | - | - | - | - | - | - | - |
| | **Total HAP Tons** | 0.335 | 0.036 | 0.029 | 0.036 | 0.029 | 0.023 | 0.020 | 0.019 | 0.025 | 0.020 | 0.027 | 0.033 | 0.038 |

**NOTES FOR FACTORS & CALCULATIONS:**

» **VOCs from controlled loading of Gasoline (truck / barge / rail)** uses the stack test mg/L in effect during loading. [ControlEfficiency_mg/L * 3.7854 * 2.2046 / 1000 * Thruput-Gas / 1000]

» **Temperatures and windspeeds** in tank calculations are from the TANKS4 Meteorological tables, using the 30 Year U. S. Monthly Climate Normals 1961-1990, National Climatic Data Center, Asheville, NC.

» **VOCs from uncontrolled loading of Gasoline & all truck, barge, and rail loading of Distillate, Ethanol, Other Organics** uses AP-42, Ch 5, Jun 2008, Pg 5.2-4 reduced by capture & control efficiency on Pg 5.2-6:
[(12.46 * Vap.Mol.Wt * SaturationFactor * TVP / BulkLiquidTemp°R) * (Thruput / 1000) * ((100 - ControlEff%) / 100) * (CaptureEff% / 100)] where where Capture_Eff% relates to the truck fugitive rate.
8 mg/l = 99.21%, 9 mg/l = 99.11%(being phased out), 13 mg/l = 98.72%. Derived from ((1 - (mg/l / 1014)) / 100), where 1014 is the density of 1 litre of saturated gasoline vapors from EPA-453/R-94-002b U.S. EPA RTP, NC Nov 1994 "Gasoline Distribution Industry (Stage I) - Background Information for Promulgated Standards", Pg A-4. **Uncontrolled barge loading** uses the factors from AP-42, Ch 5.2, Jun 2008, tables 5.2-2 and 5.2-6.

» **Truck Fugitives from loading Gasoline** uses fixed rate determined by permit or MACT status. The formula is:
[FugitiveRate mg/L * 3.785 / 453.600 * Thruput-Gas / 1000)] where the Fugitive Rate is 8 mg/l for MACT facilities and those where the trailers must pass a 1" pressure decay test, 13 mg/l for all other facilities where the trailers must pass a 3" pressure decay test. Some states and permits call for 9 mg/l (rather than 13) based on a study from Radian Corp but the API does not recognize the value.

» **Truck Fugitives from loading Distillate, Ethanol, and Other Organics** uses AP-42, Ch 5, Jun 2008, Pg 5.2-4 reduced by the capture efficiency.
[(12.46 * Mol.Wt * SaturationFactor * TVP / BulkLiquidTemp°R) * (Thruput-NonGas / 1000) * ((100 - CaptureEff%) / 100)] where Capture_Eff% relates to the truck fugitive rate.
8 mg/l = 99.21%, 9 mg/l = 99.11%(being phased out), 13 mg/l = 98.72%. Derived from ((1 - (mg/l / 1014)) / 100) where 1014 is the density of 1 litre of saturated gasoline vapors from EPA-453/R-94-002b U.S. EPA RTP, NC Nov 1994 "Gasoline Distribution Industry (Stage I) - Background Information for Promulgated Standards", Pg A-4.

» **By-products of combustion from Combustors, Boilers, Heaters, and Engines.** Reference AP-42 Ch 1.3 Fuel Oil Combustion, May 2010; AP-42 Ch 1.4 Natural Gas Combustion, July 1998; 40 CFR 98 Mandatory Reporting of GHGs; Final Rule, where applicable.

» **Tank Emissions** are calculated using AP-42 Chapter 7.1, Nov. 2006

» **Oil / Water Separator emissions:** [(Factor in lb/Gal * Thruput-Water / 1000)] Factors from AP-42, Ch 5.1, Apr 2015, Pg 5.1-16, Tbl 5.1-3, Fugitive Emission Factors for Petroleum Refineries. Oil / Water Separators.

