AI# 2181
DQ# 7285

MAGELLAN
MIDSTREAM PARTNERS, L.P.

ONE WILLIAMS CENTER
PO BOX 22186
TULSA, OK 74121-2186
(918)574-7000

JAN 10 2023

January 9, 2023

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Re: Capped Permit Application and Request to Revoke Permit 04100006-004 for the Alexandria, MN Terminal

Dear MPCA Permitting Staff,

Magellan Pipeline Co, L.P. (Magellan) hereby submits the following application for a Capped Permit. Magellan is also requesting to terminate coverage for the Alexandria Terminal under the existing Permit 04100006-004 upon issuance of the new Capped Permit. As shown in the previously submitted 2021 annual emissions inventory, actual emissions remain well below the thresholds allowed under the Capped Permit, and no projects are planned that will prevent Capped Permit eligibility.

The facility is subject to one New Source Performance Standard under 40 CFR Part 60 (NSPS), specifically 40 CFR 60 Part XX (NSPS for Bulk Gasoline Terminals). NSPS Part XX is allowable under the Capped Permit program.

The facility is an area source of HAPs and is subject to 40 CFR 63 Subpart BBBBBB (NESHAP for gasoline distribution bulk terminals, bulk plants, and pipeline facilities). 40 CFR 63 Subpart BBBBBB does not require the source to obtain a part 70 or 71 permit (per §63.11081(b)). Therefore, Magellan remains eligible for a Capped Permit in place of the Alexandria Terminal's existing permit.

Should you have any questions regarding this application, please contact me at brandy.chappelle@magellanlp.com or (918) 574-7747. Alternatively, you may contact Al Reich at areich@barr.com or at (218) 529-7144.

Sincerely,

Brandy Chappelle
Senior Air Specialist
Magellan Pipeline Co L.P.

cc: Eddie Heck, Magellan
Al Reich, Barr Engineering Company

Enclosures: Permit application (1 signed hard copy with USB drive containing electronic copies of files)
Permit application fee ($1,140)

Request to Void Permit 04100006-004 and Application for Capped Permit

Magellan Pipeline Co, L.P.

July 2022

Request to Void Permit 04100006-004 and Application for Capped Permit

Magellan Pipeline Co, L.P.

July 2022

325 S. Lake Avenue, Suite 700
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Contents

List of Tables

List of Appendices

1.0 Introduction

Magellan Pipeline Co, L.P. (Magellan) currently operates the Alexandria Terminal in Douglas County, Minnesota under Air Emission Permit No. 04100006-004 and is subject to 40 CFR 60 Par XX and 40 CFR Part 63 Subpart BBBBBB. After evaluating historical actual emissions, Magellan has concluded that the Alexandria Terminal will qualify for a Capped Permit, based on the following items:

1. Actual emissions have been less than the thresholds allowed under the Capped Permit, as confirmed by the 2021 annual emission inventory and previous years' submittals.
2. The facility is subject to a New Source Performance Standards under 40 CFR Part 60 (specifically Part XX), which is allowable under the Capped Permit program.
3. The facility is an area source of hazardous air pollutants (HAPs) and is subject to 40 CFR 63 Subpart BBBBBB (NESHAP for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities).
4. 40 CFR 63 Subpart BBBBBB does not require the source to obtain a part 70 or 71 permit (per 63.11081(b)).

Therefore, Magellan is submitting this application package to initiate termination coverage under the existing Air Emission Permit No. 04100006-004 and apply for a Capped Permit. Official termination will be completed through the Minnesota Pollution Control Agency's (MPCA) e-Services portal in coordination with the MPCA as this application is processed.

2.0 Source and Process Description

The Alexandria Terminal is located at 709 3rd Avenue West, Alexandria, MN, in Douglas County. The terminal is a bulk petroleum products distribution center, owned and operated by Magellan. The terminal normally operates 24 hours per day, seven days per week, 52 weeks per year. The property covers approximately 73 acres, and consists of twenty-two fixed roof storage tanks, nine internal floating roof storage tanks, a loading rack, a vapor combustion unit (VCU) for controlling volatile organic compounds (VOC) from the loading operations, an office building, and several storage buildings. The terminal distributes various grades of unleaded gasoline and distillate fuel oil. The quantity of products depends on the time of the year and the commercial demand for each product. The terminal receives petroleum products via pipeline, stores the products in above ground storage tanks, and then blends them with various additives in line when it is distributed through a loading rack to tanker trucks for delivery to local retailers. Vapors from the loading rack are controlled by the VCU.

A process flow diagram is included on the appropriate application form in Section 6.0. Facility-wide actual emissions are included in Attachment 1.

Table 2-1 depicts the emissions sources located at the Alexandria Terminal. Additional details on each unit are included in the following sections.

Table 2-1 Tank Emission Sources

ID	Description	Product	Control Method	Regulatory Applicability
TK 001 (Tank 4010)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 002 (Tank 153)	Fixed Roof Tank	Ethanol	N/A	N/A
TK 003 (Tank 157)	Fixed Roof Tank	Gasoline	N/A	MACT BBBBBB
TK 004 (Tank 552)	Fixed Roof Tank	Distillate	N/A	N/A
TK 005 (Tank 553)	Fixed Roof Tank	Ethanol	N/A	N/A
TK 006 (Tank 554)	Fixed Roof Tank	Distillate	N/A	N/A
TK 007 (Tank 555)	Fixed Roof Tank	Distillate	N/A	N/A
TK 008 (Tank 556)	Fixed Roof Tank	Distillate	N/A	N/A
TK 009 (Tank 557)	Fixed Roof Tank	Distillate	N/A	N/A
TK 010 (Tank 558)	Fixed Roof Tank	Distillate	N/A	N/A
TK 011 (Tank 559)	Fixed Roof Tank	Distillate	N/A	N/A
TK 012 (Tank 560)	Fixed Roof Tank	Distillate	N/A	N/A
TK 013 (Tank 561)	Fixed Roof Tank	Distillate	N/A	N/A
TK 014 (Tank 682)	Fixed Roof Tank	Distillate	N/A	N/A
TK 015 (Tank 683)	Fixed Roof Tank	Distillate	N/A	N/A
TK 016 (Tank 684)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 017 (Tank 685)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 018 (Tank 686)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 019 (Tank 687)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 020 (Tank 688)	Fixed Roof Tank	Distillate	N/A	N/A
TK 021 (Tank 761)	Fixed Roof Tank	Distillate	N/A	N/A
TK 022 (Tank 762)	Fixed Roof Tank	Distillate	N/A	N/A
TK 023 (Tank 763)	Fixed Roof Tank	Distillate	N/A	N/A
TK 024 (Tank 1343)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 025 (Tank 1344)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 026 (Tank 1346)	Fixed Roof Tank	Distillate	N/A	N/A
TK 027 (Tank 1347)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 028 (Tank 1348)	Internal Floating Roof	Gasoline	N/A	MACT BBBBBB
TK 029 (Tank 1441)	Fixed Roof Tank	Jet Kerosene	N/A	N/A
TK 030 (Tank 154)	Fixed Roof Tank	Jet Kerosene	N/A	N/A
TK 031	Fixed Roof Tank	Distillate/Gasoline Mix	N/A	N/A

Table 2-2 Additional Emission Units

ID	Description	Product	Control Method	Regulatory Applicability
EU 001	Loading Rack-Gasoline Loading	Gasoline and Distillate fuels blended with renewable fuels and other additives	VCU	MACT BBBBBB NSPS XX
EU003	Soil Vapor Extraction (Area 2) **REMOVED FROM FACILITY**	Soil Vapor	N/A	N/A
EU004	Soil Vapor Extraction (Area 5) **REMOVED FROM FACILITY**	Soil Vapor Treatment	N/A	N/A
FS 001	Fugitive Components	Gasoline or Distillate	N/A	MACT BBBBBB

2.1 Truck Loading Rack

The truck loading rack has three bays with a maximum hourly loading of 3 tank trailers per bay. Total organic compounds (TOC) from the truck loading rack must not exceed 80 mg/L in order to remain in compliance with 40 CFR 63 Subpart BBBBBB and more restrictively 35 mg/L for compliance with 40 CFR 60 Subpart XX. This limit is met by operating the VCU and loading rack in accordance with manufacturer specifications. Not only is the truck loading rack is equipped with a vapor combustion unit designed to burn vapors displaced from cargo tanks during product loading, but only cargo tanks that meet the necessary vapor tightness requirements of 40 CFR 63 Subpart BBBBBB and 40 CFR 60 Subpart XX are loaded.

2.2 VCU and Loading Rack Collection System

The Alexandria Terminal operates a VCU on the loading rack. Per 63.11088(a) and 60.502(b), the terminal must reduce emissions of TOC to ultimately less than or equal to 35 mg/L of gasoline loaded into gasoline cargo tanks at the loading rack. The VCU is operated 100% of the time the loading rack is in operation in accordance with federally enforceable requirements which effectively limit the PTE as defined in Minn. R. 7005.0100, subp. 35a. The terminal completed performance testing in 2017 to verify compliance with emission and operating requirements set forth in Air Emission Permit No. 04100006-004. The terminal operates the VCU and collection system in accordance with the applicable regulatory standards, manufacturer specifications, and operating parameters established during the performance test.

2.3 Aboveground Storage Tanks

The Alexandria Terminal contains twenty-two fixed roof aboveground storage tanks and nine internal floating roof aboveground storage tanks for product storage with a combined capacity of 26,813,000 gallons. Tanks 552, 554-561, 682, 683, 688, 761-763 and 1346 are fixed roof tanks used to store distillate

fuel. Tanks 153 and 553 are fixed roof tanks that are used to store ethanol. Tank 157 is a fixed roof tank used to store gasoline products. Tanks 1441 and 154 are fixed roof tanks used to store Jet Kerosene. TK 031 is a fixed roof tank that can store either distillate or gasoline products. Tanks 4010, 684-687, 1343, 1344, 1347 and 1348 are internal floating roof tanks that store gasoline products. The floating roof tanks are operated and maintained in accordance with 40 CFR. 63, Subpart BBBBBB.

The Alexandria Terminal also operates thirteen small additive tanks that are metered into products during loading at the rack.

2.4 Insignificant Activities

The Alexandria Terminal also includes smaller fixed roof additive tanks and operates butane, ethanol, and biodiesel unloading operations which all qualify as insignificant activities. All other equipment such as boilers, compressors, or vacuums are either electric or are used for activities that are not required to be considered when determining the facility emissions as outlined in Minn. R. 7007.1300 Subp. 1A.

3.0 Regulatory Applicability

This section describes the regulatory applicability of primary Federal and State air quality rules to this Facility.

3.1 Federal New Source Review (NSR)/Prevention of Significant Deterioration (PSD)

Douglas County is designated as "in attainment" or "unclassifiable" for the National Ambient Air Quality Standards for all criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen oxides (NO_X), ozone (O_3), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), particulate matter less than 10 microns in diameter (PM_{10}), and sulfur dioxide (SO_2). Minnesota is a delegated state for the PSD program.

With respect to PSD, a "major stationary source" is one that:

> [1] has the potential-to-emit (PTE) 100 tpy or more of any criteria pollutant for a facility that is one of the 28 industrial source categories listed in 40 CFR 52.21(b)(1)(i)(a); or
>
> [2] has the PTE 250 tpy or more of any criteria pollutant if the facility is not on the list of industrial source categories.

The Alexandria Terminal has a storage capacity greater than 300,000 barrels, which qualifies the terminal as a listed source category under the PSD rules, specifically it is a "Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels." Therefore, the facility is subject to PSD if the PTE is 100 tpy or more of any criteria pollutant. The current facility-wide PTE is greater than 100 tpy VOC; therefore, the terminal is currently a "major stationary source" for PSD purposes. However, no construction or phyiscial changes are occuring as part of this project, therefore no further PSD or NSR analysis is required.

3.2 Federal New Source Performance Standards (NSPS)

NSPS are applicable to certain categories of affected facilities that are constructed, modified, or reconstructed and that meet other applicability criteria on or after a compliance date upon which a relevant subpart applies. The Alexandria Terminal is subject to 40 CFR 60 Subp. XX (Bulk Gasoline Terminals). The Alexandria Terminal's VCU is used to meet the applicable requirements of 40 CFR 60 Subp. XX. All required notifications and compliance demonstrations for Subp. XX have been submitted, and no new actions are required as part of this permitting action. There are no other affected sources subject to NSPS.

3.3 Federal National Emission Standards for Hazardous Air Pollutants (NESHAP)

No NESHAP standards (40 CFR Part 61) were found to apply to the Alexandria Terminal.

3.4 Federal Maximum Achievable Control Technology (MACT) Standards

The Alexandria Terminal will accept the HAP limits specified in the Capped Permit Option 2 (≤ 8 tons per year for each HAP and ≤20 tons per year for all HAPs combined). Actual HAP emissions in 2021 were 2.48 tpy for combined HAPs, and 0.76 tpy for n-hexane as the highest single HAP. 40 CFR 63 Subpart BBBBBB is applicable to the facility (National Emission Standards for Hazardous Air Pollutants Area Source Standards for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities). All required compliance demonstrations for Subpart BBBBBB have been already submitted, and no changes to original compliance submittals are required as part of this permitting action.

3.5 Minnesota Capped Permit Eligibility

The Alexandria Terminal meets the eligibility criteria for a Capped Permit as required under Minn. R. 7007.1140 Subp. 1 specifically:

- The 12-month rolling sum of actual emissions at the stationary source for each pollutant are less than or equal to the thresholds in Minn. R. 7007.1141
- The facility does not anticipate making changes in the next year which will cause the facility's 12-month rolling to exceed applicable thresholds
- The facility has shown compliance with ambient air quality using the SCREEN3 tool (allowable under Minn. R. 7007.1148 subpart 3) as shown in Attachment 2.

Additionally, the Alexandria Terminal does not meet any of the general ineligibility requirements listed under Minn. R. 7007.1140 Subp. 2. That is, the Terminal:

- Is not required to obtain a permit under any of the specifically listed programs therein,
- Is not subject to requirements of a state implementation plan
- Is only subject to new source performance standards on the list contained in Minn. R. 7007.1140 Subp. 2(E)

Therefore, Magellan has prepared this application package to transition the Alexandria Terminal to a Capped permit.

3.6 Minnesota Capped Permit Compliance and Air Rules

The Alexandria Terminal will be subject to the compliance requirements of the capped permit program as provided in Minn. R. 7007.1140 for facilities with capped permits. Additionally, all other state rules will continue to be complied with, as currently listed in the existing permit No. 04100006-004.

The Alexandria Terminal will continue to track monthly tank and loadout product volumes for each product stored and loaded at the terminal to calculate monthly emissions.

3.7 Minnesota Capped Permit Facility Modifications

Magellan understands that modifications or changes to the Alexandria Terminal are allowed by this permit without requesting a modification to the permit, provided that the following conditions are evaluated before making the change per Minn. R. 7007.1143 Subp. 3 and Minn. R. 1142 Subp. 1a if an emissions unit subject to a capped permit eligible NSPS is to be added, or an existing unit becomes subject to a capped permit eligible NSPS.

1. Re-evaluate whether the emission limits in the permit can continue to be met.
2. Comply with any NSPS or NESHAP that becomes applicable, specifically:
    a. Obtaining a Title V permit if the NESHAP requires it, and
    b. Notifying the MPCA using Form CR-06 if a new NSPS becomes applicable with the information required by Minn. R. 7007.1142 Subp. 1a.

4.0 Emission Calculation Discussion

The primary pollutants of concern are volatile organic compounds (VOC), hazardous air pollutants (HAPs), nitrogen oxides (NO_X), and carbon monoxide (CO). There are also insignificant emissions consisting of PM (particulate matter), PM_{10} (particulate matter smaller than 10 microns in aerodynamic diameter), $PM_{2.5}$ (particulate matter smaller than 2.5 microns in aerodynamic diameter) from truck traffic.

The primary sources of VOC emissions are routine and non-routine emissions from the storage tanks and emissions from the controlled loadout operations. Facility-wide actual emission calculations for 2021 are provided in Attachment 1. The storage tank emissions have been calculated using the TankESP application. TankESP incorporates the calculation methodology found in US EPA, AP-42, fifth edition, Chapter 7.1 Organic Liquid Storage Tanks (June 2020). Loading rack VOC emissions are calculated based on the emission calculation methodology found in US EPA, AP-42, fifth edition, Chapter 5.2 Transportation and Marketing of Petroleum Liquids.

HAPs are speciated components of the VOC emissions generated by the operation of the storage tanks and loading operations. These emissions are calculated primarily based on monthly throughput and loadout volumes, and product types for both the storage tanks and loading rack.

Fugitive VOC emissions have been calculated using EPA Bulletin 453/R-95-017, Protocol for Equipment Leak Emission Estimates, November 1995 using factors from Table 2-3: Marketing Terminal Average Emission Factors. These emissions are calculated based on total fugitive equipment counts and assume year-round operation. They contribute a nominal amount to overall VOC emissions.

NO_X and CO emissions are emitted from the VCU as result of combusting vapors associated with the loadout operations. They are calculated using emission factors based on vendor guarantees supplied by the manufacturer for each respective pollutant.

These emissions have been calculated and submitted for the 2021 annual emissions inventory and are supplied here for reference, in addition to being already submitted through the MPCA's Consolidated

Emissions Data Repository (CEDR). The Alexandria Terminal has operated more than 12 consecutive months, and therefore the most recent year's actual emissions have been included as required by Minn. R. 7007.1140 Subp. 1(A) and Subp. 1(B).

5.0 Capped Permit Application Forms

SI List

Certain forms requested historic identification numbers. This table is provided a reference to support identification of all equipment.

AI ID (Name): 2181 (Magellan Pipeline Co LP - Alexandria Terminal)
Activity: IND20090001

SI Category	SI Type	Subject Item ID	Delta Designation	Description
Agency Interest	Conventional Site	AISI 2181	Null	Null
Component Group	Air Component Group	COMG 1	GP001	Units Subject to 40 CFR pt. 63, Subpart BBBBBB
Equipment	Aboveground Storage Tank	EQUI 4	TK001	Gasoline 8006619 Tank no. 4010
		EQUI 5	TK002	Ethanol 64175 Tank No. 153
		EQUI 6	TK005	Ethanol 64175 Tank no. 553
		EQUI 7	TK005	Distillate 68476346 Tank no. 554
		EQUI 8	TK004	Distillate 68476346 Tank no. 552
		EQUI 9	TK003	Gasoline 8006619 Tank no. 157
		EQUI 10	TK007	Distillate 68476346 Tank no. 555
		EQUI 11	TK009	Distillate 68476346 Tank no. 557
		EQUI 12	TK008	Distillate 68476346 Tank no. 556
		EQUI 13	TK018	Gasoline 8006619
		EQUI 14	TK016	Gasoline 8006619
		EQUI 15	TK015	Distillate 68476346
		EQUI 16	TK014	Distillate 8476346 Tank no. 682
		EQUI 17	TK013	Distillate 68476346 Tank no. 561
		EQUI 18	TK012	Distillate 9476346 Tank no. 560
		EQUI 19	TK011	Distillate 68476346 Tank no. 559
		EQUI 20	TK029	Jet Kerosene 8009205
		EQUI 21	TK028	Gasoline 8006619
		EQUI 22	TK027	Gasoline 8006619
		EQUI 23	TK026	Distillate 68476346
		EQUI 24	TK025	Gasoline 8006619
		EQUI 25	TK024	Gasoline 8006619
		EQUI 26	TK021	Distillate 68476346
		EQUI 27	TK020	Distillate 68476346
		EQUI 28	TK017	Gasoline 8006619
		EQUI 29	TK030	Jet Kerosene
		EQUI 30	TK023	Distillate 68476346
		EQUI 31	TK010	Distillate 68476346 Tank no. 558
		EQUI 32	TK031	Distillate/gasoline mix
		EQUI 33	TK019	Gasoline 8006619
		EQUI 34	TK022	Distillate 68476346
	Loading-Unloading Equipment	EQUI 3	EU001	Liquid Petroleum Products Truck Loading Rack - Gasoline Loading
Fugitive	Equipment Leaks	FUGI 1	FS001	Valves, flanges, pumps, fittings - in gasoline service
Structure	Stack/Vent	STRU 1	SV001	Liquid Petroleum Products Truck Loading Rack
Total Facility	Air Quality Total Facility	TFAC 1	04100006	Magellan Pipeline Co LP - Alexandria
Treatment	131-Thermal Oxidizer	TREA 1	CE001	Thermal Oxidizer

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-00

Capped Permit Qualifications Review List

Air Quality Permit Program

Doc Type: Permit Application

Note: You must submit this form as part of your capped permit application package.

AQ Facility ID No.: 04100006 AQ File No.: 2181

Facility Name: Magellan Pipeline Co LP-Alexandria Terminal

The following list of questions will help you to determine if you qualify for the capped emission permit. The capped permit contains limitations to keep the potential-to-emit for criteria and hazardous air pollutants below federal permitting thresholds. You can choose between an option 1 and an option 2 capped permit. Option 1 has higher allowable facility-wide emission limits than option 2, but requires tracking of emissions from insignificant activities. Requirements associated with the capped permit can be found in Minn. R. 7007.1140 to 7007.1148. (See https://www.revisor.mn.gov/rules/?id=7007.) Other information relating to the capped permit can be found at http://www.pca.state.mn.us/hqzq483.

Capped Permit Emission Thresholds for Options 1 and 2

POLLUTANT	Option 1 Threshold (ton/year)	Option 2 Threshold (ton/year)
Hazardous Air Pollutants (HAP)	9.0 tons per year for a single HAP 20 tons per year total for all HAPs	8.0 tons per year for a single HAP 20 tons per year total for all HAPs
Particulate Matter (PM)	90 tons per year	75 tons per year
PM smaller than 10 microns (PM_{10})	90 tons per year	75 tons per year
Volatile Organic Compounds (VOC)	90 tons per year	85 tons per year
Sulfur Dioxide (SO_2)	90 tons per year	90 tons per year
Nitrogen Oxides (NO_x)	90 tons per year	85 tons per year
Carbon Monoxide (CO)	90 tons per year	85 tons per year
Lead (Pb)	0.50 tons/year	0.50 tons/year
Carbon Dioxide Equivalent (CO_2e)	90,000 tons/year	85,000 tons/year

Questionnaire

Complete the following questions to determine if your stationary source qualifies for the capped permit. If you do not qualify for the capped permit, you must submit a permit application for a registration, Part 70, General, or State permit before you make a modification to your facility or an installation and operation permit for the modification under Minn. R. 7007.0750, subp. 5. You may not begin actual construction on the modification until the appropriate permit is obtained.