» **WAT tank emission factors:** The petroleum is stripped out in the OWS and the contact water is in equilibrium by the time it hits the WAT tanks. This is based on sampling where approximately 50 ppm hydrocarbon was found. (So low that there would be no emissions if left alone.)
>> WAT tanks if not sparged use 0 lb/1,000 gal thruput. (equilibrium)
>> WAT tanks if sparged and vented to the atmosphere, use 0.42 lb VOC / 1,000 gal water thruput.
(Sparging removes the remaining hydrocarbons) (50 ppm = (50 lb/1,000,000 lb water) * (8.3454 lbs water * 1000 gal)).
>> WAT tanks if sparged and vented to VRU use 0.021 lb VOC / 1,000 gal water (95% collection efficiency of the remaining hydrocarbons is assumed).

**NOTES FOR FACTORS & CALCULATIONS - Continued**

**Speciation Notes:**

| | Vapor Weight Percent | | | |
|---|---|---|---|---|
| POLLUTANT | Ethanol * | Gasolines | Distillates | Crude |
| BENZENE | 0.0450 % | 0.9000 % | 0.0200% | 1.1400 % |
| ETHYLBENZENE | 0.0050 % | 0.1000 % | 0.0400% | 0.0750 % |
| HEXANE | 0.0800 % | 1.6000 % | 0.0100% | 1.2100 % |
| TOLUENE | 0.0650 % | 1.3000 % | 0.2600% | 0.5700 % |
| TRIMETHYLBENZNE(1,2,4) | 0.0000 % | 0.0000 % | 0.0000% | 0.0130 % |
| TRIMETHYLPENTANE(2,2,4) | 0.0400 % | 0.8000 % | 0.0000% | 0.1000 % |
| XYLENE | 0.0250 % | 0.5000 % | 0.6900% | 0.3300 % |
| NAPHTHALENE | 0.0000 % | 0.0000 % | 0.2550% | 0.0000 % |
| CUMENE | 0.0005 % | 0.0100 % | 0.0100% | 0.0100 % |

** Ethanol assumed to be denatured with 5% gasoline.*

**Butane Calculations:**

**>>**Disconnect Loss: {TruckCount} * {LossVolPerConnector} * {ConnectorsPerEvent} * {MaterialDensity}

>>Injection Loss: {TkThroughputMeas}/1000000.0000 * {TOC_EF}
TOC_EF is 4900lb/MM Gallons

>>TOC: IF(ISERROR({DisconnectLoss}), 0, {DisconnectLoss}) + IF (ISERROR({AdditionalEmissions}), 0, {AdditionalEmissions})

**Terminal Specific Notes:**

» **Gasoline speciation data** taken from Gasoline Distribution Industry (Stage 1) - Background Information for Proposed Standards for the MACT regulation Table C-5 (EPA-435/R-94-002a)

» **Distillate speciation data** taken from Karin Ritter (American Petroleum Institute) memo to the Gasoline Distribution MACT Workgroup dated Feb. 8, 1995 containing speciation data submitted by various API member companies.

» **Asphalt speciation data -** As industry accepted HAPs speciation is unavailable, MPC has chosen to reflect HAPs from Asphalt VOCs as the same as for distillates.

» **Crude speciation data -** Taken from TANKS 4.09 liquid speciation of crude at 76 degrees F.

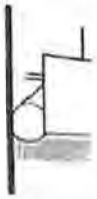
Marathon Pipe Line LLC
Owning Org: IDPC

# 10 Year Internal Floating Roof (IFR) Seal Inspection Form

| General Tank Information | | |
|---|---|---|
| Date: 6-23-22 | Location: Stockbridge MI | Tank #: 681 |
| Tank Diameter: 150' | Product : Gasoline | Product Level: 25' |
| Site Mgr: Cedrick Coburn | Project Mgr: Tyler Rupp | Inspector: John Payton |

**Primary Seal** (Circle Seal Type)

Mechanical Shoe Seal



Foam Log Seal

**Secondary Seal** (If Applicable - Circle Seal Type)

Compression Plate or Similar

Rim-Mount Wiper

None

| Questions | Responses | | |
|---|---|---|---|
| | Yes | No | N/A |
| 1. Is the floating roof currently floating? | ✓ | | |
| 2. Does the primary seal completely cover the space between the IFR and tank shell (Is the seal free of holes, tears and defects)? | ✓ | | |
| 3. If installed, does the secondary seal completely cover the space between the IFR and tank shell (Is the seal free of holes, tears and defects)? | | | ✓ |
| 4. Is each manway on the IFR closed with bolted/gasketed lids when not in use? | ✓ | | |
| 5. Are leg actuated bleeder vent(s) or pressure/vacuum vent(s) gasketed and closed, except for when roof is in the process of being floated or landed? | ✓ | | |
| 6. If applicable, are rim space vents gasketed and closed? | | | ✓ |
| 7. If applicable, do all sample wells or temperature probe funnels that have a slit fabric cover that is 90% or more closed? | ✓ | | |
| 8. If applicable, do all emergency drains have a slit fabric cover that is 90% or more closed or some type of float style cover? | | | ✓ |
| 9. If applicable, do all fixed roof support columns have a flexible fabric sleeve seal or gasketed sliding cover? | ✓ | | |
| 10. If applicable, does each ladder or gauge pole ladder combo penetrating below the IFR, have a gasketed sliding cover? | ✓ | | |

| | |
|---|---|
| If all **YES** responses: | • Submit form to MPL ESR Air Program Coordinator and MPL Tank SIL within 15 days. |
| If there are any **NO** responses: | • Make notification as soon as practical, but no later than the next business day to MPL ESR Air Program Coordinator and MPL Tank SIL.<br>• Submit form to MPL ESR Air Program Coordinator and MPL Tank SIL within 7 days. |