1. Which capped permit option are you applying for?
   - ☐ Capped permit Option 1; Go to question 2.
   - ☒ Capped permit Option 2; Go to question 3.
2. Will you accept a permit condition to limit actual emissions to less than the Option 1 thresholds listed in the table above based on a 12-month monthly rolling sum?
   - ☐ Yes; go to question 4.
   - ☐ No; your stationary source does not qualify for the capped permit.
3. Will you accept a permit condition to limit actual emissions to less than the Option 2 thresholds listed in the table above based on a 12-month monthly rolling sum?
   - ☒ Yes; go to question 5.
   - ☐ No; your stationary source does not qualify for the capped permit.
4. Will you accept a permit condition to calculate emissions from those insignificant activities that are quantifiable on a monthly basis? See CAP-IA Insignificant Activities List for more information.
   - ☐ Yes; Go to question 5.
   - ☐ No; evaluate if you will qualify for Option 2; otherwise your stationary source does not qualify for the capped permit.

5. You must perform an ambient air quality assessment as described in Minn. R. 7007.1148 to be eligible for a capped permit. Were the 1-hour, 3-hour, and 24-hour SO_2; the 24-hour PM_{10}; and annual Nitrogen Dioxide (NO_2) concentrations predicted in the assessment at and beyond the property line of your facility lower than the corresponding standard in Minn. R. 7009.0080? See http://www.pca.state.mn.us/hqzq483 for more information about the assessment.

   ☒ Yes, go to question 6.

   ☐ No; your stationary source does not quality for the capped permit.

6. In performing the ambient air quality assessment, did you assume any limits or conditions not contained in Minn. R. 7007.1140 to 7007.1148? Note that facilities with significant PM_{10} emissions, such as those with material handling operations, may have difficulty successfully completing the assessment without taking production or hourly limits not contained in a capped permit.

   ☐ Yes, your stationary source does not quality for the capped permit.

   ☒ No; go to question 7.

7. Are any of the emission units at your stationary source subject to any New Source Performance Standards other than 40 CFR pt. 60 Subparts Dc, I, K, Ka Kb, DD, EE, GG, SS, XX, JJJ, TTT, IIII, or JJJJ? If you have modified (as defined in 40 CFR § 60.14), reconstructed (as defined in 40 CFR § 60.15) or constructed the described emission source on or after the effective date listed in 40 CFR pt. 60, your stationary source may be subject to the requirements, see CAP-GI-09D Requirements Form.

   ☐ Yes, your stationary source does not qualify for the capped permit.

   ☒ No; go to question 8.

8. Are any of the emission units at your stationary source subject to a National Emission Standards for Hazardous Air Pollutant Sources (NESHAPS) standard other than one of the area source NESHAPS standards listed on Form CAP-GI-09A, question 1 (e.g., halogenated solvent cleaners, chromium plating, etc.)? See CAP-GI-09A Requirements Form for more information.

   ☐ Yes, your stationary source does not qualify for the capped permit.

   ☒ No; go to question 9.

9. Was (is) an environmental review required for your stationary source? (i.e., new stationary sources that have a potential to emit of 100 tons or more of any single air pollutant, and for stationary source modifications that will result in a single pollutant's potential increase in emissions of 100 tons per year or more).

   ☐ Yes; go to question 10.

   ☒ No; go to question 11.

10. Did you assume any specific conditions or limits not contained in Minn. R. 7007.1140 to 7007.1148 in obtaining a negative declaration in an environmental assessment worksheet or as a mitigation measure in an environmental impact statement?

    ☐ Yes; your stationary source does not qualify for the capped permit.

    ☐ No; go to question 11.

11. Is your facility required to obtain a permit under Minn. R. 7007.0200, subp. 3, acid rain affected sources; Minn. R. 7007.0200, subp. 4, solid waste incinerators and waste combustors; Minn. R. 7007.0200, subp. 5, other part 70 sources; Minn. R. 7007.0250, subp. 3, state implementation plan required state permit; or Minn. R. 7007.0250, subp. 6, waste combustors?

    ☐ Yes; your stationary source does not qualify for the capped permit.

    ☒ No; go to question 12.

12. Does your facility produce fuel grade ethanol or is a sector-based state general permit available for the source category your facility is in? (The only sector-based state general permit currently available is for sand and gravel operations.)

    ☐ Yes; your stationary source does not qualify for the capped permit.

    ☒ No; go to question 13.

13. Is your stationary source subject to any State Implementation Plan (SIP) limits or Best Available Control Technology (BACT) limits?

    ☐ Yes; your stationary source does not qualify for the capped permit.

    ☒ No; go to question 14.

14. In qualifying for the capped permit, will you assume the use any control equipment or control efficiencies not contained in the state Control Equipment rule (Minn. R. 7011.0060 to 7011.0080)?

    ☐ Yes; your stationary source does not qualify for the capped permit.

    ☒ No; go to question 15.

15. Have any production limits been imposed on your facility as a result of performance testing?

    ☒ No; your facility qualifies for the capped permit. Complete the remainder of the application forms.

    ☐ Yes; your stationary source does not qualify for the capped permit.

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North
St. Paul, MN 55155-4194

RECEIVED
JAN 10 2023

Check from: Megellan Pipeline Company

Check #: 2800545550

Amt of Check: 1140-

Date of Check:

Date of Dep:

SCP-01: Submittal cover page

Permit application/notification/ determination request fee submittal

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 6.

1a) AQ Facility ID number: 04100006 1b) Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3) Submittal is (choose from the following options and then complete the remainder of item 3 as directed):

- ☐ The final certified (or recertified) version of a previously-submitted permit application. **Complete Section 3A.**
- ☐ Additional or supplemental information requested by permit staff during the permit-writing process. **Complete Section 3A.**
- ☐ A request that the Minnesota Pollution Control Agency (MPCA) make an applicability determination. **Complete Section 3A.**
- ☐ An application for a new Individual Part 70 or State Permit – **Complete Section 3B**:
- ☐ An application for reissuance of an Individual Part 70 or State Permit – **Complete Section 3B.**

Note: Applications for reissuance must be submitted using the MPCA's e-Services website at https://www.pca.state.mn.us/data/e-services. Applications outside of the e-services website will only be accepted if there is a request for confidentiality.

- ☐ An application for an amendment to an existing Individual Part 70 or State Permit – **Complete Section 3B.**
- ☒ An application for a Registration Permit, Capped Permit, or General Permit – **Complete Section 3C.**
- ☐ An application for an administrative change to an existing Registration, Capped, or General Permit – **Complete Section 3C.**
- ☐ A notification required under Minn. R. 7007.1150(C); Minn. R. 7007.1250, subp. 4; Minn. R. 7007.1350; Minn. R. 7007.0800, subp. 10, item B. **Complete Section 3D.**
- ☐ A notification from a hot mix asphalt plant holding a Registration Permit of the intent to incorporate ground tear-off shingles and/or manufacturer scrap shingles in the hot mix asphalt. **Complete Section 3D.**

Section 3A – Request for applicability determination, recertification of a previously-submitted permit application, or supplement to a previously-submitted permit application

Use this section only if your submittal is one of the following:

- The final version of a previously submitted permit application, incorporating changes negotiated through the permitting process, or
- Submittal of additional or supplemental information requested by permit staff during the permit-writing process, or
- A request for the MPCA to make an applicability determination.

For final versions and supplemental information, enter the "tracking number" which can be obtained from the MPCA permit staff working on the permit.

Check one of the boxes below. Do not complete Sections 3B, 3C, or 3D. Continue with item 4 of the form.

Choose one of the following:	Quantity	Points	Total points
☐ Recertification of a previously-submitted permit application – tracking number: _____	NA	NA	NA
☐ Supplement to a previously-submitted permit application – tracking number: _____	NA	NA	NA
☐ An Applicability Determination Request		x 10 =	

Section 3B – Application for an Individual Part 70 or State Permit, reissuance of an Individual Part 70 or State Permit, or amendment of an Individual Part 70 or State Permit

Choose one of the following:

- ☐ This is the original application or replacement for a denied or withdrawn application. Complete the table below.
- ☐ This is the replacement for an application returned as incomplete (not denied) **and** the scope is exactly the same as in the incomplete application. Enter the tracking number of the incomplete application being replaced: _____. A new fee is not required, so completion of the table below is not necessary.
- ☐ This is the replacement for an application returned as incomplete (not denied) **and** the scope is different than the incomplete application. Enter the tracking number of the incomplete application being replaced: _____. Complete the table below.

If your submittal includes notifications that do not require a permit application, also complete Section 3D.

Choose one of the following:	**Quantity**	**Points**	**Total points**
☐ Application for an Individual Part 70 Permit		x 75 =	
☐ Application for an Individual State Permit		x 50 =	
☐ Application for reissuance of an expiring Individual Part 70 or State Permit (does not include modifications to a permit that require an amendment) **Note:** Applications outside of the e-services website will only be accepted if there is a request for confidentiality.			
Expiration date: _____ *(mm/dd/yyyy)* Application due date (180 days prior to expiration): _____ *(mm/dd/yyyy)*	NA	NA	NA
☐ Application for a major amendment to an Individual State or Part 70 Permit ☐ Includes reconstruction or modification of a New Source Performance Standards (NSPS) Affected Facility not subject to New Source Review		x 25 =	
☐ Application for a moderate amendment to an Individual State or Part 70 Permit		x 15 =	
☐ Application for a minor amendment to an Individual State or Part 70 Permit		x 4 =	
☐ Application for an administrative amendment to an Individual State or Part 70 Permit. For administrative amendments to individual permits, use the MPCA's e-Services website at https://www.pca.state.mn.us/data/e-services. Administrative amendment applications outside of the e-services website will only be accepted if there is a request for confidentiality.		x 1 =	

Additional information (check all that apply):

- ☐ Submittal was preceded by pre-application work with the MPCA (for example: dispersion modeling or modeling protocol review, Air Emission Risk Analysis (AERA) review, environmental review). The tracking number associated with the preapplication work is: _____

  Date preapplication work was submitted: _____
- ☐ Permit will replace an existing permit of a different type (e.g., replacing a Capped Permit with an Individual State Permit, or replacing a Part 70 General Permit with an Individual Part 70 Permit).
- ☐ Permit is for construction of a new facility.
- ☐ Permit is required because of a modification to an existing facility, making the facility subject for the first time for the requirement for an Air Emission Permit.
- ☐ Project is subject to Prevention of Significant Deterioration (PSD) (40 CFR § 52.21). Send a complete copy of the application to U.S. Environmental Protection Agency (EPA) Region V (see instructions).
- ☐ Permit is required because of installation or modification of a Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP) and/or a Part 60 NSPS Affected Facility at a Stationary Source with Potential-to-Emit below all permit thresholds (Minn. R. 7007.0500, subp. 2.C.(1)).

Section 3C – Application for a Registration, Capped, or General Permit

Choose one of the following:

- ☒ This is the original application or replacement for a denied or withdrawn application. Complete the table below.
- ☐ This is the replacement for an application returned as incomplete (not denied) **and** the scope is exactly the same as in the incomplete application. Enter the tracking number of the incomplete application being replaced: _____. A new fee is not required, so completion of the table below is not necessary.
- ☐ This is the replacement for an application returned as incomplete (not denied) **and** the scope is different than the incomplete application. Enter the tracking number of the incomplete application being replaced: _____. Complete the table below.

If your submittal includes notifications that do not require a permit application, also complete Section 3D.

Choose one of the following:	Quantity	Points	Total points
☐ Application for a Registration Permit ☐ Option A ☐ Option B ☐ Option C ☐ Option D		x 2 =	
☐ Application for a Capped Permit ☐ Option 1 ☒ Option 2	1	x 4 =	4
☐ Application for a Part 70 General Permit ☐ Manufacturing General Permit ☐ Low Emitting Facility General Permit		x 4 =	
☐ Application for a State General Permit ☐ Nonmetallic Mineral Processing General Permit		x 3 =	
☐ Application for an administrative change to an existing Registration, Capped, or General Permit (e.g., change of facility ownership)		x 1 =	

Additional information (check all that apply):

☒ Permit will replace an existing permit of a different type (e.g., replacing a Registration Permit with a Capped Permit; replacing an Option B Registration Permit with an Option D Registration Permit; etc.)

☐ Permit is required for construction of a new facility

☐ Permit is required because of a modification to an existing facility, making the facility subject for the first time for the requirement for an Air Emission Permit.

☐ Permit is required because of a modification or change making the facility ineligible for its existing Air Emission Permit.

Section 3D – Notifications

If your submittal also includes a permit application, then also complete Section 3A, 3B, or 3C as applicable. Check all applicable boxes below, then continue with item 4 of the form.

☐ A notification of accumulated insignificant activities (Minn. R .7007.1250, subp. 4)

☐ A notification of installation of pollution control equipment (Minn. R. 7007.1150, item C)

☐ A notification of replacement of a unit (Minn. R. 7007.1150, item C)

☐ A notification of replacement of controls with listed controls (Minn. R. 7007.1150, item C)

☐ A notification of changes that contravene a permit term (Minn. R .7007.1350)

☐ A notification from a hot mix asphalt plant including a request to incorporate ground tear-off shingles and/or manufacturer scrap shingles in the hot mix asphalt (applies to Registration Permits) Minn. R. 7011.0913, subp. 3)

4) Total points ("total points" from Section 3A, 3B, or 3C)

4

5) Total application fee

4 (total points from item 4) x $285 = $ 1140 (fee amount)

The application fee amount is $285 per point, payable to the MPCA. Send your payment ("fee amount") with your submittal. The fee is not refundable, per Minn. R. 7002.0016, subp. 1. There may be additional fees assessed during processing of your request, as required by Minn. R. ch. 7002.

Note: If an application is resubmitted for a different type of amendment or permit, the original fee is not refundable nor transferable. The resubmitted application fee must be paid in full.

6a) Confidentiality statement

☒ This application does not contain material claimed to be confidential under Minn. Stat. §§ 13.37, subd. 1(b) and 116.075. Skip item 6b, go to item 7.

☐ This application contains material which is claimed to be confidential under Minn. Stat. §§ 13.37, subd. 1(b) and 116.075. Complete Item 6b. Your submittal must include both Confidential and Public versions of your application.

Registration Permit applicants may not claim any portion of their application as confidential. If applying for a Registration Permit or an administrative change to a Registration Permit, you must check the first box above ("This application does not contain…..").

☐ Confidential copy of application attached ☐ Public copy of application attached

6b) Confidentiality certification

To certify data for the confidential use of the MPCA, a responsible official must read the following, certify to its truth by filling in the signature block on the following page, and provide the stated attachments.

☐ I certify that the enclosed permit application(s) and all attachments have been reviewed by me and do contain confidential material. I understand that only specific data can be considered confidential and not the entire application or permit. I certify that I have enclosed the following to comply with the proper procedure for confidential material:

- ☐ I have enclosed a statement identifying which data contained in my application I consider confidential, and I have explained why I believe the information qualifies for confidential (or non-public) treatment under Minnesota Statutes.
- ☐ I have explained why the data for which I am seeking confidential treatment should not be considered "emissions data" which the MPCA is required to make available to the public under federal law.
- ☐ I have enclosed an application containing all pertinent information to allow for completion and issuance of my permit. This document has been clearly marked "confidential".
- ☐ I have enclosed a second copy of my application with the confidential data blacked out (not omitted or deleted entirely). It is evident from this copy that information was there, but that it is not for public review. This document has been clearly marked "public copy".

Permittee responsible official:	**Co-Permittee responsible official (if applicable)**
Print name:	Print name:
Title:	Title:
Signature:	Signature:
Date (mm/dd/yyyy):	Date (mm/dd/yyyy):

7) Submittal certification

I certify under penalty of law that the enclosed documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I also certify, in accordance with Minn. R. 7007.0500, subp. 2 (K)(2) and subp. 2 (K)(3), that I have reviewed the procedures implemented by my facility to maintain compliance and that those procedures are, to the best of my knowledge and belief, reasonable to maintain compliance with all applicable requirements, including those that will become applicable during the term of the permit.

I also certify, in accordance with Minn. R. 7007.1450, subp. 4(D), that if this application requests the use of the minor or moderate permit amendment procedures, the proposed change is not part of a larger project which, taken as a whole, would not qualify for treatment as a minor or moderate permit amendment.

Choose one of the following:

☒ I certify that no construction is associated with the permit action sought by this permit application.

☐ I certify that my project includes construction, but construction has not yet been started except as allowed under Minn. R. 7007.1110, subp. 10 or Minn. R. 7007.1250, subp. 4, and will not begin until the permit is issued except as allowed under Minn. R. 7007.1110, subp. 12; Minn. R. 7007.1142, subp. 2; Minn. R. 7007.1150, item C; or Minn. R. 7007.1450, subp. 7.

☐ My project includes construction, and construction other than what is allowed under Minnesota Rules has been started

Permittee responsible official:	**Co-Permittee responsible official (if applicable)**
Print name: Jeff Myers	Print name:
Title: Director of Operations	Title:
Signature:	Signature:
Date (mm/dd/yyyy): 01/04/2023	Date (mm/dd/yyyy):

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-01

Facility Information for Capped Permits

Air Quality Permit Program

Doc Type: Permit Application

Instructions on Page 3

1a) AQ Facility ID No.: 04100006 **1b)** AQ File No.: 2181

2) Facility Name: Magellan Pipeline Co LP-Alexandria Terminal

3) Facility Location

Street Address: 709 3rd Ave West

City: Alexandria County: Douglas County Zip code: 56308

Note: If the facility is or will be located within the city limits of Minneapolis, attach a map showing the exact location.

Mailing Address: 709 3rd Ave West

City: Alexandria State: Douglas County Zip code: 56308

4) Corporate/Company Owner

Name: Magellan Pipeline Co LP

Mailing Address: One Williams Center, OTC-8

City: Tulsa State: OK Zip code: 74172

Owner Classification: ☒ Private ☐ Local Govt. ☐ State Govt. ☐ Federal Govt. ☐ Utility

5) Corporate/Company Operator (if different than owner)

Name:

Mailing Address:

City: State: Zip code:

6) Co-permittee (if applicable)

Name:

Mailing Address:

City: State: Zip code:

7) Legally responsible official for this permit/facility

Mr/Ms: Jeff Myers Phone: (913) 310-7730

Title: Director of Operations Fax:

At (check one): ☐ Owner Address ☐ Operator Address ☐ Emission Facility Address

☒ Other (specify): 13424 98th Street Shawnee Mission, KS 66215

8) Contact person for this permit

Mr/Ms: Brandy Chappelle Phone: (918) 574-7747

Title: Environmental Air Specialist Fax:

At (check one): ☒ Owner Address ☐ Operator Address ☐ Emission Facility Address

☐ Other (specify):

E-mail address: Brandy.Chappelle@magellanlp.com

9) All billings for annual fees should be addressed to:

Mr/Ms: Brandy Chappelle Phone: (918) 574-7747

Title: Environmental Air Specialist Fax:

At (check one): ☒ Owner Address ☐ Operator Address ☐ Emission Facility Address

☐ Other (specify)

10) Standard Industrial Classification (SIC) Code and description, **and North American Industry Classification System (NAICS) code and description** for the facility:

Primary: 4613 / Refined Petroleum Pipelines

Secondary (if applicable): /

Tertiary (if applicable): /

Primary NAICS code: /

11) Primary product produced (or activity performed) at the facility is:

The Facility is a bulk petroleum products terminal.

12) Facility is: ☒ Stationary ☐ Portable

13) Check the one that applies best to your facility:

☐ New facility planned or under construction (first permit application)

☒ Existing facility, currently operating under Air Emission Permit No. 04100006-004

☐ Existing facility, but have never had an Air Emission Permit issued by the MPCA

14) (Reserved for future use)

15) Is environmental review required (either an Environmental Assessment Worksheet (EAW) or an Environmental Impact Statement (EIS)) for this facility?.

☐ Yes ☒ No

Note: If you answered "Yes" to this question, you may also be required to perform an Air Emissions Risk Assessment (AERA). Please call 800-657-3864 or 651-296-6300.

16) Are you required to submit a Toxics Release Inventory (Form R) under SARA Title 313 for this facility? Call the Minnesota Emergency Planning and Community Right-to-Know Act (EPCRA) Program for more information (651-201-7400).

☐ Yes ☒ No

17) Is this facility within 50 miles of another state or the Canadian border:

☐ Yes (specify which ones) _____ ☒ No

18) Brief description of the facility or proposed facility to be permitted (attach additional sheet if necessary):

The Permittee owns and operates a refined petroleum pipeline transport station for gasoline and distillates in Alexandria, MN. The stationary source includes thirty one product storage tanks, a pump station, a tank truck loading rack with vapor controller, consisting of a vaport collection system and vapor combustion unit. The terminal receives and transports petroleum products to other terminals through an interstate pipeline distribution network. Petroleum products are also shipped by tank trucks to retailers and bulk stations. The terminal operates 24 hours per day, 365 days per year. VOCs are the major source of air emissions from this facility.

19) (Reserved for future use)

20) Person preparing this permit application:

Mr./Ms. Al Reich

Title: Senior Chemical Engineer E-mail address: areich@barr.com

Phone: 218-529-7144 Fax: _____ Date: July 11, 2022

Instructions for Form CAP-GI-01

1a) **AQ Facility ID No. --** Fill in your Air Quality (AQ) Facility Identification (ID) Number (No.). This is the first eight digits of the permit number for all new permits issued under the current operating permit program. If your facility has never been issued a permit under this program, leave this line blank.

1b) **AQ File No. --** Fill in your AQ File Number. This is the first group of characters in your current Air Emission Facility Permit. For example, for permit number 1899AB-93-OT-1, the AQ Facility ID number would be 1899AB. If you have never had an air quality permit, leave this line blank.

2) **Facility Name --** Enter your facility name.

3) **Facility Location --** Fill in the facility's street address and the city and county where the facility is located. Also indicate the facility's mailing address. You may use a P.O. Box number for the mailing address, but not for the street address. If the facility is or will be located within the limits of the city of Minneapolis, include a map showing the exact location of the facility.

4) **Corporate/Company Owner --** Fill in the owner name and mailing address. The owner receives the air emission permit from the MPCA. The owner is the "Permittee". Check the one "owner classification box" that most closely describes your facility.

5) **Corporate/Company Operator (if different from owner) --** The operator runs the facility on a day-to-day basis. If a separate management company operates the facility, its name goes here. The operator is also a "Permittee". Fill in if

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

GI-02

Process Flow Diagram

Air Quality Permit Program

Doc Type: Permit Application

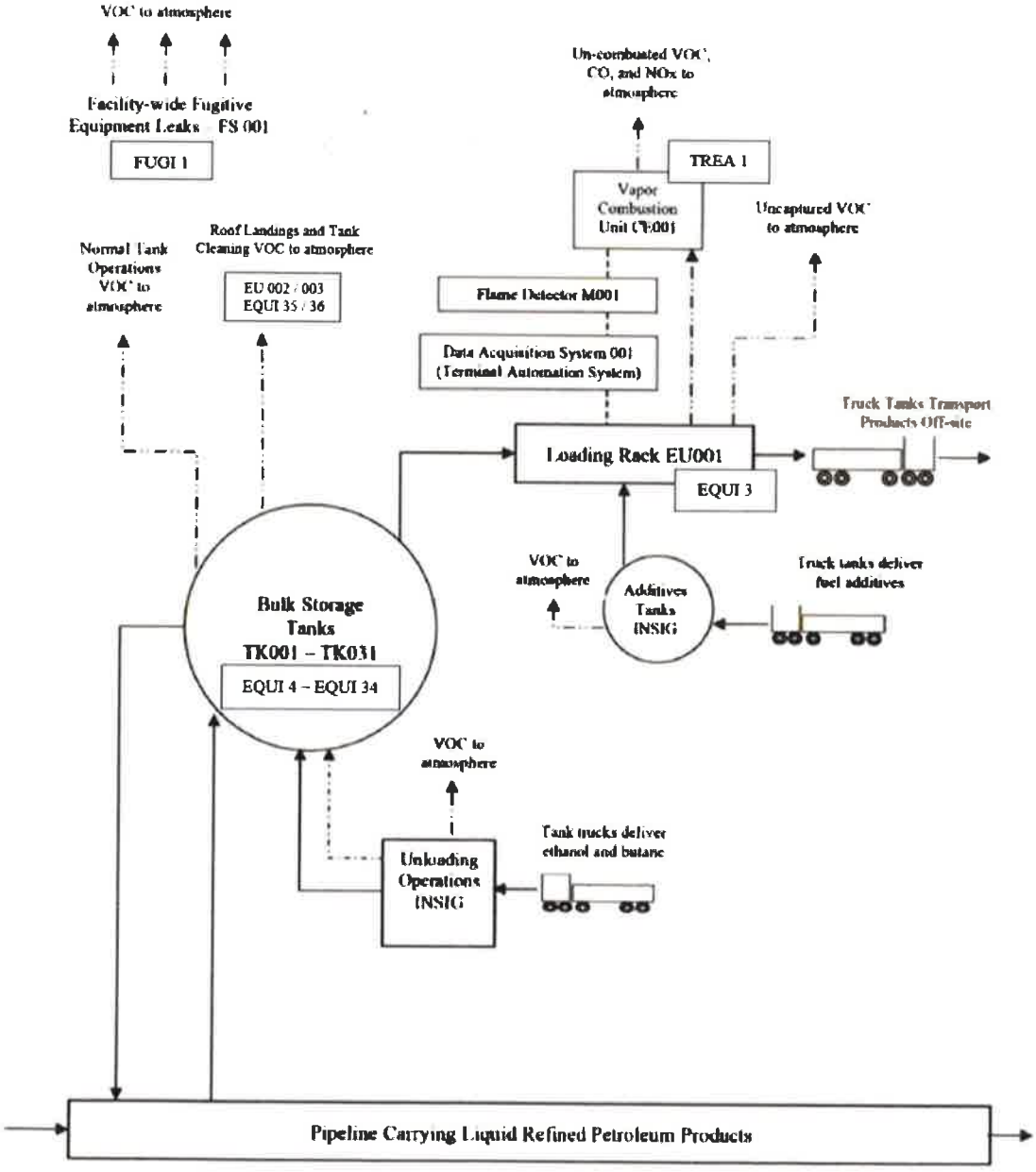
Instructions on Page 2.

1a) AQ Facility ID number: 04100006

1b) Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3) Flow diagram: (insert flow diagram below or attach a separate sheet)



Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-03**

FACILITY AND STACK/VENT DIAGRAM

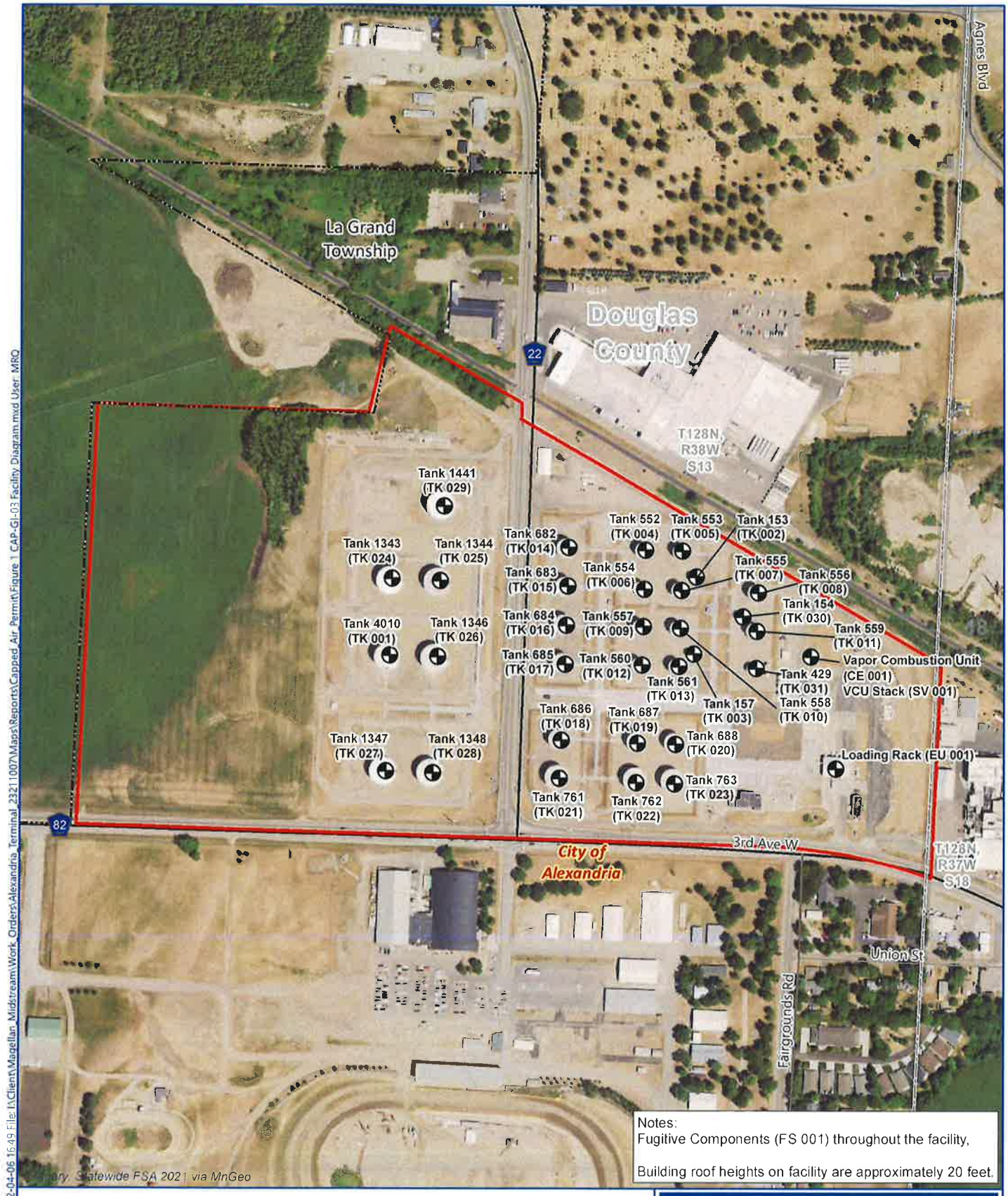
10/7/04

1) AQ Facility ID No.: **04100006**

2) Facility Name: **Magellan Pipeline Co LP-Alexandria Terminal**

3) Facility and Stack/Vent Diagram:

SEE FIGURE ON FOLLOWING PAGE



Barr Footer: ArcGIS 10.8.1, 2022-04-06 16:49 File: N:\Client\Magellan_Midstream\Work_Orders\Alexandria_Terminal_23211007\Maps\Reports\Capped_Air_Permit\Figure 1 CAP-GI-03 Facility Diagram.mxd User: MRQ

Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-04**
STACK/VENT INFORMATION
3/7/06

1) AQ Facility ID No.: **04100006** 2) Facility Name: **Magellan Pipeline Co LP-Alexandria Terminal**

3a) SV ID No.	3b) Operator's Description	3c) Height of Opening From Ground (ft.)	3d) Inside Diameter in ft. (left column only) or Length x Width in ft. (both columns)		3e) Design Flow Rate at Exit (acfm)	3f) Exit Gas Temperature (° F)	3g) Rate/Temp Information Source	3h) Discharge Direction
001	VCU Stack	40.0	6.0		33.587	294.5	E	U

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-05A

Pollution Control Equipment Information

Air Quality Permit Program

Doc Type: Permit Application

1a) AQ Facility ID No.: 04100006 **1b)** AQ File No.: 2181

2) Facility Name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Control Equip ID No.	3b) CE Type Code	3c) Description	3d) Manufacturer	3e) Model No.	3f) Pollutants Controlled	3g) Control Efficiency
001	131	Vapor Combustion Unit	John Zink	GV-ZTOF-4800-1	VOC	97

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-05B

Emission Unit Information

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2.

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3) Fill in a column in the table below for each emission unit (EU/EQUI). Form GI-05F *Emission Source Association* must also be submitted whenever this form is required.

3a) Emission unit ID number	EU 001 / EQUI 3	Proposed EU 002 / EQUI 35	Proposed EU 003 / EQUI 36	
3b) Emission unit type	Gasoline Loading	Other Emission Unit	Other Emission Unit	
3c) Emission unit operator's description	Loading Rack	Floating Roof Landing Events	Tank Cleaning Events	
3d) Manufacturer	Field erected	Not Applicable	Not Applicable	
3e) Model number	Not Applicable	Not Applicable	Not Applicable	
3f) Max design capacity, material and units	630720 units: E3Gal/ Yr material: Gasoline Vapors	units: / material:	units: / material:	units: / material:
3g) Commence construction date (mm/dd/yyyy)	8/19/1992 ☐ to be determined	☒ to be determined	☒ to be determined	☐ to be determined
3h) Initial startup date (mm/dd/yyyy)	3/10/1993 ☐ to be determined	☒ to be determined	☒ to be determined	☐ to be determined
3i) Modification or reconstructed date (mm/dd/yyyy)				
3j) Firing method				
3k) Engine use				
3l) Engine displacement	Units:	Units:	Units:	Units:
3m) Subject to CSAPR?				
3n) Electric generating capacity (megawatts)				
3o) SIC code	4613	4613		
3p) Status	Active			
3q) Removal date (mm/dd/yyyy)				
3r) Reasons for changes/modifications		Add EU for landing events	Add EU for tank cleaning events	

Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-05C**
TANK INFORMATION
3/7/06

1) AQ Facility ID No.: **04100006** 2) Facility Name: **Magellan Pipeline Co LP - Alexandria Terminal**

3a) Tank ID No.	3b) Control Equip ID No.	3c) Product(s) Stored	3d) Interior Height (ft.)	3e) Interior Diameter (ft.)	3f) Capacity (1000 gals.)	3g) Construc -tion Type	3h) Support Type (floating roof only)	3i) Number of Columns (column-supported only)	3j) Column Diameter (column-supported only, in ft.)	3k) Deck Type (floating roof only)	3l) Seal Type (floating roof only)	3m) Date Installed or Constructed
001	NA	Gasoline; Tank 4010	48	80	1484	4. Interna	4. Column s	1	1	1. Welded	1. Mecha	1946
002	NA	Ethanol; Tank 153	24	25	75	5. Fixed r						1946
003	NA	Gasoline; Tank 157	25	25	76	5. Fixed r						1946
004	NA	Distillate; Tank 552	40	45	435	5. Fixed r						1946
005	NA	Ethanol; Tank 553	40	45	424	5. Fixed r						1946
006	NA	Distillate; Tank 554	40	45	435	5. Fixed r						1946
007	NA	Distillate; Tank 555	40	45	435	5. Fixed r						1946
008	NA	Distillate; Tank 556	40	45	435	5. Fixed r						1946
009	NA	Distillate; Tank 557	40	45	435	5. Fixed r						1946
010	NA	Distillate; Tank 558	40	45	435	5. Fixed r						1946

Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-05C**
TANK INFORMATION
3/7/06

1) AQ Facility ID No.: **04100006** 2) Facility Name: **Magellan Pipeline Co LP - Alexandria Terminal**

3a) Tank ID No.	3b) Control Equip ID No.	3c) Product(s) Stored	3d) Interior Height (ft.)	3e) Interior Diameter (ft.)	3f) Capacity (1000 gals.)	3g) Construc -tion Type	3h) Support Type (floating roof only)	3i) Number of Columns (column-supported only)	3j) Column Diameter (column-supported only, in ft.)	3k) Deck Type (floating roof only)	3l) Seal Type (floating roof only)	3m) Date Installed or Constructed
011	NA	Distillate; Tank 559	40	45	373	4. Interna	3. Column s	1	1	7. Bolted,	7. Resilie	1946
012	NA	Distillate; Tank 560	40	45	435	5. Fixed r						1946
013	NA	Distillate; Tank 561	40	45	435	5. Fixed r						1946
014	NA	Distillate; Tank 682	40	60	773	5. Fixed r						1946
015	NA	Distillate; Tank 683	40	60	773	5. Fixed r						1946
016	NA	Gasoline; Tank 684	40	60	691	4. Interna	3. Column s	6	1	7. Bolted,	7. Resilie	1946
017	NA	Gasoline; Tank 685	40	60	702	4. Interna	3. Column s	6	1	7. Bolted,	1. Mecha	1946
018	NA	Gasoline; Tank 686	40	60	711	4. Interna	3. Column s	6	1	7. Bolted,	7. Resilie	1946
019	NA	Gasoline; Tank 687	40	60	684	4. Interna	3. Column s	6	1	7. Bolted,	7. Resilie	1946
020	NA	Distillate; Tank 688	40	60	773	5. Fixed r						1946

Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-05C**
TANK INFORMATION
3/7/06

1) AQ Facility ID No.: **04100006** 2) Facility Name: **Magellan Pipeline Co LP - Alexandria Terminal**

3a) Tank ID No.	3b) Control Equip ID No.	3c) Product(s) Stored	3d) Interior Height (ft.)	3e) Interior Diameter (ft.)	3f) Capacity (1000 gals.)	3g) Construc -tion Type	3h) Support Type (floating roof only)	3i) Number of Columns (column-supported only)	3j) Column Diameter (column-supported only, in ft.)	3k) Deck Type (floating roof only)	3l) Seal Type (floating roof only)	3m) Date Installed or Constructed
021	NA	Distillate; Tank 761	41	72	1144	5. Fixed r						1946
022	NA	Distillate; Tank 762	41	72	1144	5. Fixed r						1946
023	NA	Distillate; Tank 763	41	72	1144	5. Fixed r						1946
024	NA	Gasoline; Tank 1343	40	85	1338	4. Interna	3. Column s	6	1	1. Welded	7. Resilie	1946
025	NA	Gasoline; Tank 1344	40	85	1445	4. Interna	3. Column s	6	1	1. Welded	7. Resilie	1946
026	NA	Distillate; Tank 1346	40	85	1528	5. Fixed r						1946
027	NA	Gasoline; Tank 1347	40	85	1445	4. Interna	3. Column s	6	1	7. Bolted,	7. Resilie	1946
028	NA	Gasoline; Tank 1348	40	85	1445	4. Interna	3. Column s	6	1	1. Welded	7. Resilie	1946
029	NA	Jet Kerosene; Tank 1441	48	90	2092	5. Fixed r						1946
030	NA	Jet Kerosene; Tank 154	25	25	76	5. Fixed r						1946

Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-05C**
TANK INFORMATION
3/7/06

1) AQ Facility ID No.: **04100006** 2) Facility Name: **Magellan Pipeline Co LP - Alexandria Terminal**

3a) Tank ID No.	3b) Control Equip ID No.	3c) Product(s) Stored	3d) Interior Height (ft.)	3e) Interior Diameter (ft.)	3f) Capacity (1000 gals.)	3g) Construc -tion Type	3h) Support Type (floating roof only)	3i) Number of Columns (column-supported only)	3j) Column Diameter (column-supported only, in ft.)	3k) Deck Type (floating roof only)	3l) Seal Type (floating roof only)	3m) Date Installed or Constructed
031	NA	Transmix; Tank 429	24	30	74	4. Interna	3. Column s	1	1	1. Welded	7. Resilie	1946

Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-05D**
FUGITIVE EMISSION SOURCE INFORMATION
3/7/06

1) Facility ID No.: 04100006 2) Facility Name: Magellan Pipeline Co LP-AlexandriaTerminal

3a) Fugitive Source ID No.	3b) Pollutant Emitted (particulate matter (PM) or VOC)	3c) Included in Ambient Assessment?	3d) Description of Fugitive Emission Source
001	VOC	No	Valves, Pump Seals, Flanges, and Connectors-Equipment Leaks

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

GI-05F

Emission source associations
Air Quality Permit Program
Doc Type: Permit Application

Instructions on page 3

1a) AQ Facility ID number: 04100006 1b) Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

☐ Check this box if using GI-05F for a *Reissuance application*. You will need the AQ SI details report labeled ***SI-SI relationships***. See the instructions for fields that may be marked "null" in the *SI-SI relationships* report.

Note – If your most recent permit was issued after November 1, 2015 **or** you are applying for reissuance, use Tempo ID numbers for all equipment, stacks, controls, etc. Tempo IDs are in the form EQUIxxx, TREAxxx, STRUxxx, FUGIxxx, etc.

3a) Source ID number	3b) % Flow	3c)	3d) CE ID number	3e) Start date (mm/dd/yyyy)	3f) End date (mm/dd/yyyy)	3g) % Flow	3h)	3i) S/V ID number	3j) Start date (mm/dd/yyyy)	3k) End date (mm/dd/yyyy)	3l) Comments
EQUI 3	100	**is controlled by**	TREA 1	3/10/1993			**sends to**	001	3/10/1993		TREA 1 is the vapor combustion unit
EQUI 4	0	**is controlled by**					**sends to**				EQUI 4 is uncontrolled
EQUI 5	0	**is controlled by**					**sends to**				EQUI 5 is uncontrolled
EQUI 6	0	**is controlled by**					**sends to**				EQUI 6 is uncontrolled
EQUI 7	0	**is controlled by**					**sends to**				EQUI 7 is uncontrolled
EQUI 8	0	**is controlled by**					**sends to**				EQUI 8 is uncontrolled
EQUI 9	0	**is controlled by**					**sends to**				EQUI 9 is uncontrolled
EQUI10	0	**is controlled by**					**sends to**				EQUI 10 is uncontrolled
EQUI11	0	**is controlled by**					**sends to**				EQUI 11 is uncontrolled
EQUI12	0	**is controlled by**					**sends to**				EQUI 12 is uncontrolled
EQUI13	0	**is controlled by**					**sends to**				EQUI 13 is uncontrolled
EQUI14	0	**is controlled by**					**sends to**				EQUI 14 is uncontrolled
EQUI15	0	**is controlled by**					**sends to**				EQUI 15 is uncontrolled
EQUI16	0	**is controlled by**					**sends to**				EQUI 16 uncontrolled
EQUI17	0	**is controlled by**					**sends to**				EQUI 17 is uncontrolled
EQUI18	0	**is controlled by**					**sends to**				EQUI 18 is uncontrolled

3a) Source ID number	3b) % Flow	3c) Relationship	3d) CE ID number	3e) Start date (mm/dd/yyyy)	3f) End date (mm/dd/yyyy)	3g) % Flow	3h) Relationship	3i) S/V ID number	3j) Start date (mm/dd/yyyy)	3k) End date (mm/dd/yyyy)	3l) Comments
EQUI19	0	is controlled by					sends to				EQUI 19 is uncontrolled
EQUI20	0	is controlled by					sends to				EQUI 20 is uncontrolled
EQUI21	0	is controlled by					sends to				EQUI 21 is uncontrolled
EQUI22	0	is controlled by					sends to				EQUI 22 is uncontrolled
EQUI23	0	is controlled by					sends to				EQUI 23 is uncontrolled
EQUI24	0	is controlled by					sends to				EQUI 24 is uncontrolled
EQUI25	0	is controlled by					sends to				EQUI 25 is uncontrolled
EQUI26	0	is controlled by					sends to				EQUI 26 is uncontrolled
EQUI27	0	is controlled by					sends to				EQUI 27 is uncontrolled
EQUI28	0	is controlled by					sends to				EQUI 28 is uncontrolled
EQUI29	0	is controlled by					sends to				EQUI 29 is uncontrolled
EQUI30	0	is controlled by					sends to				EQUI 30 is uncontrolled
EQUI31	0	is controlled by					sends to				EQUI 31 is uncontrolled
EQUI32	0	is controlled by					sends to				EQUI 32 is uncontrolled
EQUI33	0	is controlled by					sends to				EQUI 33 is uncontrolled
EQUI34	0	is controlled by					sends to				EQUI 34 is uncontrolled
EQUI35	0	is controlled by					sends to				Roof landings are uncontrolled
EQUI36	0	is controlled by					sends to				Tank cleaning events are uncontrolled
FUGI 1	0	is controlled by					sends to				Fugitive emissions are uncontrolled
		is controlled by					sends to				

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	124-38-9		CAS#:	74-82-8		CAS#:	10024-97-2	
		3d) Pollutant name:	Carbon Dioxide		Pollutant name:	Methane		Pollutant name:	Nitrous Oxide	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
STRU	001	908.99	3,981.40		0.04	0.17		0.01	0.03	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	908.99	3,981.40	745.01	0.04	0.17	0.03	0.01	0.03	0.006