| Month-Year | Equipment Name | MaterialName | Monthly VOCs (lbs) | Rolling 12 Month Total VOCs (tons) | Monthly Throughput (gals) | Rolling 12 Month Total Throughput (gals) |
|---|---|---|---|---|---|---|
| Feb-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 731.06 | | 28,973,574 | |
| Mar-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 13.5 | 928.62 | | 21,281,274 | |
| Apr-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 749.89 | | 10,176,894 | |
| May-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,034.35 | | 23,206,680 | |
| Jun-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,255.68 | | 23,388,540 | |
| Jul-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,444.09 | | 26,371,758 | |
| Aug-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,357.32 | | 25,953,480 | |
| Sep-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,080.08 | | 25,834,830 | |
| Oct-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 13.5 | 1,350.46 | | 22,705,326 | |
| Nov-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 1,118.39 | | 28,667,142 | |
| Dec-19 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 857.52 | | 24,711,708 | |
| Jan-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 753.62 | 6.33 | 23,666,790 | 284,937,996 |
| Feb-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 748.80 | 6.34 | 23,425,794 | 279,390,216 |
| Mar-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 13.5 | 924.72 | 6.34 | 18,208,134 | 276,317,076 |
| Apr-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 742.44 | 6.33 | 4,316,676 | 270,456,858 |
| May-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,018.73 | 6.33 | 10,925,376 | 258,175,554 |
| Jun-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,254.95 | 6.33 | 22,808,982 | 257,595,996 |
| Jul-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,442.40 | 6.32 | 25,046,616 | 256,270,854 |
| Aug-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,354.95 | 6.32 | 24,094,854 | 254,412,228 |
| Sep-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,076.98 | 6.32 | 23,397,276 | 251,974,674 |
| Oct-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 13.5 | 1,354.61 | 6.32 | 25,962,678 | 255,232,026 |
| Nov-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 1,105.56 | 6.32 | 18,582,648 | 245,147,532 |
| Dec-20 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 844.63 | 6.31 | 14,581,602 | 235,017,426 |
| Jan-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 753.71 | 6.31 | 23,736,594 | 235,087,230 |
| Feb-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 711.03 | 6.29 | 13,224,876 | 224,886,312 |
| Mar-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 13.5 | 927.30 | 6.29 | 20,240,304 | 226,918,482 |
| Apr-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 763.77 | 6.30 | 21,088,032 | 243,689,838 |
| May-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,022.73 | 6.31 | 14,064,498 | 246,828,960 |
| Jun-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,258.53 | 6.31 | 25,628,820 | 249,648,798 |
| Jul-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,436.56 | 6.31 | 20,454,336 | 245,056,518 |
| Aug-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,350.93 | 6.30 | 20,932,632 | 241,894,296 |
| Sep-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,080.73 | 6.31 | 26,340,552 | 244,837,572 |
| Oct-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 13.5 | 1,353.65 | 6.30 | 25,206,804 | 244,081,698 |
| Nov-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 1,111.35 | 6.31 | 23,132,382 | 248,631,432 |
| Dec-21 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 858.27 | 6.31 | 25,304,076 | 259,353,906 |
| Jan-22 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 746.74 | 6.31 | 18,257,820 | 253,875,132 |
| Feb-22 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 15.0 | 713.90 | 6.31 | 15,484,098 | 256,134,354 |
| Mar-22 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 13.5 | 926.46 | 6.31 | 19,580,442 | 255,474,492 |
| Apr-22 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 764.14 | 6.31 | 21,378,924 | 255,765,384 |
| May-22 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,034.98 | 6.32 | 23,697,660 | 265,398,546 |
| Jun-22 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,257.33 | 6.32 | 24,680,838 | 264,450,564 |
| Jul-22 | Stockbridge Tank 681 | GAS CONVENTIONAL RVP 09.0 | 1,448.20 | 6.32 | 29,602,104 | 273,598,332 |

# Tank TVP Summary



## Stockbridge Station

**Tank: Stockbridge Tank 681 ( Internal Floater - Cone/Flat Roof)**

| Begin Date | End Date | Material Name | Throughput (Gal) | True Vapor Pressure |
|---|---|---|---|---|
| 01/01/2021 | 02/01/2021 | Gas Conventional RVP 15.0 | 23,736,594 | 3.8290 |
| 02/01/2021 | 03/01/2021 | Gas Conventional RVP 15.0 | 13,224,876 | 4.0312 |
| 03/01/2021 | 04/01/2021 | Gas Conventional RVP 13.5 | 20,240,304 | 4.4830 |
| 04/01/2021 | 05/01/2021 | Gas Conventional RVP 09.0 | 21,088,032 | 3.6391 |
| 05/01/2021 | 06/01/2021 | Gas Conventional RVP 09.0 | 14,064,498 | 4.5988 |
| 06/01/2021 | 07/01/2021 | Gas Conventional RVP 09.0 | 25,628,820 | 5.5398 |
| 07/01/2021 | 08/01/2021 | Gas Conventional RVP 09.0 | 20,454,336 | 6.0189 |
| 08/01/2021 | 09/01/2021 | Gas Conventional RVP 09.0 | 20,932,632 | 5.7345 |
| 09/01/2021 | 10/01/2021 | Gas Conventional RVP 09.0 | 26,340,552 | 4.8860 |
| 10/01/2021 | 11/01/2021 | Gas Conventional RVP 13.5 | 25,206,804 | 6.0758 |
| 11/01/2021 | 12/01/2021 | Gas Conventional RVP 15.0 | 23,132,382 | 5.4767 |
| 12/01/2021 | 01/01/2022 | Gas Conventional RVP 15.0 | 25,304,076 | 4.2836 |
| **Tank: Stockbridge Tank 681 Total Throughput & Average TVP:** | | | **259,353,906** | **4.8830** |