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	540-84-1		CAS#:	71-43-2		CAS#:	100-41-4	
		3d) Pollutant name:	2,2,4 TMP		Pollutant name:	Benzene		Pollutant name:	Ethyl Benzene	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	3	3.35E-02	0.15		3.77E-02	0.17		4.19E-03	0.02	
STRU	1	8.96E-02	0.39		1.01E-01	0.44		1.12E-02	0.05	
EQUI	4	4.63E-03	0.02		5.21E-03	0.02		5.78E-04	2.53E-03	
EQUI	5	4.05E-03	0.02		4.56E-03	0.02		5.06E-04	2.22E-03	
EQUI	9	1.84E-03	8.06E-03		2.07E-03	9.07E-03		2.30E-04	1.01E-03	
EQUI	8	3.30E-04	1.45E-03		3.71E-04	1.63E-03		4.12E-05	1.81E-04	
EQUI	6	2.20E-02	0.10		2.48E-02	0.11		2.75E-03	0.01	
EQUI	7	3.30E-04	1.45E-03		3.71E-04	1.63E-03		4.12E-05	1.81E-04	
EQUI	10	3.30E-04	1.45E-03		3.71E-04	1.63E-03		4.12E-05	1.81E-04	
EQUI	12	3.30E-04	1.45E-03		3.71E-04	1.63E-03		4.12E-05	1.81E-04	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<	<<<	<<<	<<<	<<<	<<<	<<<

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	110-54-3		CAS#:	108-88-3		CAS#:	1330207	
		3d) Pollutant name:	Hexane		Pollutant name:	Toluene		Pollutant name:	Total Xylenes	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	3	6.71E-02	0.29		5.45E-02	0.24		2.10E-02	0.09	
STRU	1	1.79E-01	0.79		1.46E-01	0.64		5.60E-02	0.25	
EQUI	4	9.26E-03	0.04		7.52E-03	0.03		2.89E-03	0.01	
EQUI	5	8.10E-03	0.04		6.58E-03	0.03		2.53E-03	0.01	
EQUI	9	3.68E-03	0.02		2.99E-03	0.01		1.15E-03	5.04E-03	
EQUI	8	6.60E-04	2.89E-03		5.36E-04	2.35E-03		2.06E-04	9.03E-04	
EQUI	6	4.41E-02	0.19		3.58E-02	0.16		1.38E-02	0.06	
EQUI	7	6.60E-04	2.89E-03		5.36E-04	2.35E-03		2.06E-04	9.03E-04	
EQUI	10	6.60E-04	2.89E-03		5.36E-04	2.35E-03		2.06E-04	9.03E-04	
EQUI	12	6.60E-04	2.89E-03		5.36E-04	2.35E-03		2.06E-04	9.03E-04	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<	<<<	<<<	<<<	<<<	<<<	<<<

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	540-81-1		CAS#:	71-43-2		CAS#:	100-41-4	
		3d) Pollutant name:	2,2,4 TMP		Pollutant name:	Benzene		Pollutant name:	Ethyl Benzene	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	11	3.30E-04	1.45E-03		3.71E-04	1.63E-03		4.12E-05	1.81E-04	
EQUI	31	3.26E-04	1.43E-03		3.67E-04	1.61E-03		4.08E-05	1.79E-04	
EQUI	19	3.96E-03	0.02		4.46E-03	0.02		4.96E-04	2.17E-03	
EQUI	18	3.30E-04	1.45E-03		3.71E-04	1.63E-03		4.12E-05	1.81E-04	
EQUI	17	3.30E-04	1.45E-03		3.71E-04	1.63E-03		4.12E-05	1.81E-04	
EQUI	16	5.87E-04	2.57E-03		6.61E-04	2.89E-03		7.34E-05	3.22E-04	
EQUI	15	5.87E-04	2.57E-03		6.61E-04	2.89E-03		7.34E-05	3.21E-04	
EQUI	14	6.64E-03	0.03		7.47E-03	0.03		8.30E-04	3.63E-03	
EQUI	28	5.65E-03	0.02		6.36E-03	0.03		7.07E-04	3.10E-03	
EQUI	13	6.37E-03	0.03		7.17E-03	0.03		7.96E-04	3.49E-03	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<	<<<	<<<	<<<	<<<	<<<	<<<

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#: 110-54-3			CAS#: 108-88-3			CAS#: 1330207		
		3d) Pollutant name: Hexane			Pollutant name: Toluene			Pollutant name: Total Xylenes		
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	11	6.60E-04	2.89E-03		5.36E-04	2.35E-03		2.06E-04	9.03E-04	
EQUI	31	6.52E-04	2.86E-03		5.30E-04	2.32E-03		2.04E-04	8.93E-04	
EQUI	19	7.93E-03	0.03		6.44E-03	0.03		2.48E-03	0.01	
EQUI	18	6.60E-04	2.89E-03		5.36E-04	2.35E-03		2.06E-04	9.03E-04	
EQUI	17	6.60E-04	2.89E-03		5.36E-04	2.35E-03		2.06E-04	9.03E-04	
EQUI	16	1.17E-03	5.14E-03		9.54E-04	4.18E-03		3.67E-04	1.61E-03	
EQUI	15	1.17E-03	5.14E-03		9.54E-04	4.18E-03		3.67E-04	1.61E-03	
EQUI	14	1.33E-02	0.06		1.08E-02	0.05		4.15E-03	0.02	
EQUI	28	1.13E-02	0.05		9.19E-03	0.04		3.53E-03	0.02	
EQUI	13	1.27E-02	0.06		1.04E-02	0.05		3.98E-03	0.02	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<	<<<	<<<	<<<	<<<	<<<	<<<

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	540-84-1		CAS#:	71-43-2		CAS#:	100-41-4	
		3d) Pollutant name:	2,2,4 TMP		Pollutant name:	Benzene		Pollutant name:	Ethyl Benzene	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	33	6.14E-03	0.03		6.91E-03	0.03		7.68E-04	3.36E-03	
EQUI	27	5.87E-04	2.57E-03		6.61E-04	2.89E-03		7.34E-05	3.22E-04	
EQUI	26	8.69E-04	3.81E-03		9.77E-04	4.28E-03		1.09E-04	4.76E-04	
EQUI	34	8.69E-04	3.81E-03		9.77E-04	4.28E-03		1.09E-04	4.76E-04	
EQUI	30	8.69E-04	3.81E-03		9.77E-04	4.28E-03		1.09E-04	4.76E-04	
EQUI	25	7.99E-03	0.03		8.99E-03	0.04		9.98E-04	4.37E-03	
EQUI	24	8.01E-03	0.04		9.01E-03	0.04		1.00E-03	4.39E-03	
EQUI	23	1.18E-03	5.15E-03		1.32E-03	5.79E-03		1.47E-04	6.43E-04	
EQUI	22	9.48E-03	0.04		1.07E-02	0.05		1.19E-03	5.19E-03	
EQUI	21	8.01E-03	0.04		9.01E-03	0.04		1.00E-03	4.39E-03	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<	<<<	<<<	<<<	<<<	<<<	<<<

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	110-54-3		CAS#:	108-88-3		CAS#:	1330207	
		3d) Pollutant name:	Hexane		Pollutant name:	Toluene		Pollutant name:	Total Xylenes	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	33	1.23E-02	0.05		9.98E-03	0.04		3.84E-03	0.02	
EQUI	27	1.17E-03	5.14E-03		9.54E-04	4.18E-03		3.67E-04	1.61E-03	
EQUI	26	1.74E-03	7.61E-03		1.41E-03	6.18E-03		5.43E-04	2.38E-03	
EQUI	34	1.74E-03	7.61E-03		1.41E-03	6.18E-03		5.43E-04	2.38E-03	
EQUI	30	1.74E-03	7.61E-03		1.41E-03	6.18E-03		5.43E-04	2.38E-03	
EQUI	25	1.60E-02	0.07		1.30E-02	0.06		4.99E-03	0.02	
EQUI	24	1.60E-02	0.07		1.30E-02	0.06		5.01E-03	0.02	
EQUI	23	2.35E-03	1.03E-02		1.91E-03	8.36E-03		7.35E-04	3.22E-03	
EQUI	22	1.90E-02	0.08		1.54E-02	0.07		5.93E-03	0.03	
EQUI	21	1.60E-02	0.07		1.30E-02	0.06		5.01E-03	0.02	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<	<<<	<<<	<<<	<<<	<<<	<<<

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	540-81-1		CAS#:	71-43-2		CAS#:	100-41-4	
		3d) Pollutant name:	2,2,4 TMP		Pollutant name:	Benzene		Pollutant name:	Ethyl Benzene	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	20	1.60E-03	6.99E-03		1.80E-03	7.86E-03		2.00E-04	8.74E-04	
EQUI	29	6.08E-05	2.66E-04		6.84E-05	2.99E-04		7.60E-06	3.33E-05	
EQUI	32	6.07E-04	2.66E-03		6.83E-04	2.99E-03		7.59E-05	3.33E-04	
EQUI	35	1.19E-02	0.05		1.34E-02	0.06		1.48E-03	6.50E-03	
EQUI	36	3.71E-02	0.16		4.17E-02	0.18		4.63E-03	0.02	
FUGI	1	1.99E-03	8.72E-03		2.24E-03	9.81E-03		2.49E-04	1.09E-03	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	0.28	1.22	0.382	0.31	1.38	0.430	0.03	0.15	0.048

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:	110-54-3		CAS#:	108-88-3		CAS#:	1330207	
		3d) Pollutant name:	Hexane		Pollutant name:	Toluene		Pollutant name:	Total Xylenes	
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	20	3.19E-03	0.01		2.59E-03	0.01		9.98E-04	4.37E-03	
EQUI	29	1.22E-04	5.32E-04		9.87E-05	4.32E-04		3.80E-05	1.66E-04	
EQUI	32	1.21E-03	5.32E-03		9.87E-04	4.32E-03		3.80E-04	1.66E-03	
EQUI	35	2.38E-02	0.10		1.93E-02	0.08		7.42E-03	0.03	
EQUI	36	7.41E-02	0.32		6.02E-02	0.26		2.32E-02	0.10	
FUGI	1	3.98E-03	0.02		3.23E-03	0.01		1.24E-03	5.45E-03	

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	0.56	2.45	0.764	0.45	1.99	0.621	0.17	0.76	0.239

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:			CAS#: 630-08-0			CAS#:		
		3d) Pollutant name: VOC			Pollutant name: CO			Pollutant name: NOx		
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	3	4.66	20.43							
STRU	1	11.20	49.07		3.20	14.03		1.28	5.61	
EQUI	4	0.58								
EQUI	5	0.51								
EQUI	9	0.23								
EQUI	8	0.04								
EQUI	6	2.75								
EQUI	7	0.04								
EQUI	10	0.04								
EQUI	12	0.04								

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<	3.20	14.03	6.31	1.28	5.61	2.52

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:			CAS#:			CAS#:		
		3d) Pollutant name:	VOC		Pollutant name:			Pollutant name:		
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	11	0.04	0.18							
EQUI	31	0.04	0.18							
EQUI	19	0.50	2.17							
EQUI	18	0.04	0.18							
EQUI	17	0.04	0.18							
EQUI	16	0.07	0.32							
EQUI	15	0.07	0.32							
EQUI	14	0.83	3.63							
EQUI	28	0.71	3.10							
EQUI	13	0.80	3.49							

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GI-07	<<<	<<<						

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number:

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:			CAS#:			CAS#:		
		3d) Pollutant name:	VOC		Pollutant name:			Pollutant name:		
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	33	0.77	3.36							
EQUI	27	0.07	0.32							
EQUI	26	0.11	0.48							
EQUI	34	0.11	0.48							
EQUI	30	0.11	0.48							
EQUI	25	1.00	4.37							
EQUI	24	1.00	4.39							
EQUI	23	0.15	0.64							
EQUI	22	1.19	5.19							
EQUI	21	1.00	4.39							

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	See final CAP-GP-07	<<<	<<<						

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-07

Capped Permit facility emissions summary

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3a) Emission source type	**3b)** Emission source ID number	**3c)** CAS#:			CAS#:			CAS#:		
		3d) Pollutant name:	VOC		Pollutant name:			Pollutant name:		
		3e) Potential		**3f)** *optional*	Potential			Potential		
		lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr	lbs per hr	tpy unrestricted	Actual tons per yr
EQUI	20	0.20	0.87							
EQUI	29	0.01	0.03							
EQUI	32	0.08	0.33							
EQUI	35	18.07	6.50							
EQUI	36	169.11	20.29							
FUGI	1	0.25	1.09							

4)	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*	Potential lbs/hr	Unrestricted potential tpy	Actual TPY *required*
Total facility	216.45	155.01	47.75						

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-09

Capped Permit Requirements Form
Air Quality Permit Program
Doc Type: Permit Application

Note: You must submit this form as part of your capped permit application package.

AQ Facility ID No.: 04100006 AQ File No.: 2181

Facility Name: Magellan Pipeline Co LP-Alexandria Terminal

Federal and State Requirements

This packet of forms, **CAP-GI-09 Requirements**, will help you to determine the federal and state requirements with which your facility must comply. Be advised that you must include any applicable requirement that may not be addressed in this part of the application.

The first section of this form asks questions to find out if your facility is subject to specific federal and state regulations. To assist you in filling out this form, there are five attachments, forms **CAP-GI-09 A, D, F, G and I**. This form will direct you to each of the attachments as necessary, which will help you determine if your facility is subject to these regulations. When you are directed to an attachment, complete it as required, but *always* return to this **CAP-GI-09 Requirements** form.

In this form and the others in the CAP-GI-09 series, attach additional pages if the space provided is not sufficient.

1) National Emission Standards for Hazardous Air Pollutants for Source Categories
(NESHAP for Source Categories, 40 CFR pt. 63)

1a) To determine if any requirements for the National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Source Categories (40 CFR pt. 63) apply to your facility, you must complete attached form **CAP-GI-09A Requirements: NESHAP for Source Categories** (40 CFR pt. 63).

1b) After completing form CAP-GI-09A, check one of the following boxes:

☒ **Yes**, my facility **is currently** subject to an area source NESHAP for Source Categories requirements. Go to question 1c.

☐ **No**, my facility **is not currently** subject to NESHAP for Source Categories requirements. Go to question 2.

1c) Check the box that best describes your source's compliance status with regards to applicable area source NESHAP requirements on the date of application and then go to question 2:

☒ Compliance

☐ Non-compliance. Describe: _____

2) Standards of Performance for New Stationary Sources
(NSPS, New Source Performance Standards, 40 CFR pt. 60)

2a) Have you constructed, modified (as defined in 40 CFR § 60.14), or reconstructed (as defined in 40 CFR § 60.15) your emission facility, or any portion thereof, after August 17, 1971?

☐ **No**. Go to question 3.

☒ **Yes**, you may be subject to this regulation. Complete the attached form **CAP-GI-09D Requirements: NSPS**.

2b) After completing the above question (and the attachment if necessary) check one of the following boxes:

☒ **Yes**, my facility (or a portion of it) **is** subject to NSPS requirements. My facility is only subject to one or more of the 14 NSPS requirement listed in Minn. R. 7007.1140, subp. 2 (E). Go to question 2c.

☐ **No**, my facility **is not** subject to NSPS requirements. Go to question 3.

2c) Check the box that best describes your source's compliance status with regards to applicable NSPS requirements on the date of application and then go to question 3:

☒ Compliance

☐ Non-compliance. Describe: _____

3) Stratospheric Ozone Protection
(1990 Clean Air Act, as amended, Sections 601-618)

3a) To determine if this federal regulation applies to your facility, you must complete the attached form **CAP-GI-09F Requirements: Stratospheric Ozone**.

3b) After completing form **CAP-GI-09F Requirements: Stratospheric Ozone**, check one of the following boxes:

☐ **Yes**, my facility **is** subject to this requirement. Go to question 3c.

☒ **No**, my facility **is not** subject to this requirement. Go to question 4.

3c) Check the box that best describes your source's compliance status with regards to applicable stratospheric ozone requirements on the date of application and then go to question 4:

☐ Compliance

☐ Non-compliance. Describe: _____

4) Risk Management Programs for Chemical Accidental Release Prevention
(40 CFR pt. 68, Section 112(r) of the Clean Air Act Amendments)

4a) Section 112(r) of the Clean Air Act requires facilities that produce, process, store or use any of the substances listed in form **GI-09G: Risk Management Programs for Chemical Accidental Release Prevention** (40 CFR pt. 68), in amounts greater than the listed thresholds, to develop and implement a risk management plan for accidental releases.

4b) Determine if you produce, process, store or use any of the substances listed in form **CAP-GI-09G: Risk Management Programs for Chemical Accidental Release Prevention**, and check one of the following boxes:

☐ **Yes**, my facility **does** produce, process, store or use one or more of the substances listed in form **CAP-GI-09G**, in amounts exceeding the listed thresholds. Go to question 4c.

☒ **No**, my facility **does not** produce, process, store or use any of the substances listed in form **CAP-GI-09G**, in amounts exceeding the listed thresholds. Go to question 5.

4c) Check the box that best describes your source's compliance status with regards to applicable 112(r) requirements on the date of application and then go to question 5:

☐ Compliance

☐ Non-compliance. Describe: _____

5) Federal Ozone Measures for the Control of Emissions from Certain Sources
(1990 Clean Air Act, as amended, Section 183(e))

5a) Rules have been promulgated under the above section of the Clean Air Act regulating Volatile Organic Compounds (VOCs) from consumer or commercial products that emit VOCs. Does your facility manufacture: (check all that apply)

☐ Household consumer products containing VOCs.

☐ Architectural coatings containing VOCs.

☐ Autobody refinishing coatings containing VOCs.

☒ My facility does not manufacture any of the above. Go to question 6.

5b) If you checked any boxes in question 5a) review the regulations at http://www.epa.gov/ttn/atw/183e/gen/183epg.html to determine whether your facility may be subject to any rules that are adopted under § 183(e) requiring emission reductions. After reviewing the regulations, check one of the following boxes.

☐ Yes, my facility is subject to consumer and commercial products regulation under section183(e). Go to question 5c.

☐ No, my facility is not subject to consumer and commercial products regulation under section183(e). Go to question 6.

5c) Check the box that best describes your source's compliance status with regards to applicable 183(e) requirements on the date of application and then go to question 6:

☐ Compliance

☐ Non-compliance. Describe: _____

6) Minnesota State Air Quality Rules

6a) To determine which Minnesota State rules you may be subject to, go to form **CAP-GI-09I Requirements: State Rules**.

6b) Whether permitted or not, **every business** and activity in Minnesota **is subject to the rules listed in the following table.** Check the box that best describes your source's compliance status with regards to the rules in the following table and other applicable state rules identified in form CAP-GI-09I on the date of application and then go to question 7:

☒ Compliance

☐ Non-compliance. Describe: _____

Title of the Rule	Minnesota Rules (Chapter or Part)	What the Content of the Rule is:
Air Quality Emission Fees	Part 7002.0025 - 7002.0095	Requires facilities to pay emission fees every year within 60 days of MPCA billing.
Air Emission Permits	Parts 7007.0050 - 7007.1850	Outlines when an air emission permit is required and procedures for obtaining one.
Minnesota and National Ambient Air Quality Standards	Part 7009.0010 - 7009.0080	No one is allowed to emit any of the limited pollutants in such a manner that ambient levels of the pollutant are higher than the maximum level.
Applicability of Standards of Performance	Parts 7011.0010, and 7011.0050	Indicates that facilities must comply with all applicable state air pollution rules.
Circumvention	Part 7011.0020	States that no one may conceal or dilute emissions which would otherwise violate a federal or state air pollution control rule.
Emission Standards for Visible Air Contaminants	Part 7011.0100 - 7011.0120	Outlines restrictions against emitting opaque smoke from facilities.
Preventing Particulate Matter from Becoming Airborne	Part 7011.0150	States that no person shall cause particulate matter to become airborne if it can be avoided with listed preventative measures.
Continuous Monitors	Part 7017.1000	Outlines requirements for continuous monitoring systems.
Performance Tests	Part 7017.2001 - 7017.2060	Outlines procedures and methods for emissions and performance testing if required.
Notifications	Part 7019.1000	Requires facilities to notify the MPCA of shutdowns and breakdowns.
Reports	Part 7019.2000	Requires specific records and reports from facilities with continuous monitoring systems.
Emission Inventory	Part 7019.3000 - 7019.3100	Requires facilities to submit an Emission Inventory Report by April 1 every year.
Motor Vehicles	Part 7023.0100 - 7023.0120	Outlines restrictions against emitting opaque smoke from motor vehicles, trains, boats, construction equipment and stationary internal combustion engines.
Noise Pollution Control	Part 7030.0010 - 7030.0080	Sets noise standards which cannot be exceeded.

7) You have completed this form.

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-09A

Capped Permit Requirements: NESHAP for Source Categories (40 CFR pt. 63)

Air Quality Permit Program

Doc Type: Permit Application

National Emission Standards for Hazardous Air Pollutants for source categories (NESHAP for Source Categories, 40 CFR pt. 63)

Tables A (Hazardous Air Pollutants) and B (Source Categories) are provided for your reference and to assist with completing CAP-00. They are not used to answer Question 1 on this form.

AQ Facility ID number: 04100006 Agency Interest ID number: 2181

Facility name: Magellan Pipeline Co LP-Alexandria Terminal

1) If your source has any equipment that belongs to the following area source categories, place a check in the box next to that category and read the specified NESHAP for Source Categories to determine all applicable requirements for area sources. The rules for these source categories may apply whether or not your facility is considered a major source for hazardous air pollutants. If you check one or more boxes below, you must answer "**Yes**" to question 1b when you return to Form CAP-GI-09. If any part of your facility is subject to a listed standard that requires a Part 70 operating permit, you may not get a Capped Permit but must instead apply for and obtain a Part 70 permit.

- ☐ Acrylic and Modacrylic Fibers Production, 40 CFR § 63 Subpart LLLLLL
- ☐ Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR § 63 Subpart AAAAAAA
- ☐ Carbon Black Production, 40 CFR § 63 Subpart MMMMMM *(see note 1)*
- ☐ Chemical Manufacturing Area Sources, 40 CFR § 63 Subpart VVVVVV *(see note 2)*
- ☐ Chemical Manufacturing: Chromium Compounds, 40 CFR § 63 Subpart NNNNNN *(see note 1)*
- ☐ Chemical Preparations Industry, 40 CFR § 63 Subpart BBBBBBB
- ☐ Chromic acid anodizing **(Chromium Electroplating)**, 40 CFR § 63 Subpart N
- ☐ Clay Ceramics Manufacturing, 40 CFR § 63 Subpart RRRRRR
- ☐ Commercial dry cleaning (Perc) transfer machines, 40 CFR § 63 Subpart M
- ☐ Commercial sterilization facilities, 40 CFR § 63 Subpart O
- ☐ Decorative chromium electroplating **(Chromium Electroplating)**, 40 CFR § 63 Subpart N
- ☐ Electric Arc Furnace Steelmaking Facilities, 40 CFR § 63 Subpart YYYYY *(see note 1)*
- ☐ Ferroalloys Production Facilities, 40 CFR § 63 Subpart YYYYYY
- ☐ Flexible Polyurethane Foam Production and Fabrication, 40 CFR § 63 Subpart OOOOOO
- ☐ Gasoline Dispensing Facilities, 40 CFR § 63 Subpart CCCCCC
- ☒ Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, 40 CFR § 63 Subpart BBBBBB
- ☐ Glass Manufacturing, 40 CFR § 63 Subpart SSSSSS *(see note 1)*
- ☐ Gold Mine Ore Processing and Production, 40 CFR § 63 Subpart EEEEEEE
- ☐ Halogenated solvent cleaners (Degreasing Organic Cleaners), 40 CFR § 63 Subpart T
- ☐ Hard chromium electroplating **(Chromium Electroplating)**, 40 CFR § 63 Subpart N
- ☐ Hospital Sterilizers Using Ethylene Oxide, 40 CFR § 63 Subpart WWWWW
- ☐ Industrial, Commercial, and Institutional Boilers, 40 CFR § 63 Subpart JJJJJJ
- ☐ Iron and Steel Foundries Area Sources, 40 CFR § 63 Subpart ZZZZZ
- ☐ Lead Acid Battery Manufacturing, 40 CFR § 63 Subpart PPPPPP
- ☐ Metal Fabrication and Finishing Sources, 40 CFR § 63 Subpart XXXXXX
- ☐ Nonferrous Foundries: Aluminum, Copper, and Other, 40 CFR § 63 Subpart ZZZZZZ
- ☐ Oil and natural gas production, 40 CFR § 63 Subpart HH
- ☐ Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR § 63 Subpart HHHHHH
- ☐ Paints and Allied Products Manufacturing, 40 CFR § 63 Subpart CCCCCCC
- ☐ Plating and Polishing Operations, 40 CFR § 63 Subpart WWWWWW
- ☐ Polyvinyl Chloride and Copolymers Production, 40 CFR § 63 Subpart DDDDDD
- ☐ Prepared Feeds Manufacturing, 40 CFR § 63 Subpart DDDDDDD
- ☐ Primary Copper Smelting, 40 CFR § 63 Subpart EEEEEE *(see note 1)*
- ☐ Primary Nonferrous Metals: Zinc, Cadmium, and Beryllium, 40 CFR § 63 Subpart GGGGGG *(see note 1)*

☐ Reciprocating Internal Combustion Engines, 40 CFR § 63 Subpart ZZZZ
☐ Secondary aluminum processing, 40 CFR § 63 Subpart RRR
☐ Secondary Copper Smelting, 40 CFR § 63 Subpart FFFFFF *(see note 1)*
☐ Secondary Nonferrous Metals Processing (Brass, Bronze, Magnesium, Zinc), 40 CFR § 63 Subpart TTTTTT
☐ Wood Preserving, 40 CFR § 63 Subpart QQQQQQ

Notes

1. If any part of your facility is subject Subpart(s) MMMMMM, NNNNNN, YYYYY, SSSSSS, EEEEEE, EEEEEEE, GGGGGG, and/or FFFFFF, you must apply for and obtain a Part 70 operating permit; a facility subject to any of these subparts does not qualify for a Capped Permit.
2. If a source subject to this subpart was a major source of HAP and installed control equipment after November 15, 1990, to become an area source of HAP, the source must obtain a Part 70 operating permit, regardless of the facility emissions.

2) Return to Form CAP-GI-09 and answer question 1b.

Table A - Hazardous Air Pollutants

75070	Acetaldehyde
60355	Acetamide
75058	Acetonitrile
98862	Acetophenone
53963	2-Acetylaminofluorene
107028	Acrolein
79061	Acrylamide
79107	Acrylic acid
107131	Acrylonitrile
107051	Allyl chloride
92671	4-Aminobiphenyl
62533	Aniline
90040	o-Anisidine
1332214	Asbestos
71432	Benzene
92875	Benzidine
98077	Benzotrichloride
100447	Benzyl chloride
92524	Biphenyl
117817	Bis (2-ethylhexyl) phthalate (DEHP)
542881	Bis (chloromethyl) ether
75252	Bromoform
106945	1-Bromopropane (n-propyl bromide)
106990	1,3-Butadiene
156627	Calcium cyanamide
133062	Captan
63252	Carbaryl
75150	Carbon disulfide
56235	Carbon tetrachloride
463581	Carbonyl sulfide
120809	Catechol
133904	Chloramben
57749	Chlordane
7782505	Chlorine
79118	Chloroacetic acid
532274	2-Chloroacetophenone
108907	Chlorobenzene
510156	Chlorobenzilate
67663	Chloroform
107302	Chloromethyl methyl ether
126998	Chloroprene
1319773	Cresols/Cresylic acid (isomers and mixture)
95487	0-Cresol
108394	m-Cresol
106445	p-Cresol
98828	Cumene
94757	2,4-D, salts and esters
3547044	DDE
334883	Diazomethane
132649	Dibenzofurans
96128	1,2-Dibromo-3-chloropropane
84742	Dibutylphthalate
106467	1,4-Dichlorobenzene(p)
91941	3,3'-Dichlorobenzidene
111444	Dichloroethyl ether (Bis(2-chloroethyl)either)
542756	1,3-Dichloropropene
62737	Dichlorvos
111422	Diethanolamine
121697	N,N-Diethyl aniline (N,N- Dimethylaniline)
64675	Diethyl sulfate
119904	3,3-Dimethoxybenzidine
60117	Dimethyl aminoazobenzene
119937	3,3-Dimethyl benzidine
79447	Dimethyl carbamoyl chloride
68122	Dimethyl formamide
57147	1,1 Dimethyl hydrazine
131113	Dimethyl phthalate
77781	Dimethyl Sulfate
534521	4,6-Dintro-o-cresol, and salts
51285	2,4-Dinitrophenol
121142	2,4-Dinitrotoluene
123911	1,4-Dioxane (1.4-Diethyleneoxide)
122667	1,2-Diphenylhydrazine
106898	Epichlorohydrin (1-Chloro-2,3-epoxypropane)
106887	1,2-Epoxybutane
140885	Ethyl acrylate
100414	Ethyl benzene
51796	Ethyl carbamate (Urethane)
75003	Ethyl chloride (Chloroethane)
106934	Ethylene dibromide (Dibromoethane)
107062	Ethylene dichloride (1,2- Dichloroethane)
107211	Ethylene glycol
151564	Ethylene imine (Aziridine)
75218	Ethylene oxide
96457	Ethylene thiourea
75343	Ethylidene dichloride (1,1-Dichloroethane)
50000	Formaldehyde
76448	Heptacholor
118741	Hexachlorobenzene
87683	Hexachlorobutadiene
77474	Hexachlorocyclopentadiene
67721	Hexachloroethane
822060	Hexamethylene-1,6-diisocyanate
680319	Hexamethylphosphoramide
110543	Hexane
302012	Hydrazine
7647010	Hydrochloric acid
7664393	Hydrogen flouride (hydrofluoric acid)
123319	Hydroquinone
78591	Isophorone
58899	Lindane (all isomers)
108316	Maleic anhydride
67561	Methanol
72435	Methoxychlor
74839	Methyl bromide (Bromomethane)
74873	Methyl chloride (Choromethane)
71556	Methyl chloroform (1,1,1-Trichloroethane)
60344	Methyl hydrazine
74884	Methyl iodide (Iodomethane)
108101	Methyl isobutyl ketone (Hexone)
624839	Methyl isocyanate
80626	Methyl methacrylate
1634044	Methyl tert butyl ether
101144	4,4-Methylene bis (2-chloroaniline)
75092	Methylene chloride (Dichloromethane)
101688	Methlene diphenyl diisocyanate (MDI)
101779	4,4'-methylenedianiline

Table A - Hazardous Air Pollutants

91203	Naphthalene
98953	Nitrobenzene
92933	4-Nitrobiphenyl
100027	4-Nitrophenol
79469	2-Nitropropane
684935	N-Nitroso-N-methylurea
62759	N-Nitrosodimethylamine
59892	N-Nitosomorpholine
56382	Parathion
82688	Pentachloronitrobenzene (Quintobenzene)
87865	Pentachlorophenol
108952	Phenol
106503	p-Phenylenediamine
75445	Phosgene
7803512	Phosphine
7723140	Phosphorus
85449	Phthalic anhydride
1336363	Polychlorinated biphenyls (aroclors)
1120714	1,3-Propane sultone
57578	beta-Propiolactone
123386	Propionaldehyde
114261	Propoxur (Baygon)
78875	Propylene dichloride (1,2-Dichloropropane)
75569	Propylene oxide
75558	1,2-Propylenimine (2-Methyl aziridine)
91225	Quinoline
106514	Quinone
100425	Styrene
96093	Styrene Oxide
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79345	1,1,2,2-Tetrachloroethane
127184	Tetrachloroethylene (Perchloroethylene)
7550450	Titanium tetrachloride
108883	Toluene
95807	2,4-Toluene diamine
584849	2,4-Toluene diisocyanate
95534	o-Toluidine
8001352	Toxaphene (chlorinated camphene)
120821	1,2,4-Trichlorobenzene
79005	1,1,2-Trichloroethane
79016	Trichloroethylene (TCE) [5]
95954	2,4,5-Trichlorophenol
88062	2,4,6-Trichlorophenol
121448	Triethylamine
1582098	Trifluralin
540841	2,2,4-Trimethylpentane
108054	Vinyl acetate
593602	Vinyl bromide
75014	Vinyl chloride
75354	Vinylidene chloride (1,1-Dichloroethylene)
1330207	Xylenes (isomers and mixtures)
95476	o-Xylenes
108383	m-Xylenes
106423	p-Xylenes

0	Antimony compounds
0	Arsenic compounds (inorganic including arsine)
0	Beryllium compounds
0	Cadmium compounds
0	Chromium compounds
0	Cobalt compounds
0	Coke oven emissions
0	Cyanide compounds
0	Glycol ethers [1]
0	Lead compounds
0	Manganese compounds
0	Mercury compounds
0	Mineral fibers [2]
0	Nickel compounds
0	Polycyclic organic matter [3]
0	Radionuclides [4]
0	Selenium compounds

Note: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

[1] Glycol ethers include mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-$(OCH_2CH_2)_n$-OR' where

n = 1, 2, or 3

R = alkyl C7 or less; or

R = phenyl or alkyl substituted phenyl;

R' = H or alkyl C7 or less; or

OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.

Glycol ethers do no include ethylene glycol monobutyl ether (EGBE, 2-Butoxyethanol, CAS Number 111-76-2).

[2] Includes mineral fiber emissions from facilities manufacturing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micron or less.

[3] Includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

[4] A type of atom which spontaneously undergoes radioactive decay.

[5] Trichloroethylene (TCE) use on or after June 1, 2022, is banned in Minnesota, under Minnesota Statutes, section 116.385.

Table B – Source Categories

Categories of Major Sources	Subpart	Rule Promulgation Date	Compliance Date for Existing Sources (if applicable)
Acetyl resins production (Generic MACT)	YY	6/29/99	6/29/02
Acrylic fibers/modacrylic fibers production (Generic MACT)	YY	6/29/99	6/29/02
Acrylonitrile-butadiene-styrene production (Polymers and Resins IV)	JJJ	9/12/96	7/31/97
Aerospace Industry	GG	9/1/95	9/1/98
Alkyd resins production (Misc. Organic Chemical Production and Processes (MON))	FFFF	11/10/03	11/10/06
Amino resins production(Polymers and Resins III)	OOO	1/20/00	1/20/03
Ammonium sulfate production (MON)	FFFF	11/10/03	11/10/06
Asphalt/coal tar application - metal pipes	MMMM	1/2/04	1/2/07
Asphalt Roofing and Processing	LLLLL	4/29/03	5/1/06
Auto and Light Duty Truck Surface Coating	IIII	4/26/04	4/26/07
Benzyltrimethylammonium chloride production (MON)	FFFF	11/10/03	11/10/06
Boat manufacturing	VVVV	8/22/01	8/22/04
Brick and Structural Clay Products Manufacturing	JJJJJ	5/16/03	5/16/06
Butadiene-furfural cotrimer (R-11) production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Butyl rubber production (Polymers and Resins I)	U	9/5/96	3/5/97
Captafol production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Captan production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Carbon Black Production (Generic MACT)	YY	7/12/02	7/12/05
Carboxymethylcellulose production (Cellulose Production Manufacturing)	UUUU	6/11/02	6/11/05
Carbonyl sulfide production (MON)	FFFF	11/10/03	11/10/06
Cellophane production (Cellulose Production Manufacturing)	UUUU	6/11/02	6/11/05
Cellulose ethers production (Cellulose Production Manufacturing)	UUUU	6/11/02	6/11/05
Cellulose food casing manufacturing (Cellulose Production Manufacturing)	UUUU	6/11/02	6/11/05
Clay Ceramics Manufacturing	KKKKK	5/16/03	5/16/06
Chelating agents production (MON)	FFFF	11/10/03	11/10/06
Chlorinated paraffins production (MON)	FFFF	11/10/03	11/10/06
4-chloro-2-methyl acid production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Chloroneb production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Chlorothalonil production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Chromic acid anodizing (Chromium Electroplating)	N	1/25/95	1/25/97
Coke Ovens: Charging, Top Side, and Door Leaks	L	10/27/93	varies
Coke Ovens: Pushing, Quenching and Battery Stacks	CCCCC	4/14/03	4/14/06
Combustion (Gas) Turbines	YYYY	3/5/04	3/5/07
Commercial dry cleaning (Perc) transfer machines	M	9/22/93	9/23/96
Commercial sterilization facilities	O	12/6/94	12/6/98
Cyanide Chemicals Manufacturing (Generic MACT)	YY	7/12/02	7/12/05
Dacthal ™ production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Decorative chromium electroplating (Chromium Electroplating)	N	1/25/95	1/25/96
4,6,-dinitro-o-cresol production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03

Table B (continued)

Categories of Major Sources	Subpart	Rule Promulgation Date	Compliance Date for Existing Sources (if applicable)
Engine Test Cells/Stands	PPPPP	5/27/03	5/27/03
Epichlorohydrin elastomers production(Polymers and Resins I)	U	9/5/96	3/5/97
Epoxy resins production (Polymers and Resins II)	W	3/8/95	3/3/98
Ethylene-propylene rubber production (Polymers and Resins I)	U	9/5/96	3/5/97
Ethylidene norbomene production (MON)	FFFF	11/10/03	11/10/06
Explosives production (MON)	FFFF	11/10/03	11/10/06
Ethylene Processes (Generic MACT)	YY	7/12/02	7/12/05
Fabric Printing, Coating, & Dyeing	OOOO	5/29/03	5/29/06
Ferroalloys Production	XXX	5/20/99	5/20/01
Fiberglass Mat Production (wet formed)	HHHH	4/11/02	4/11/05
Flexible Polyurethane Foam Fabrication Operations	MMMMM	4/14/03	4/14/04
Flexible Polyurethane Foam Production	III	10/7/98	10/8/01
Friction Products Manufacturing	QQQQQ	10/18/02	10/18/05
Fume Silica Production (Hydrochloric Acid Production)	NNNNN	4/17/03	4/17/06
Gasoline distribution (Stage 1)	R	12/14/94	12/15/97
Halogenated solvent cleaners (Degreasing Organic Cleaners)	T	12/2/94	12/2/97
Hard chromium electroplating (Chromium Electroplating)	N	1/25/95	1/25/97
Hazardous Waste Combustion		9/30/99	9/30/03
Hazardous Organic NESHAP (Synthetic Organic Chemical Manufacturing Industry)	F,G	4/22/94	5/14/01
	H	4/22/94	5/12/99
	I	4/22/94	5/12/98
Hydrazine production (MON)	FFFF	11/10/03	11/10/06
Hydrochloric acid production	NNNNN	4/17/03	4/17/06
Hydrogen Fluoride Production (Generic MACT)	YY	6/29/99	6/29/02
Hypalon ™ production (Polymers and Resins I)	U	9/5/96	3/5/97
Industrial, Commercial and Institutional Boilers and Process Heaters	DDDDD	5/20/11	3/21/14
Industrial Dry Cleaning (Dry Cleaning)	M	9/22/93	12/20/93
Industrial Cooling Towers	Q	9/8/94	3/8/95
Integrated Iron and Steel Manufacturing	FFFFF	5/20/03	5/20/06
Iron & Steel Foundries	EEEEE	4/22/04	4/22/07
Large Appliance Surface Coating	NNNN	7/23/02	7/23/05
Leather Finishing Operation	TTTT	2/27/02	2/27/05
Lime Manufacturing	AAAAA	1/5/04	1/5/07
Magnetic Tape Surface Coating	EE	12/15/94	12/15/96
Maleic anhydride copolymers production (MON)	FFFF	11/10/03	11/10/06
Manufacture of paints, coating and adhesives (MON)	FFFF	11/10/03	11/10/06
Marine Vessel Loading Operations	Y	9/19/95	9/19/99
Mercury cell Chlor-Alkali plants	IIIII	12/19/03	12/19/06
Metal Can Surface Coating	KKKK	11/13/03	11/13/05
Metal Coil Surface Coating	SSSS	6/10/02	6/10/05
Metal Furniture Surface Coating	RRRR	5/23/03	5/23/06
Methylcellulose production (Cellulose Production Manufacturing)	UUUU	6/11/02	6/11/05
Methyl methacrylate-acrylonitrile-butadiene-styrene production (Polymers and Resins IV)	JJJ	9/12/96	7/31/97

Table B (continued)

Categories of Major Sources	Subpart	Rule Promulgation Date	Compliance Date for Existing Sources (if applicable)
Methyl methacrylate-butadiene-styrene terpolymers production (Polymers and Resins IV)	JJJ	9/12/96	7/31/97
Mineral Wool Production	DDD	6/1/99	6/1/02
Miscellaneous Coating Manufacturing	HHHHH	12/11/03	12/11/06
Miscellaneous Metal Parts and Products Surface Coating	MMMM	1/2/04	1/2/07
Municipal Solid Waste Landfills	AAAA	1/16/03	1/16/04
Natural gas transmission and storage	HHH	6/17/99	6/17/02
Neoprene production (Polymers and Resins I)	U	9/5/96	3/5/97
Nitrile butadiene rubber prod. (Polymers and Resins I)	U	9/5/96	3/5/97
Non-nylon polyamides production (Polymers and Resins I)	W	3/8/95	3/3/98
Nutritional Yeast Manufacture	CCCC	5/21/01	5/21/04
Off-site Waste Recovery Operations	DD	7/1/96	2/1/00
Oil and natural gas production	HH	6/17/99	6/17/02
Organic liquids distribution (non-gasoline)	EEEE	2/3/04	2/3/07
Oxybisphenoxarsine (OBPA)/1,3-diisocyanate production (MON)	FFFF	11/10/03	11/10/06
Paper and other webs surface coating	JJJJ	12/4/02	12/4/05
Petroleum refineries - catalytic cracking (fluid and other) units, catalytic reforming units, and sulfur plant units	UUU	4/11/02	4/11/05
Petroleum refineries - Other sources not distinctly listed	CC	8/18/95	8/18/98
Pharmaceuticals production	GGG	9/21/98	9/21/01
Phenolic resins production (Polymers and Resins III)	OOO	1/20/00	1/20/03
Phosphate fertilizers production	BB	6/10/99	6/10/02
Phosphoric acid manufacturing	AA	6/10/99	6/10/02
Photographic chemicals production (MON)	FFFF	11/10/03	11/10/06
Phthalate plasticizers production (MON)	FFFF	11/10/03	11/10/06
Plastic parts and products surface coating	PPPP	4/19/04	4/19/07
Plywood & composite wood products	DDDD	7/30/04	9/28/07
Polyether polyols production	PPP	6/1/99	6/1/02
Polybutadiene rubber production (Polymers and Resins I)	U	9/5/96	3/5/97
Polycarbonates production (Generic MACT)	YY	6/29/99	6/29/02
Polyester resins production (MON)	FFFF	11/10/03	11/10/06
Polyethylene terephthalate production (Polymers and Resins IV)	JJJ	9/12/96	7/31/97
Polymerized vinylidene chloride production (MON)	FFFF	11/10/03	11/10/06
Polymethyl methacrylate resins production (MON)	FFFF	11/10/03	11/10/06
Polystyrene production (Polymers and Resins IV)	JJJ	9/12/96	7/31/97
Polysulfide rubber production (Polymers and Resins I)	U	9/5/96	3/5/97
Polyvinyl acetate emulsions production (MON)	FFFF	11/10/03	11/10/06
Polyvinyl alcohol production (MON)	FFFF	11/10/03	11/10/06
Polyvinyl butyral production (MON)	FFFF	11/10/03	11/10/06
Polyvinyl chloride and copolymers production	J	7/10/02	7/10/05
Portland cement manufacturing	LLL	6/14/99	6/10/02
Primary aluminum production	LL	10/7/97	10/7/99
Primary copper smelting	QQQ	6/12/02	6/12/05
Primary lead smelting	TTT	6/4/99	5/4/01
Primary magnesium refining	TTTTT	10/10/03	10/11/04
Printing/publishing	KK	5/30/96	5/30/99
Publicly owned treatment works	VVV	10/26/99	10/26/02
Pulp and paper production (non-combust) MACT I	S	4/15/98	4/15/01
Pulp and paper production (combust) (Kraft, soda, sulfite) MACT II	MM	1/12/01	1/12/04

Table B (continued)

Categories of Major Sources	Subpart	Rule Promulgation Date	Compliance Date for Existing Sources (if applicable)
Pulp and paper production (non-chemical) MACT III	S	3/8/96	4/16/01
Quaternary ammonium compounds production (MON)	FFFF	11/10/03	11/10/06
Rayon production (Cellulose Production Manufacturing)	UUUU	6/11/02	6/11/05
Reciprocating Internal Combustion Engines	ZZZZ	6/15/04	6/15/07
Refractory Products Manufacturing	SSSSS	4/16/03	4/17/06
Reinforced plastic composites production	WWWW	4/21/03	4/21/06
Rubber chemicals manufacturing (MON)	FFFF	11/10/03	11/10/06
2,4- salts and esters production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Secondary aluminum prod.	RRR	3/23/00	3/24/03
Secondary lead smelting	X	6/23/95	6/23/97
Semiconductor manufacturing	BBBBB	5/22/03	5/22/06
Shipbuilding and ship repair (surface coating)	II	12/15/95	12/16/96
Site remediation	GGGGG	10/8/03	10/9/06
Sodium pentachlorophenate production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Spandex production (Generic MACT)	YY	7/12/02	7/12/05
Stationary combustion turbines	YYYY	3/5/04	3/5/07
Steel pickling	CCC	6/22/99	6/22/01
Styrene-acrylonitrile production (Polymers and Resins IV)	JJJ	9/12/96	7/31/97
Styrene-butadiene rubber and latex prod. (Polymers and Resins I)	U	9/5/96	3/5/97
Symmetrical tetrachloropyridine production (MON)	FFFF	11/10/03	11/10/06
Taconite iron ore processing	RRRRR	10/30/03	10/30/06
Tetrahydrobenzaldehyde manufacture	F	5/12/98	5/12/01
Tire manufacturing	XXXX	7/9/02	7/11/05
Tordon ™ acid production (Pesticide Active Ingredient Production)	MMM	6/23/99	12/23/03
Utility NESHAP	UUUUU	2/16/12	4/16/15
Vegetable oil production – solvent extraction	GGGG	4/12/01	4/12/04
Wood building products (surface coating)	QQQQ	5/28/03	5/28/06
Wood furniture	JJ	12/7/95	11/21/97
Wool fiberglass manufacturing	NNN	6/14/99	6/14/02

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-GI-09D

Requirements: NSPS (40 CFR pt. 60)
Air Quality Permit Program
Doc Type: Permit Application

Standards of Performance for New Stationary Sources (NSPS, New Source Performance Standards, 40 CFR pt. 60)

1a) AQ Facility ID No.: 04100006 **1b)** AQ File No.: 2181

2) Facility Name: Magellan Pipeline Co LP-Alexandria Terminal

3) NSPS are federal rules that define limits, testing and monitoring for certain specific emission units. These standards are proposed and promulgated in the Federal Register and published in the Code of Federal Regulations, title 40 part 60 (40 CFR pt. 60). Table D lists the standards promulgated through December 2012. Table D may not be complete if a new NSPS has been promulgated since this form was last revised. The table contains:

- a brief emission source description;
- a corresponding 40 CFR pt. 60 subpart reference;
- an effective date for all performance standards promulgated as of December 2012;
- NSPS allowed by capped emissions permit in boldface type.

[Please note: the best way to keep up-to-date on NSPS regulations is through the U.S. Environmental Protection Agency's (EPA) webpage (http://www.epa.gov) or the Federal Register since there can be a significant time lag between the date when a standard is proposed or promulgated and when it is finally published in the Code of Federal Regulations.]

4) Please read through the emission sources in Table D. If you have modified (as defined in 40 CFR § 60.14), reconstructed (as defined in 40 CFR § 60.15) or constructed the described emission source on or after the effective date listed in the table, your facility may be subject to the requirements of 40 CFR pt. 60. Generally, reconstruction means that the cost of a repair exceeds 50 percent of what it would cost to install a new emission unit. If you have had an extensive and expensive repair, it may count as a reconstruction.

If you know or suspect standards may apply to your facility you must refer to the corresponding 40 CFR pt. 60 subpart and read the requirements in detail to make a final determination. Note: the general provisions found in 40 CFR pt. 60, subp. A, apply to **all** facilities subject to any other NSPS requirements.

5) After you review the list of sources subject to NSPS and read any applicable 40 CFR pt. 60 subparts, check one of the following boxes:

☐ No, my facility is not subject to a NSPS. Return to Form CAP-GI-09, and answer "No" to question 2b.

☒ Yes, my facility is subject to a NSPS. (Note that your facility can only be subject to a NSPS listed in boldface to be eligible for the capped permit.)

6) The following page lists information needed to identify your facility's emission sources subject to NSPS. Complete the group of questions for all emission equipment subject to NSPS, attaching additional pages if necessary.

7) For each applicable subpart (including Subpart A), include a copy of the applicable subpart with the applicable parts highlighted. For some standards, the Minnesota Pollution Control Agency (MPCA) has prepared a checklist version of the standard – for those subparts you may complete the checklist/form rather than highlighting a copy of the standard. See http://www.pca.state.mn.us/nwqh472 for the subparts for which a checklist form has been prepared.

8) Return to Form CAP-GI-09D, and answer "Yes" to question 2b.

Describe Emission Equipment: Loading Rack w/Vapor Combustor Control-Gasoline Loading
Emission Unit Number: EU001
Stack/Vent Number: SV001
Date of Equipment Manufacture: _____ (Month/Date/Year)
Date of Equipment Installation: _____ (Month/Date/Year)
Date of Reconstruction (if applicable): _____ (Month/Date/Year)
Date of Modification (if applicable): _____ (Month/Date/Year)
Applicable 40 CFR pt. 60 subpart or Federal Register Reference: Bulk Gasoline Terminals (Subpart XX)
This source is also subject to the general provisions of 40 CFR pt. 60, subp. A.
Has this Unit Been Permitted Previously?

- ☐ No
- ☒ Yes, list Air Emission Permit Number: 0410006-004

Have you attached a photocopied, highlighted version of the 40 CFR pt. 60 subpart?

- ☒ Yes
- ☐ No

Describe Emission Equipment: _____
Emission Unit Number: _____
Stack/Vent Number: _____
Date of Equipment Manufacture: _____ (Month/Date/Year)
Date of Equipment Installation: _____ (Month/Date/Year)
Date of Reconstruction (if applicable): _____ (Month/Date/Year)
Date of Modification (if applicable): _____ (Month/Date/Year)
Applicable 40 CFR pt. 60 subpart or Federal Register Reference: _____
This source is also subject to the general provisions of 40 CFR pt. 60, subp. A.
Has this Unit Been Permitted Previously?

- ☐ No
- ☐ Yes, list Air Emission Permit Number: _____

Have you attached a photocopied, highlighted version of the 40 CFR pt. 60 subpart?

- ☐ Yes
- ☐ No

Describe Emission Equipment: _____
Emission Unit Number: _____
Stack/Vent Number: _____
Date of Equipment Manufacture: _____ (Month/Date/Year)
Date of Equipment Installation: _____ (Month/Date/Year)
Date of Reconstruction (if applicable): _____ (Month/Date/Year)
Date of Modification (if applicable): _____ (Month/Date/Year)
Applicable 40 CFR pt. 60 subpart or Federal Register Reference: _____
This source is also subject to the general provisions of 40 CFR pt. 60, subp. A.
Has this Unit Been Permitted Previously?

- ☐ No
- ☐ Yes, list Air Emission Permit Number: _____

Have you attached a photocopied, highlighted version of the 40 CFR pt. 60 subpart?

- ☐ Yes
- ☐ No

Table D: Standards of Performance for New Stationary Sources

If a facility is subject to an NSPS listed in **boldface**, it is still eligible for a capped permit. ***
(If a facility is subject to an NSPS other than those listed in boldface, it is not eligible for a capped permit.)

Performance standards promulgated as of December, 2012

Source categories subject to federal performance standards	40 CFR 60 Subpart	Effective date constructed, modified or reconstructed
Fossil-Fuel Fired Steam Generators >250 MMBtu	D	After: 08/17/71
Electric Utility Steam Generators >250 MMBtu	Da	After: 09/18/78
Industrial-Commercial-Institutional Steam Generators >100 MMBtu	Db	After: 06/19/84
Small Industrial-Commercial-Institutional Steam Generators >10 MMBtu but <100 MMBtu	**Dc***	**After: 06/09/89**
Coal-Fired Electric Steam Generating Units (Hg Budget units)	HHHH	Varies (applies to any unit serving a generator ≥ 25 MWe on or after 11/15/90)
Solid Waste Incinerators	E, CCCC, DDDD, EEEE, FFFF	Varies
Sewage Sludge Incinerators	LLLL, MMMM	After: 10/14/10
Hospital/Medical/Infectious Waste Incinerators	EC, CE	Initial Construction
Municipal Waste Combustors	CB, EA, EB, AAAA, BBBB	Varies
Portland Cement Plants	F	After: 08/17/71
Nitric Acid Plants	G, GA	After: 08/17/71
Sulfuric Acid Plants	H, CD	Initial Construction
Asphalt Concrete Plants	**I***	**After: 06/11/73**
Petroleum Refineries	J, JA	After: 06/11/73
Storage Vessels for Petroleum Liquids	**K*,KA***	**After: 06/11/73**
Volatile Organic Liquid Storage Vessels (Including Petroleum Liquids)	**KB***	**After: 07/23/84**
Secondary Lead Smelters	L	After: 06/11/73
Secondary Brass and Bronze Production Plants	M	After: 06/11/73
Oxygen Process Furnaces	N	After: 06/11/73
Oxygen Process Steelmaking Facilities	NA	After: 01/20/83
Sewage Treatment Plants	O	After: 06/11/73
Primary Copper Smelters	P	After: 10/16/74
Primary Zinc Smelters	Q	After: 10/16/74
Primary Lead Smelters	R	After: 10/16/74
Primary Aluminum Reduction Plants	S	After: 10/23/74
Phosphate Fertilizer Industry	T,U,V,W,X	After: 10/22/74
Coal Preparation Plants	Y	After: 10/24/74
Ferroalloy Production Facilities	Z	After: 10/24/74
Steel Plants	AA, AAA	After: 10/21/74
Kraft Pulp Mills	BB	After: 09/24/76
Glass Manufacturing Plants	CC	After: 06/15/79
Grain Elevators	**DD***	**After: 08/03/78**
Surface Coating of Metal Furniture	**EE***	**After: 11/28/80**
Stationary Gas Turbines	**GG***	**After: 10/03/77**
Stationary Gas Turbines 10 MMBtu or larger	KKKK	After: 02/18/05
Lime Manufacturing Plants	HH	After: 05/03/77

Performance standards promulgated as of December, 2012

Source categories subject to federal performance standards	40 CFR 60 Subpart	Effective date constructed, modified or reconstructed
Lead-Acid Battery Manufacturing Plants	KK	After: 01/14/80
Metallic Mineral Processing Plants	LL	After: 08/24/82
Automobile and Light-Duty Truck Surface Coating Operations	MM	After: 10/05/79
Phosphate Rock Plants	NN	After: 09/21/79
Ammonium Sulfate Manufacture	PP	After: 02/04/80
Graphic Arts Industry: Publication Rotogravure Printing	QQ	After: 08/28/80
Pressure Sensitive Tape and Label Surface Coating Operations	RR	After: 12/30/80
Industrial Surface Coating: Large Appliances	**SS***	**After: 12/24/80**
Metal Coil Surface Coating	TT	After: 01/05/81
Asphalt Processing and Asphalt Roofing Manufacture	UU	After: 11/18/80
Equipment Leaks of Volatile Organic Compounds (VOCs) in the Synthetic Organic Chemicals Manufacturing Industry	VV, VVA	After: 01/05/81
Beverage Can Surface Coating Industry	WW	After: 11/26/80
Bulk Gasoline Terminals	**XX***	**After: 12/17/80**
New Residential Wood Heaters **	AAA	After: 07/01/88
Rubber Tire Manufacturing Industry	BBB	After: 01/20/83
VOC Emissions from the Polymer Manufacturing Industry	DDD	After: 09/30/87
Flexible Vinyl and Urethane Coating and Printing	FFF	After: 01/18/83
Equipment Leaks of VOC in Petroleum Refineries	GGG, GGGA	After: 01/04/83
Synthetic Fiber Production Facilities	HHH	After: 11/23/82
VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes	III	After: 10/21/83
Petroleum Dry Cleaners	**JJJ***	**After: 12/14/82**
Onshore Natural Gas Processing: VOC Equipment Leaks and SO_2 Emissions	KKK, LLL	After: 01/20/84
VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations	NNN	After: 12/30/83
Nonmetallic Mineral Processing Plants (Including Sand and Gravel Processing)	OOO*	After: 08/31/83
Wool Fiberglass Insulation Manufacturing Plants	PPP	After: 02/07/84
VOC Emissions from Petroleum Refinery Wastewater Systems	QQQ	After: 05/04/87
VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI)Reactor Processes	RRR	After: 06/29/90
Magnetic Tape Coating Facilities	SSS	After: 01/22/86
Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	**TTT***	**After: 01/08/86**
Calciners and Dryers in Mineral Industries	UUU	After: 04/23/86
Polymeric Coating of Supporting Substrates Facilities	VVV	After: 04/30/87
Municipal Solid Waste Landfills	WWW, Cc	Initial Construction
Stationary Compression Ignition Internal Combustion Engines	**IIII**	**After: 07/11/05**
Stationary Spark Ignition Internal Combustion Engines	**JJJJ**	**After: 06/12/06**
Crude Oil and Natural Gas Production, Transmission, and Distribution	OOOO	After: 08/23/11

* Checklist versions of regulation available from the MPCA. Contact the MPCA at 651- 296-6300 or 1-800-657-3864 for copies. Also available online at http://www.pca.state.mn.us/air/permits/forms.html#12.

** According to Minn. R. 7007.0300, subp. 1(B), "any stationary source that would be required to obtain a permit solely because it is subject to Code of Federal Regulations, title 40, part 60, subp. AAA" is exempt from permitting.

*** Minn. R. 7007.1140, subp. 2 (E) lists the 13 NSPS that a facility can be subject to and still be eligible for a capped permit.

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

NSPS-A

Subpart A checklist

Air Quality Permit Program

Doc Type: Permit Application

1a) AQ Facility ID number: 04100006 **1b) Agency Interest ID number:** 2181

2) Facility Name: Magellan Pipeline Co LP-Alexandria Terminal

Instructions: An owner or operator may fill in this form in replacement of a highlighted copy of the New Source Performance Standard (NSPS) located in 40 CFR 60, Subpart A — General Provisions.

This form has been filled to specific to NSPS XX

NSPS Provision	Check if applicable
Section 60.1 Applicability.	
(a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.	☒
(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.	☒
(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.	☒
Section 60.2 Definitions (reference rule for additional detail)	
Section 60.3 Units and abreviations (reference rule for additional detail)	
Section 60.4 Address (abreviated for facilities located in Minnesota)	
(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices. Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, IL 60604–3590.	☒
(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:	☒
(25) Minnesota Pollution Control Agency, Division of Air Quality, 520 Lafayette Road, St. Paul, MN 55155.	☒
Section 60.5 Determination of construction or modification.	
(a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.	☒
(b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.	☒
Section 60.6 Review of plans.	
(a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.	☒

NSPS Provision	Check if applicable
(b)(1) A separate request shall be submitted for each construction or modification project.	☒
(2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.	☒
(c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall (1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or (2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.	☒
Section 60.7 Notification and record keeping.	
(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:	☒
(1) A notification of the date construction (or reconstruction as defined under § 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.	☒
(2) [Reserved]	
(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.	☒
(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in § 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.	☒
(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with § 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.	☐
(6) A notification of the anticipated date for conducting the opacity observations required by § 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.	☐
(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by § 60.8 in lieu of Method 9 observation data as allowed by § 60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.	☐
(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	☒
(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:	☐
(1) The magnitude of excess emissions computed in accordance with § 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.	☐
(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.	☐
(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.	☐
(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.	☐
(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.	☐

NSPS Provision	Check if applicable
(1) If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in § 60.7(c) need not be submitted unless requested by the Administrator.	☐
(2) If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in § 60.7(c) shall both be submitted.	☐

Figure 1—SAMPLE Summary Report—Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant (Circle One—SO_2/NO_X/TRS/H_2S/CO/Opacity)

Reporting period dates: From _____ to _____

Company:

Emission Limitation

Address:

Monitor Manufacturer and Model No.

Date of Latest CMS Certification or Audit

Process Unit(s) Description:Total source operating time in reporting period 1

Emission data Summary [1]	CMS performance summary [1]
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown	a. Monitor equipment malfunctions
b. Control equipment problems	b. Non-Monitor equipment malfunctions
c. Process problems	c. Quality assurance calibration
d. Other known causes	d. Other known causes
e. Unknown causes	e. Unknown causes
2. Total duration of excess emission	2. Total CMS Downtime
3. Total duration of excess emissions × (100) [Total source operating time], % [2]	3. [Total CMS Downtime] × (100) [Total source operating time], % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in § 60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

Name
Signature
Title
Date

NSPS Provision	Check if applicable
(e)(1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:	☐
(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;	☐
(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and	☐
(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.	☐

NSPS Provision	Check if applicable
(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.	☐
(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.	☐
(f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:	☒
(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.	☐
(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.	☐
(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.	☒
(g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.	☒
(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.	☒
Section 60.8 Performace Tests	
(a) Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of this section, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).	☒
(1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.	☒

NSPS Provision	Check if applicable
(2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.	☒
(3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.	☒
(4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.	☒
(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.	☒
(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.	☒
(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.	☒
(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:	☒
(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.	☒
(2) Safe sampling platform(s).	☒
(3) Safe access to sampling platform(s).	☒
(4) Utilities for sampling and testing equipment.	☒
(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.	☒
(1) Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.	☒
(2) Contents of report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in paragraphs (f)(2)(i) through (vi) of this section.	☒

NSPS Provision	Check if applicable
(i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.	☒
(ii) Purpose of the test including the applicable regulation(s) requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard and any process parameter component, and a brief process description.	☒
(iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.	☒
(iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.	☒
(v) Where a test method requires you record or report, the following shall be included: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.	☒
(vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test program including his/her email address.	☒
(g) The performance testing shall include a test method performance audit (PA) during the performance test. *(abridged – See rule for additional detail)*	☒
(1) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. *(abridged – See rule for additional detail)*	☒
(2) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:	☒
(i) Preparing the sample;	☒
(ii) Confirming the true concentration of the sample;	☒
(iii) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range.	☒
(iv) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;	☒
(v) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;	☒
(vi) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;	☒
(vii) The AASP shall report the results from each audit sample in a timely manner to the compliance authority and then to the source owner, operator, or representative. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.	☒
(viii) Evaluating the acceptance limits of samples at least once every two years to determine in cooperation with the voluntary consensus standard body if they should be changed;	☒

NSPS Provision	Check if applicable
(ix) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.	☒
(3) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:	☒
(i) Checking audit samples to confirm their true value as reported by the AASP;	☒
(ii) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years;	☒
(iii) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.	☒
(4) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). *(abridged – See rule for additional detail)*	☒
(h) Unless otherwise specified in the applicable subpart, each test location must be verified to be free of cyclonic flow and evaluated for the existence of emission gas stratification and the required number of sampling traverse points. If other procedures are not specified in the applicable subpart to the regulations, use the appropriate procedures in Method 1 to check for cyclonic flow and Method 7E to evaluate emission gas stratification and selection of sampling points.	☒
(i) Whenever the use of multiple calibration gases is required by a test method, performance specification, or quality assurance procedure in a part 60 standard or appendix, Method 205 of 40 CFR part 51, appendix M of this chapter, "Verification of Gas Dilution Systems for Field Instrument Calibrations," may be used.	☒
Section 60.9 Availablity of information	
The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§ 60.5 and 60.6 is governed by §§ 2.201 through 2.213 of this chapter and not by § 2.301 of this chapter.)	☒
Section 60.10 State authority	
The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:	
(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.	☒
(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.	☒
Section 60.11 Compliance with standards and maintenance requirements	
(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by § 60.8, unless otherwise specified in the applicable standard.	☒
(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).	☐
(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.	☐
(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.	☒

NSPS Provision	Check if applicable
(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in § 60.8 unless one of the following conditions apply. If no performance test under § 60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. *(abridged – See rule for additional detail)*	☐
(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under § 60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.	☐
(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in § 60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.	☐
(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by § 60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and § 60.8 performance test results.	☐
(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under § 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under § 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under § 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under § 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under § 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in § 60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.	☐
(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by § 60.8, the opacity observation results and observer certification required by § 60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by § 60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with § 60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.	☐
(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.	☐
(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the **Federal Register.**	☐
(f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.	☒

NSPS Provision	Check if applicable
(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.	☒
Section 60.12 Circumvention	
No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.	☒
Section 60.13 Monitoring requirements	
(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.	☒
(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under § 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.	☒
(c) If the owner or operator of an affected facility elects to submit continous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under § 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, *(abridged – See rule for additional detail)*	☐
(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under § 60.8 and as described in § 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under § 60.8 is conducted.	☐
(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.	☐
(d)(1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once each operating day in accordance with a written procedure. *(abridged – See rule for additional detail)*	☐
(2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.	☐
(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:	☒
(1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.	☒
(2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.	☐
(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.	☒

NSPS Provision	Check if applicable
(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.	☐
(h)(1) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in § 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.	☐
(2) For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:	☐
(i) Except as provided under paragraph (h)(2)(iii) of this section, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.*, one data point in each of the 15-minute quadrants of the hour.	☐
(ii) Except as provided under paragraph (h)(2)(iii) of this section, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.	☐
(A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or	☐
(B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.	☐
(iii) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph (h)(2)(iii) of this section are met, based solely on valid data recorded after the successful calibration.	☐
(iv) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.	☐
(v) Except as provided under paragraph (h)(2)(vii) of this section, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.	☐
(vi) Owners and operators complying with the requirements of § 60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.	☐
(vii) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (*e.g.* hours with < 30 minutes of unit operation under § 60.47b(d)).	☐
(viii) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (*e.g.*, ppm pollutant and percent O_2 or ng/J of pollutant).	☐
(3) All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.	☐
(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:	☒
(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.	☒
(2) Alternative monitoring requirements when the affected facility is infrequently operated.	☒
(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.	☒
(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.	☒

NSPS Provision	Check if applicable
(5) Alternative methods of converting pollutant concentration measurements to units of the standards.	☒
(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.	☐
(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.	☒
(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.	☒
(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.	☒
(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:	☐
(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in § 60.8 of this subpart or other tests performed following the criteria in § 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).	☐
(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., §§60.45(g) (2) and (3), 60.73(e), and 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.	☐
Section 60.14 Modification	
(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.	☒
(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:	☒
(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.	☒

NSPS Provision	Check if applicable
(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.	☒
(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.	☒
(d) [Reserved]	
(e) The following shall not, by themselves, be considered modifications under this part:	☒
(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.	☒
(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.	☒
(3) An increase in the hours of operation.	☒
(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.	☒
(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.	☒
(6) The relocation or change in ownership of an existing facility.	☒
(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.	☒
(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.	☒
(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.	☐
(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.	☐
(j)(1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.	☐
(2) This exemption shall not apply to any new unit that:	☐
(i) Is designated as a replacement for an existing unit;	☐
(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and	☐

NSPS Provision	Check if applicable
(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. *(abridged – See rule for additional detail)*	☐
(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.	☐
Section 60.15 Reconstruction	
(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.	☒
(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:	
(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and	☒
(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.	☒
(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.	
(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information: (1) Name and address of the owner or operator. (2) The location of the existing facility. (3) A brief description of the existing facility and the components which are to be replaced. (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment. (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility. (6) The estimated life of the existing facility after the replacements. (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.	☒
(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.	☒
(f) The Administrator's determination under paragraph (e) shall be based on: (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility; (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility; (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and (4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.	☒
(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.	☒
Section 60.16 Priority list	
Section 60.17 Incorporations by reference	
Section 60.18 General control device and work practice requirements	
(a) *Introduction.* (1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section. (2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, Appendix A-7, Method 21 monitor.	☒
(b) *Flares.* Paragraphs (c) through (f) apply to flares.	☐

NSPS Provision	Check if applicable
(c)(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.	☐
(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).	☐
(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.	☐
(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max}, as determined by the following equation: $V_{max}=(X_{H2}-K_1)* K_2$ Where V_{max}=Maximum permitted velocity, m/sec. K_1=Constant, 6.0 volume-percent hydrogen. K_2=Constant, 3.9(m/sec)/volume-percent hydrogen. X_{H2}=The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in § 60.17).	☐
(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.	☐
(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.	
(4)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.	☐
(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).	☐
(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.	☐
(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(6).	☐
(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.	☐
(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.	☐
(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.	☐
(f)(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.	☐
(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.	☐
(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation: $H_T = K \sum_{i=1}^{n} C_i H_i$	☐

NSPS Provision	Check if applicable
Where: H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C; $K = \text{Constant}, 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right) \left(\frac{g\ mole}{scm}\right) \left(\frac{MJ}{kcal}\right)$ where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C; C_i=Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in § 60.17); and H_i=Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.	
(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.	☐
(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation. $\text{Log}_{10}(V_{max})=(H_T+28.8)/31.7$ V_{max}=Maximum permitted velocity, M/sec 28.8=Constant 31.7=Constant H_T=The net heating value as determined in paragraph (f)(3).	☐
(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation. $V_{max}=8.706+0.7084\ (H_T)$ V_{max}=Maximum permitted velocity, m/sec 8.706=Constant 0.7084=Constant H_T=The net heating value as determined in paragraph (f)(3).	☐
(g) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (g), (h), and (i) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, Appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, Appendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (g), (h), and (i) of this section apply to this standard. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (g)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (g), (h), and (i) of this section.	☐
(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, or 65 that requires monitoring of equipment with a 40 CFR part 60, Appendix A-7, Method 21 monitor.	
(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, Appendix A-7, Method 21 monitor.	
(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.	
(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.	
(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.	
(6) *Leak* means:	☐
(i) Any emissions imaged by the optical gas instrument;	☐
(ii) Indications of liquids dripping;	☐

NSPS Provision	Check if applicable
(iii) Indications by a sensor that a seal or barrier fluid system has failed; or	☐
(iv) Screening results using a 40 CFR part 60, Appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.	☐
(h) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, Appendix A-7, Method 21 monitor.	☐
(1) An owner or operator of an affected source subject to CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (i) of this section instead of using the 40 CFR part 60, Appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.	☐
(2) Any leak detected when following the leak survey procedure in paragraph (i)(3) of this section must be identified for repair as required in the applicable subpart.	☐
(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart to which the equipment is subject.	☐
(4) The schedule for repair is as required in the applicable subpart.	☐
(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.	☐
(6) When this alternative work practice is used for detecting leaking equipment the following are not applicable for the equipment being monitored:	☐
(i) Skip period leak detection and repair;	
(ii) Quality improvement plans; or	
(iii) Complying with standards for allowable percentage of valves and pumps to leak.	
(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (h)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.	☐
(i) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (i)(1) through (i)(5) of this section.	☐
(1) Instrument Specifications. The optical gas imaging instrument must comply with the requirements in (i)(1)(i) and (i)(1)(ii) of this section	☐
(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (i)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.	☐
(ii) Provide a date and time stamp for video records of every monitoring event.	☐
(2) Daily Instrument Check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (i)(2)(i) of this section in accordance with the procedure specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (i)(2)(v) of this section.	☐
(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (i)(2)(i)(A) and (i)(2)(i)(B) of this section.	
(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.	☐
(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (i)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.	☐

NSPS Provision	Check if applicable
$E_{dic} = (E_{sds}) \sum_{i=1}^{k} x_i$ E_{dic} = Mass flow rate for the daily instrument check, grams per hour x_i = Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds}. E_{sds} = Standard detection sensitivity level from Table 1 to subpart A, grams per hour k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.	
(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.	☐
(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.	☐
(iv) Establish a mass flow rate by using the following procedures:	☐
(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.	☐
(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.	☐
(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate specified in paragraph (i)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.	☐
(v) Repeat the procedures specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.	☐
(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under § 60.13(i).	☐
(3) Leak Survey Procedure. Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.	☐
(4) Recordkeeping. You must keep the records described in paragraphs (i)(4)(i) through (i)(4)(vii) of this section:	☐
(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.	☐
(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.	☐
(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of this section.	☐
(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of this section.	☐
(v) The daily instrument check. Record the distance, per paragraph (i)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (i)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.	☐
(vi) Recordkeeping requirements in the applicable subpart. A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.	☐
(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subpart.	☐

NSPS Provision	Check if applicable
(5) Reporting. Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to CCG-AWP@EPA.GOV.	☐
Section 60.19 General notification and reporting requirements	
(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.	☒
(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.	☒
(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.	☒
(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.	☒
(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.	☒
(f)(1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.	☒
(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.	☒
(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.	☒
(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.	☒
(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.	☒

NSPS Provision	Check if applicable

Table 1 to Subpart A to Part 60-Detection Sensitivity Levels (grams per hour)

Monitoring frequency per subpart [a]	Detection sensitivity level
Bi-Monthly	**60**
Semi-Quarterly	**85**
Monthly	**100**

[a] When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

(abridged – See rule for additional detail)

Minnesota Pollution Control Agency

520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

NSPS FORM – **NSPS-XX**

SUBPART XX Check-OFF FORM

July 11, 2005

I. Introduction

An owner or operator may fill in this form in replacement of a highlighted copy of the New Source Performance Standard (NSPS) located in 40 CFR 60, Subpart XX — Standards of Performance for Bulk Gasoline Terminals.

Please be aware that all facilities subject to this NSPS are also subject to 40 CFR 60 Subpart A - General Provisions. Where this NSPS refers to portions of Subpart A (§60.1 to §60.19), please copy those referenced portions of Subpart A and check off the specific items that apply to your facility. You can find the most recent version of 40 CFR 60, subpart A on EPA's website at http://www.epa.gov/epacfr40/chapt-I.info/chi-toc.htm/. A formatted version of subpart A (Form NSPS-A) with check off boxes is available on the MPCA's website, at http://www.pca.state.mn.us/air/permits/forms.html.

NSPS PROVISION Location and Language	☒ **if APPLICABLE**
Section 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.	☐
Note: The intent of these standards is to minimize the emissions of VOC through the application of best demonstrated technologies (BDT). The numerical emission limits in this standard are expressed in terms of total organic compounds. This emission limit reflects the performance of BDT.	
Section 60.501 Definitions.	
The terms used in this subpart are defined in the Clean Air Act, in §60.2 of this part, or in this section as follows: *Bulk gasoline terminal* means any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State or local law and discoverable by the Administrator and any other person. *Continuous vapor processing system* means a vapor processing system that treats total organic compounds vapors collected from gasoline tank trucks on a demand basis without intermediate accumulation in a vapor holder. *Existing vapor processing system* means a vapor processing system [capable of achieving emissions to the atmosphere no greater than 80 milligrams of total organic compounds per liter of gasoline loaded], the construction or refurbishment of which was commenced before December 17, 1980, and which was not constructed or refurbished after that date. *Flare* means a thermal oxidation system using an open (without enclosure) flame.	

NSPS PROVISION Location and Language	☒ **if APPLICABLE**
Section 60.501 Definitions. (continued)	
Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater which is used as a fuel for internal combustion engines. *Gasoline tank truck* means a delivery tank truck used at bulk gasoline terminals which is loading gasoline or which has loaded gasoline on the immediately previous load. *Intermittent vapor processing system* means a vapor processing system that employs an intermediate vapor holder to accumulate total organic compounds vapors collected from gasoline tank trucks, and treats the accumulated vapors only during automatically controlled cycles. *Loading rack* means the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves necessary to fill delivery tank trucks. *Refurbishment* means, with reference to a vapor processing system, replacement of components of, or addition of components to, the system within any 2-year period such that the fixed capital cost of the new components required for such component replacement or addition exceeds 50 percent of the cost of a comparable entirely new system. *Thermal oxidation system* means a combustion device used to mix and ignite fuel, air pollutants, and air to provide a flame to heat and oxidize hazardous air pollutants. Auxiliary fuel may be used to heat air pollutants to combustion temperatures. *Total organic compounds* means those compounds measured according to the procedures in §60.503. *Vapor collection system* means any equipment used for containing total organic compounds vapors displaced during the loading of gasoline tank trucks. *Vapor processing system* means all equipment used for recovering or oxidizing total organic compounds vapors displaced from the affected facility. *Vapor-tight gasoline tank truck* means a gasoline tank truck which has demonstrated within the 12 preceding months that its product delivery tank will sustain a pressure change of not more than 750 pascals (75 mm of water) within 5 minutes after it is pressurized to 4,500 pascals (450 mm of water). This capability is to be demonstrated using the pressure test procedure specified in Method 27.	
Section 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.	☒
(d) Each vapor collection system shall be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.	☒

NSPS PROVISION Location and Language	☒ if APPLICABLE
Section 60.502 Standard for Volatile Organic Compound (VOC) emissions from bulk gasoline terminals. (continued)	☒
(e) Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline tank trucks using the following procedures:	☒
(1) The owner or operator shall obtain the vapor tightness documentation described in §60.505(b) for each gasoline tank truck which is to be loaded at the affected facility.	☒
(2) The owner or operator shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the affected facility.	☒
(3) (i) The owner or operator shall cross-check each tank identification number obtained in paragraph (e)(2) of this section with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:	☒
(A) If less than an average of one gasoline tank truck per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or	☐
(B) If less than an average of one gasoline tank truck per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.	☐
(ii) If either the quarterly or semiannual cross-check provided in paragraphs (e)(3)(i) (A) through (B) of this section reveals that these conditions were not maintained, the source must return to biweekly monitoring until such time as these conditions are again met.	☐
(4) The terminal owner or operator shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the affected facility within 1 week of the documentation cross-check in paragraph (e)(3) of this section.	☒
(5) The terminal owner or operator shall take steps assuring that the nonvapor-tight gasoline tank truck will not be reloaded at the affected facility until vapor tightness documentation for that tank is obtained.	☒
(6) Alternate procedures to those described in paragraphs (e)(1) through (5) of this section for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Administrator.	☐
(f) The owner or operator shall act to assure that loadings of gasoline tank trucks at the affected facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.	☒
(g) The owner or operator shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks.	☐
(h) The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in §60.503(d).	☒
(i) No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water).	☒
(j) Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this paragraph, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.	☒
Section 60.503 Test methods and procedures.	☒
(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). The three-run requirement of §60.8(f) does not apply to this subpart.	☒

NSPS PROVISION Location and Language	☒ if APPLICABLE
Section 60.503 Test methods and procedures. (continued)	☒
(b) Immediately before the performance test required to determine compliance with §60.502 (b), (c), and (h), the owner or operator shall use Method 21 to monitor for leakage of vapor all potential sources in the terminal's vapor collection system equipment while a gasoline tank truck is being loaded. The owner or operator shall repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test.	☒
(c) The owner or operator shall determine compliance with the standards in §60.502 (b) and (c) as follows:	☒
(1) The performance test shall be 6 hours long during which at least 300,000 liters of gasoline is loaded. If this is not possible, the test may be continued the same day until 300,000 liters of gasoline is loaded or the test may be resumed the next day with another complete 6-hour period. In the latter case, the 300,000-liter criterion need not be met. However, as much as possible, testing should be conducted during the 6-hour period in which the highest throughput normally occurs.	☒
(2) If the vapor processing system is intermittent in operation, the performance test shall begin at a reference vapor holder level and shall end at the same reference point. The test shall include at least two startups and shutdowns of the vapor processor. If this does not occur under automatically controlled operations, the system shall be manually controlled.	☒
(3) The emission rate (E) of total organic compounds shall be computed using the following equation: $E = K\sum_{i=1}^{n}(V_{esi}C_{ei}) / (L\,10^{6})$ where: E = emission rate of total organic compounds, mg/liter of gasoline loaded. V_{esi} = volume of air-vapor mixture exhausted at each interval "i", scm. C_{ei} = concentration of total organic compounds at each interval "i", ppm. L = total volume of gasoline loaded, liters. n = number of testing intervals. i = emission testing interval of 5 minutes. K = density of calibration gas, 1.83×10^{6} for propane and 2.41×10^{6} for butane, mg/scm.	☒
(4) The performance test shall be conducted in intervals of 5 minutes. For each interval "i", readings from each measurement shall be recorded, and the volume exhausted (V_{esi}) and the corresponding average total organic compounds concentration (C_{ei}) shall be determined. The sampling system response time shall be considered in determining the average total organic compounds concentration corresponding to the volume exhausted.	☒
(5) The following methods shall be used to determine the volume (V_{esi}) air-vapor mixture exhausted at each interval:	☒
(i) Method 2B shall be used for combustion vapor processing systems.	☒
(ii) Method 2A shall be used for all other vapor processing systems.	☒
(6) Method 25A or 25B shall be used for determining the total organic compounds concentration (C_{ei}) at each interval. The calibration gas shall be either propane or butane. The owner or operator may exclude the methane and ethane content in the exhaust vent by any method (e.g., Method 18) approved by the Administrator.	☒
(7) To determine the volume (L) of gasoline dispensed during the performance test period at all loading racks whose vapor emissions are controlled by the processing system being tested, terminal records or readings from gasoline dispensing meters at each loading rack shall be used.	☒

NSPS PROVISION Location and Language	☒ if APPLICABLE
Section 60.503 Test methods and procedures. (continued)	☒
(d) The owner or operator shall determine compliance with the standard in §60.502(h) as follows:	☒
(1) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with ±2.5 mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.	☒
(2) During the performance test, the pressure shall be recorded every 5 minutes while a gasoline truck is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.	☒
(e) The performance test requirements of paragraph (c) of this section do not apply to flares defined in §60.501 and meeting the requirements in §60.18(b) through (f). The owner or operator shall demonstrate that the flare and associated vapor collection system is in compliance with the requirements in §§60.18(b) through (f) and 60.503(a), (b), and (d).	☐
(f) The owner or operator shall use alternative test methods and procedures in accordance with the alternative test method provisions in §60.8(b) for flares that do not meet the requirements in §60.18(b).	☐
Section 60.504	
Reserved	
Section 60.505 Reporting and recordkeeping.	☒
(a) The tank truck vapor tightness documentation required under §60.502(e)(1) shall be kept on file at the terminal in a permanent form available for inspection.	☒
(b) The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27. This documentation shall include, as a minimum, the following information:	☒
(1) Test title: Gasoline Delivery Tank Pressure Test—EPA Reference Method 27.	☒
(2) Tank owner and address.	☒
(3) Tank identification number.	☒
(4) Testing location.	☒
(5) Date of test.	☒
(6) Tester name and signature.	☒
(7) Witnessing inspector, if any: Name, signature, and affiliation.	☒
(8) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs).	☒
(c) A record of each monthly leak inspection required under §60.502(j) shall be kept on file at the terminal for at least 2 years. Inspection records shall include, as a minimum, the following information:	☒
(1) Date of inspection.	☒
(2) Findings (may indicate no leaks discovered; or location, nature, and severity of each leak).	☒
(3) Leak determination method.	☒
(4) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days).	☒
(5) Inspector name and signature.	☒
(d) The terminal owner or operator shall keep documentation of all notifications required under §60.502(e)(4) on file at the terminal for at least 2 years.	☐
(e) As an alternative to keeping records at the terminal of each gasoline cargo tank test result as required in paragraphs (a), (c), and (d) of this section, an owner or operator may comply with the requirements in either paragraph (e)(1) or (2) of this section.	☒
(1) An electronic copy of each record is instantly available at the terminal.	☐

NSPS PROVISION Location and Language	☒ **if APPLICABLE**
Section 60.505 Reporting and recordkeeping. (continued)	☒
(i) The copy of each record in paragraph (e)(1) of this section is an exact duplicate image of the original paper record with certifying signatures.	☐
(ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e)(1) of this section.	☐
(2) For facilities that utilize a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank vapor tightness documentation from loading (*e.g.*, via a card lock-out system), a copy of the documentation is made available (*e.g.*, via facsimile) for inspection by permitting authority representatives during the course of a site visit, or within a mutually agreeable time frame.	☒
(i) The copy of each record in paragraph (e)(2) of this section is an exact duplicate image of the original paper record with certifying signatures.	☒
(ii) The permitting authority is notified in writing that each terminal using this alternative is in compliance with paragraph (e)(2) of this section.	☒
(f) The owner or operator of an affected facility shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least 3 years.	☒
Section 60.506 Reconstruction.	☐
For purposes of this subpart:	
(a) The cost of the following frequently replaced components of the affected facility shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital costs that would be required to construct a comparable entirely new facility" under §60.15: pump seals, loading arm gaskets and swivels, coupler gaskets, overfill sensor couplers and cables, flexible vapor hoses, and grounding cables and connectors.	☐
(b) Under §60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in §60.506(a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following December 17, 1980. For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.	☐

Minnesota Pollution Control Agency

AIR QUALITY
520 LAFAYETTE ROAD NO., ST. PAUL, MN 55155-4194

PERMIT APPLICATION FORM **CAP-GI-09F**

REQUIREMENTS: STRATOSPHERIC OZONE PROTECTION (40 CFR pt. 82)

10/7/04

Stratospheric Ozone Protection
(1990 Clean Air Act, as amended, Sections 601-618; 40 CFR pt. 82)

The 1990 Clean Air Act Amendments, Sections 601-618 and federal regulations located in 40 CFR pt. 82 regulate ozone depleting substances and requires a phase out of their use. Review the attached list of ozone depleting chemicals, Tables E and F. If you manufacture, sell, distribute or use any the chemicals in Tables E and F, then Sections 601-618 and 40 CFR pt. 82 apply to your facility. Please read Sections 601-618 and 40 CFR pt. 82 to determine all the requirements that apply to your facility.

1) After reviewing Table F check one of the following:

☒ NO, my facility **does not** manufacture, sell, distribute or use any chemicals from the list, and the 1990 Clean Air Act, as amended, Sections 601-618 do not apply to my facility. Return to Form **CAP-GI-09 Requirements**, question 3b.

☐ YES, my facility **does** manufacture, sell, distribute or use one or more of the chemicals from the list. Go to question 2.

2) Indicate below which chemicals you manufacture, sell, distribute or use; whether the chemical is Class I or Class II; and what chemical your facility will be using to replace the phased out chemical. Include additional pages if necessary:

2a) Chemical Name:	**2b)** Class Type:	**2c)** CAS Number:	**2d)** Replacement Chemical (after phase out):

3) Return to form **CAP-GI-09 Requirements**, question 3b.

TABLE E
CLASS I OZONE DEPLETING CHEMICALS

Group I:	Chemical	CAS Number
	$CFCl_3$-Trichlorofluoromethane (CFC-11)	75-69-4
	CF_2Cl_2-Dichlorodifluoromethane (CFC-12)	75-71-8
	$C_2F_3Cl_2$-Trichlorotrifluoroethane (CFC-113)	76-13-1
	$C_2F_4Cl_3$-Dichlorotetrafluoroethane (CFC-114)	76-14-2
	C_2F_5Cl-Monochloropentafluoroethane (CFC-115)	76-15-3
	All isomers of the above chemicals	

Group II:	Chemical	CAS Number
	CF_2ClBr-Bromochlorodifluoromethane (Halon-1211)	421-01-2
	CF_3Br-Bromotrifluoroethane (Halon-1301)	75-63-8
	$C_2F_4Br_2$-Dibromotetrafluoroethane (Halon-2402)	124-73-2
	All isomers of the above chemicals	

Group III:	Chemical	CAS Number
	CF_3Cl-Chlorotrifluoromethane (CFC-13)	75-72-9
	C_2FCl_5 (CFC-111)	954-56-3
	$C_2F_2Cl_4$ (CFC-112)	76-12-0
	C_3FCl_7 (CFC-211)	422-78-6
	$C_3F_2Cl_6$ (CFC-212)	3182-26-1
	$C_3F_3Cl_5$ (CFC-213)	2354-06-5
	$C_3F_4Cl_4$ (CFC-214)	29255-31-0
	$C_3F_5Cl_3$ (CFC-215)	4259-43-2
	$C_3F_6Cl_2$ (CFC-216)	661-97-2
	C_3F_7Cl (CFC-217)	422-86-6
	All isomers of the above chemicals	

Group IV:	Chemical	CAS Number
	CCl-Carbon Tetrachloride	56-23-5

Group V:	Chemical	CAS Number
	$C_2H_3Cl_3$-1,1,1 Trichloroethane (Methyl chloroform)	71-55-6
	All isomers of the above chemical except 1,1,2-trichloroethane	79-00-5

Group VI:	Chemical	CAS Number
	CH_3BR - Bromomethane (Methyl Bromide)	

Group VII:	Chemical	CAS Number
	$CHFBR_2$	
	CHF_2Br (HBFC-22B1)	
	CH_2FBr	
	C_2HFBr_4	
	$C_2HF_2Br_3$	
	$C_2HF_3Br_2$	
	C_2HF_4Br	
	$C_2H_2FBr_3$	
	$C_2H_2F_2Br_2$	
	$C_2H_2F_3Br$	
	$C_2H_2FBr_2$	
	$C_2H_3F_2Br$	
	C_2H_4FBr	
	C_3HFBr_6	
	$C_3HF_2Br_5$	

TABLE E (continued)

Group VII:	Chemical	CAS Number
	$C_3HF_3Br_4$	
	$C_3HF_4Br_3$	
	$C_3HF_5Br_2$	
	C_3HF_6Br	
	$C_3H_2FBR_5$	
	$C_3H_2F_2BR_4$	
	$C_3H_2F_3Br_3$	
	$C_3H_2F_4Br_2$	
	$C_3H_2F_5BR$	
	$C_3H_3FBR_4$	
	$C_3H_3F_2Br_3$	
	$C_3H_3F_3Br_2$	
	$C_3H_3F_4Br$	
	$C_3H_4FBr_3$	
	$C_3H_4F_2Br_2$	
	$C_3H_4F_3Br$	
	$C_3H_5FBr_2$	
	$C_3H_5F_2Br$	
	C_3H_6FB	

TABLE F
CLASS II OZONE DEPLETING CHEMICALS

	Chemical	CAS Number
HCFC-21	$CHFCl_2$ -dichlorofluoromethane	75-43-4
HCFC-22	CHF_2Cl -chlorodifluoromethane	75-45-6
HCFC-31	CH_2FCl -chlorofluoromethane	593-70-4
HCFC-121	C_2HFCl_4 -tetrachlorofluoroethane	130879-71-9
HCFC-121	C_2HFCl_4 -tetrachlorofluoroethane	134237-32-4
HCFC-121	C_2HFCl_4 -1,1,1,2-tetrachloro-2-fluoroethane	354-11-0
HCFC-121	C_2HFCl_4 -1,1,2,2-tetrachloro-1-fluoroethane	354-14-3
HCFC-122	$C_2HF_2Cl_3$ -trichlorodifluoroethane	41834-16-6
HCFC-122	$C_2HF_2Cl_3$ -trichloro-1,1-difluoroethane	55949-46-7
HCFC-122	$C_2HF_2Cl_3$ -1,2,2-trichloro-1,1-difluoroethane	354-21-2
HCFC-122	$C_2HF_2Cl_3$ -1,2,2-trichloro-1,2-difluoroethane	354-15-4
HCFC-122	$C_2HF_2Cl_3$ -1,1,1-trichloro-2,2-difluoroethane	354-12-1
HCFC-122	$C_2HF_2Cl_3$ -1,1,2-trichloro-2,2-difluoroethane	NA
HCFC-123	$C_2HF_3Cl_2$ -dichlorotrifluoroethane	34077-87-7
HCFC-123	$C_2HF_3Cl_2$ -dichlorotrifluoroethane	134237-33-5
HCFC-123	$C_2HF_3Cl_2$ -dichloro-1,1,2-trifluoroethane	90454-18-5
HCFC-123	$C_2HF_3Cl_2$ -2,2-dichloro-1,1,1-trifluoroethane	306-83-2
HCFC-123a	$C_2HF_3Cl_2$ -1,2-dichloro-1,1,2-trifluoroethane	354-23-4
HCFC-123b	$C_2HF_3Cl_2$ -1,1-dichloro-1,2,2-trifluoroethane	812-04-4
HCFC-123	$C_2HF_3Cl_2$ -2,2-dichloro-1,1,2-trifluoroethane	NA
HCFC-124	C_2HF_4Cl -chlorotetrafluoroethane	63938-10-3
HCFC-124	C_2HF_4Cl -2-chloro-1,1,1,2-tetrafluoroethane	2837-89-0
HCFC-124	C_2HF_4Cl -1-chloro-1,1,2,2-tetrafluoroethane	354-25-6
HCFC-131	$C_2H_2FCl_3$ -trichlorofluoroethane	27154-33-2
HCFC-131	$C_2H_2FCl_3$ -trichlorofluoroethane	134237-34-6
HCFC-131	$C_2H_2FCl_3$ -1,1,2-trichloro-1 (or 2)-fluoroethane	90134-98-8
HCFC-131b	$C_2H_2FCl_3$ -1,1,1-trichloro-2-fluoroethane	2366-36-1
HCFC-131a	$C_2H_2FCl_3$ -1,1,2-trichloro-1-fluoroethane	811-95-0
HCFC-131	$C_2H_2FCl_3$ -1,1,2-trichloro-2-fluoroethane	359-28-4
HCFC-132	$C_2H_2F_2Cl_2$ -dichlorodifluoroethane	25915-78-0
HCFC-132	$C_2H_2F_2Cl_2$ -dichloro-1,1-difluoroethane	55494-45-6
HCFC-132	$C_2H_2F_2Cl_2$ -1,1-dichlorodifluoroethane	31153-51-2
HCFC-132	$C_2H_2F_2Cl_2$ -1,2-dichloro-1,2-difluoroethane	33579-37-2
HCFC-132	$C_2H_2F_2Cl_2$ -1,2-dichloro-1,2-difluoroethane	33489-30-4
HCFC-132c	$C_2H_2F_2Cl_2$ -1,1-dichloro-1,2-difluoroethane	1842-05-3
HCFC-132b	$C_2H_2F_2Cl_2$ -1,2-dichloro-1,1-difluoroethane	1649-08-7
HCFC-132a	$C_2H_2F_2Cl_2$ -1,1-dichloro-2,2-difluoroethane	471-43-2
HCFC-132	$C_2H_2F_2Cl_2$ -1,2-dichloro-1,2-difluoroethane	431-06-1
HCFC-133	$C_2H_2F_3Cl$ -chlorotrifluoroethane	13330-45-6
HCFC-133	$C_2H_2F_3Cl$ -1-chloro-1,2,2-trifluoroethane	431-07-2
HCFC-133b	$C_2H_2F_3Cl$ -1-chloro-1,1,2-trifluoroethane	421-04-5
HCFC-133a	$C_2H_2F_3Cl$ -2-chloro-1,1,1-trifluoroethane	75-88-7
HCFC-141	$C_2H_3FCl_2$ -dichlorofluoroethane	25167-88-8
HCFC-141b	$C_2H_3FCl_2$ -1,1-dichloro-1-fluoroethane	1717-00-6
HCFC-141	$C_2H_3FCl_2$ -1,2-dichloro-1-fluoroethane	430-57-9
HCFC-141a	$C_2H_3FCl_2$ -1,1-dichloro-2-fluoroethane	430-53-5
HCFC-142	$C_2H_3F_2Cl$ -chlorodifluoroethane	25497-29-4
HCFC-142	$C_2H_3F_2Cl$ -chloro-1,1-difluoroethane	55949-44-5
HCFC-142a	$C_2H_3F_2Cl$ -2-chloro-1,1-difluoroethane	338-65-8
HCFC-142b	$C_2H_3F_2Cl$ -1-chloro-1,2-difluoroethane	338-64-7
HCFC-142	$C_2H_3F_2Cl$ -1-chloro-1,1-difluoroethane	75-68-3
HCFC-221	C_3HFCl_6 -hexachlorofluoropropane	29470-94-8

TABLE F (continued)

	Chemical	CAS Number
HCFC-221	C_3HFCl_6 -hexachlorofluoropropane	134237-35-7
HCFC-221	C_3HFCl_6 -1,1,1,2,3,3-hexachloro-3-fluoropropane	431-79-8
HCFC-221	C_3HFCl_6 -1,1,1,2,3,3-hexachloro-2-fluoropropane	422-40-2
HCFC-221	C_3HFCl_6 -1,1,1,2,2,3-hexachloro-1-fluoropropane	422-26-4
HCFC-221	C_3HFCl_6 -1,1,2,2,3,3-hexachloro-1-fluoropropane	422-28-6
HCFC-221	C_3HFCl_6 -1,1,1,3,3,3-hexachloro-2-fluoropropane	NA
HCFC-222	$C_3HF_2Cl_5$ -pentachlorodifluoropropane	116867-32-4
HCFC-222	$C_3HF_2Cl_5$ -pentachlorodifluoropropane	134237-36-8
HCFC-222	$C_3HF_2Cl_5$ -1,1,2,3,3-pentachloro-1,3-difluoropropane	421-82-3
HCFC-222	$C_3HF_2Cl_5$ -1,1,1,2,3-pentachloro-3,3-difluoropropane	431-80-1
HCFC-222c	$C_3HF_2Cl_5$ -1,1,1,3,3-pentachloro-2,2-difluoropropane	422-49-1
HCFC-222	$C_3HF_2Cl_5$ -1,2,2,3,3-pentachloro-1,1-difluoropropane	422-30-0
HCFC-222	$C_3HF_2Cl_5$ -1,1,1,2,2-pentachloro-3,3-difluoropropane	422-27-5
HCFC-222	$C_3HF_2Cl_5$ -1,1,1,2,3-pentachloro-2,3-difluoropropane	NA
HCFC-222	$C_3HF_2Cl_5$ -1,1,1,3,3-pentachloro-2,3-difluoropropane	NA
HCFC-222	$C_3HF_2Cl_5$ -1,1,2,2,3-pentachloro-1,3-difluoropropane	NA
HCFC-222	$C_3HF_2Cl_5$ -1,1,2,3,3-pentachloro-1,2-difluoropropane	NA
HCFC-223	$C_3HF_3Cl_4$ -tetrachlorotrifluoropropane	29470-95-9
HCFC-223	$C_3HF_3Cl_4$ -tetrachlorotrifluoropropane	134237-37-9
HCFC-223	$C_3HF_3Cl_4$ -1,1,1,3-tetrachloro-2,3,3-trifluoropropane	54002-59-4
HCFC-223	$C_3HF_3Cl_4$ -1,1,2,3-tetrachloro-1,3,3-trifluoropropane	431-83-4
HCFC-223	$C_3HF_3Cl_4$ -1,1,1,2-tetrachloro-3,3,3-trifluoropropane	431-81-2
HCFC-223ca	$C_3HF_3Cl_4$ -1,1,3,3-tetrachloro-1,2,2-trifluoropropane	422-52-6
HCFC-223cb	$C_3HF_3Cl_4$ -1,1,1,3-tetrachloro-2,2,3-trifluoropropane	422-50-4
HCFC-223	$C_3HF_3Cl_4$ -1,2,3,3-tetrachloro-1,1,2-trifluoropropane	422-41-3
HCFC-223	$C_3HF_3Cl_4$ -2,2,3,3-tetrachloro-1,1,1-trifluoropropane	422-35-5
HCFC-223	$C_3HF_3Cl_4$ -1,1,2,2-tetrachloro-1,3,3-trifluoropropane	422-29-7
HCFC-223	$C_3HF_3Cl_4$ -1,1,1,2-tetrachloro-2,3,3-trifluoropropane	NA
HCFC-223	$C_3HF_3Cl_4$ -1,1,3,3-tetrachloro-1,2,3-trifluoropropane	NA
HCFC-223	$C_3HF_3Cl_4$ -1,2,2,3-tetrachloro-1,1,3-trifluoropropane	NA
HCFC-223	$C_3HF_3Cl_4$ -1,1,2,3-tetrachloro-1,2,3-trifluoropropane	NA
HCFC-224	$C_3HF_4Cl_3$ -trichlorotetrafluoropropane	127564-91-4
HCFC-224	$C_3HF_4Cl_3$ -trichlorotetrafluoropropane	134237-38-0
HCFC-224	$C_3HF_4Cl_3$ -1,1,3-trichloro-1,2,3,3-tetrafluoropropane	53063-53-9
HCFC-224	$C_3HF_4Cl_3$ -1,1,1-trichloro-2,3,3,3-tetrafluoropropane	53063-52-8
HCFC-224	$C_3HF_4Cl_3$ -1,2,3-trichloro-1,1,3,3-tetrafluoropropane	431-85-6
HCFC-224	$C_3HF_4Cl_3$ -1,1,2-trichloro-1,3,3,3-tetrafluoropropane	431-84-5
HCFC-224ca	$C_3HF_4Cl_3$ -1,3,3-trichloro-1,1,2,2-tetrafluoropropane	422-54-8
HCFC-224cb	$C_3HF_4Cl_3$ -1,1,3-trichloro-1,2,2,3-tetrafluoropropane	422-53-7
HCFC-224cc	$C_3HF_4Cl_3$ -1,1,1-trichloro-2,2,3,3-tetrafluoropropane	422-51-5
HCFC-224	$C_3HF_4Cl_3$ -2,3,3-trichloro-1,1,1,2-tetrafluoropropane	422-47-9
HCFC-224	$C_3HF_4Cl_3$ -1,2,3-trichloro-1,1,2,3-tetrafluoropropane	422-42-4
HCFC-224	$C_3HF_4Cl_3$ -1,2,2-trichloro-1,1,3,3-tetrafluoropropane	422-32-2
HCFC-224	$C_3HF_4Cl_3$ -2,2,3-trichloro-1,1,1,3-tetrafluoropropane	NA
HCFC-224	$C_3HF_4Cl_3$ -1,1,2-trichloro-1,2,3,3-tetrafluoropropane	NA
HCFC-225	$C_3HF_5Cl_2$ -dichloropentafluoropropane	127564-92-5
HCFC-225	$C_3HF_5Cl_2$ -1,3-dichloro-1,1,2,3,3-pentafluoropropane	136013-79-1
HCFC-225aa	$C_3HF_5Cl_2$ -2,2-dichloro-1,1,1,3,3-pentafluoropropane	128903-21-9
HCFC-225	$C_3HF_5Cl_2$ -1,1-dichloro-1,2,3,3,3-pentafluoropropane	111512-56-2
HCFC-225	$C_3HF_5Cl_2$ -2,3-dichloro-1,1,1,2,3-pentafluoropropane	111512-55-1
HCFC-225	$C_3HF_5Cl_2$ -2,3-dichloro-1,1,1,2,3-pentafluoropropane	111512-51-7
HCFC-225cc	$C_3HF_5Cl_2$ -1,1-dichloro-1,2,2,3,3-pentafluoropropane	13474-88-9
HCFC-225cb	$C_3HF_5Cl_2$ -1,3-dichloro-1,1,2,2,3-pentafluoropropane	507-55-1

TABLE F (continued)

	Chemical	CAS Number
HCFC-225da	$C_3HF_5Cl_2$ -1,2-dichloro-1,1,3,3,3-pentafluoropropane	431-86-7
HCFC-225ca	$C_3HF_5Cl_2$ -3,3-dichloro-1,1,1,2,2-pentafluoropropane	422-56-0
HCFC-225ba	$C_3HF_5Cl_2$ -2,3-dichloro-1,1,1,2,3-pentafluoropropane	422-48-0
HCFC-225	$C_3HF_5Cl_2$ -1,2-dichloro-1,1,2,3,3-pentafluoropropane	422-44-6
HCFC-226	C_3HF_6Cl -chlorohexafluoropropane	28987-04-4
HCFC-226	C_3HF_6Cl -chlorohexafluoropropane	134308-72-8
HCFC-226ba	C_3HF_6Cl -2-chloro-1,1,1,2,3,3-hexafluoropropane	51346-64-6
HCFC-226da	C_3HF_6Cl -2-chloro-1,1,1,3,3,3-hexafluoropropane	431-87-8
HCFC-226ca	C_3HF_6Cl -3-chloro-1,1,1,2,2,3-hexafluoropropane	422-57-1
HCFC-226cb	C_3HF_6Cl -1-chloro-1,1,2,2,3,3-hexafluoropropane	422-55-9
HCFC-226ea	C_3HF_6Cl -1-chloro-1,1,2,3,3,3-hexafluoropropane	359-58-0
HCFC-231	$C_3H_2FCl_5$ -pentachlorofluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -pentachlorofluoropropane	134190-48-0
HCFC-231	$C_3H_2FCl_5$ -1,1,1,2,3-pentachloro-2-fluoropropane	421-94-3
HCFC-231	$C_3H_2FCl_5$ -1,1,2,3,3-pentachloro-2-fluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -1,1,1,3,3-pentachloro-3-fluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -1,1,2,2,3-pentachloro-1-fluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -1,1,1,2,2-pentachloro-3-fluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -1,1,1,2,3-pentachloro-3-fluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -1,1,1,3,3-pentachloro-2-fluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -1,1,2,2,3-pentachloro-3-fluoropropane	NA
HCFC-231	$C_3H_2FCl_5$ -1,1,2,3,3-pentachloro-1-fluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -tetrachlorodifluoropropane	127564-82-3
HCFC-232	$C_3H_2F_2Cl_4$ -tetrachlorodifluoropropane	134237-39-1
HCFC-232	$C_3H_2F_2Cl_4$ -1,2,3,3-tetrachloro-1,1-difluoropropane	67879-59-8
HCFC-232ca	$C_3H_2F_2Cl_4$ -1,1,3,3-tetrachloro-2,2-difluoropropane	1112-14-7
HCFC-232cb	$C_3H_2F_2Cl_4$ -1,1,1,3-tetrachloro-2,2-difluoropropane	677-54-3
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,1,3-tetrachloro-3,3-difluoropropane	460-89-9
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,1,3-tetrachloro-2,3-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,1,2-tetrachloro-2,3-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,1,2-tetrachloro-3,3-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,3,3-tetrachloro-1,2-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,2,3-tetrachloro-1,2-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,2,3-tetrachloro-1,3-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,2,3,3-tetrachloro-1,2-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,2,2,3-tetrachloro-1,1-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,2,2,3-tetrachloro-1,3-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,3,3-tetrachloro-1,3-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,2,2-tetrachloro-3,3-difluoropropane	NA
HCFC-232	$C_3H_2F_2Cl_4$ -1,1,2,2-tetrachloro-1,3-difluoropropane	NA
HCFC-233	$C_3H_2F_3Cl_3$ -trichlorotrifluoropropane	61623-04-9
HCFC-233	$C_3H_2F_3Cl_3$ -trichlorotrifluoropropane	134237-40-4
HCFC-233ca	$C_3H_2F_3Cl_3$ -1,1,3-trichloro-2,2,3-trifluoropropane	131221-36-8
HCFC-233cc	$C_3H_2F_3Cl_3$ -1,1,1-trichloro-2,2,3-trifluoropropane	131211-71-7
HCFC-233	$C_3H_2F_3Cl_3$ -1,1,3-trichloro-1,2,3-trifluoropropane	54377-32-1
HCFC-233	$C_3H_2F_3Cl_3$ -1,1,1-trichloro-2,3,3-trifluoropropane	54306-56-8
HCFC-233	$C_3H_2F_3Cl_3$ -1,1,2-trichloro-2,3,3-trifluoropropane	13058-99-6
HCFC-233	$C_3H_2F_3Cl_3$ -1,1,1-trichloro-3,3,3-trifluoropropane	7125-84-0
HCFC-233	$C_3H_2F_3Cl_3$ -2,2,3-trichloro-1,1,1-trifluoropropane	7125-83-9
HCFC-233	$C_3H_2F_3Cl_3$ -2,3,3-trichloro-1,1,1-trifluoropropane	431-51-6
HCFC-233cb	$C_3H_2F_3Cl_3$ -1,1,3-trichloro-1,2,2-trifluoropropane	421-99-8
HCFC-233	$C_3H_2F_3Cl_3$ -1,2,3-trichloro-1,1,2-trifluoropropane	421-95-4
HCFC-233	$C_3H_2F_3Cl_3$ -1,1,3-trichloro-1,3,3-trifluoropropane	333-26-6

TABLE F (continued)

	Chemical	CAS Number
HCFC-233	$C_3H_2F_3Cl_3$ -1,1,2-trichloro-1,2,3-trifluoropropane	NA
HCFC-233	$C_3H_2F_3Cl_3$ -1,2,3-trichloro-1,2,3-trifluoropropane	NA
HCFC-233	$C_3H_2F_3Cl_3$ -1,1,2-trichloro-1,3,3-trifluoropropane	NA
HCFC-233	$C_3H_2F_3Cl_3$ -1,3,3-trichloro-1,1,2-trifluoropropane	NA
HCFC-233	$C_3H_2F_3Cl_3$ -2,2,3-trichloro-1,1,3-trifluoropropane	NA
HCFC-233	$C_3H_2F_3Cl_3$ -1,2,3-trichloro-1,1,3-trifluoropropane	NA
HCFC-233	$C_3H_2F_3Cl_3$ -1,2,2-trichloro-1,1,3-trifluoropropane	NA
HCFC-234	$C_3H_2F_4Cl_2$ -dichlorotetrafluoropropane	127564-83-4
HCFC-234fa	$C_3H_2F_4Cl_2$ -1,3-dichloro-1,1,3,3-tetrafluoropropane	76140-39-1
HCFC-234ca	$C_3H_2F_4Cl_2$ -1,3-dichloro-1,2,2,3-tetrafluoropropane	70341-81-0
HCFC-234cd	$C_3H_2F_4Cl_2$ -1,1-dichloro-1,2,2,3-tetrafluoropropane	70192-63-1
HCFC-234	$C_3H_2F_4Cl_2$ -1,1-dichloro-1,3,3,3-tetrafluoropropane	64712-27-2
HCFC-234	$C_3H_2F_4Cl_2$ -1,3-dichloro-1,1,2,3-tetrafluoropropane	53149-65-8
HCFC-234	$C_3H_2F_4Cl_2$ -1,3-dichloro-1,1,2,3-tetrafluoropropane	5306355-1
HCFC-234	$C_3H_2F_4Cl_2$ -3,3-dichloro-1,1,1,2-tetrafluoropropane	53063-54-0
HCFC-234	$C_3H_2F_4Cl_2$ -2,2-dichloro-1,1,3,3-tetrafluoropropane	17705-30-5
HCFC-234cb	$C_3H_2F_4Cl_2$ -1,1-dichloro-2,2,3,3-tetrafluoropropane	4071-01-6
HCFC-234	$C_3H_2F_4Cl_2$ -1,2-dichloro-1,2,3,3-tetrafluoropropane	425-94-5
HCFC-234cc	$C_3H_2F_4Cl_2$ -1,3-dichloro-1,1,2,2-tetrafluoropropane	422-00-5
HCFC-234da	$C_3H_2F_4Cl_2$ -2,3-dichloro-1,1,1,3-tetrafluoropropane	NA
HCFC-234	$C_3H_2F_4Cl_2$ -1,1-dichloro-1,2,3,3-tetrafluoropropane	NA
HCFC-234	$C_3H_2F_4Cl_2$ -1,2-dichloro-1,1,3,3-tetrafluoropropane	NA
HCFC-234	$C_3H_2F_4Cl_2$ -2,3-dichloro-1,1,1,2-tetrafluoropropane	NA
HCFC-234	$C_3H_2F_4Cl_2$ -2,2-dichloro-1,1,1,3-tetrafluoropropane	NA
HCFC-234	$C_3H_2F_4Cl_2$ -1,2-dichloro-1,1,2,3-tetrafluoropropane	NA
HCFC-234	$C_3H_2F_4Cl_2$ -1,3-dichloro-1,1,2,3-tetrafluoropropane	NA
HCFC-235	$C_3H_2F_5Cl$ -chloropentafluoropropane	108662-83-5
HCFC-235	$C_3H_2F_5Cl$ -chloropentafluoropropane	134237-83-5
HCFC-235	$C_3H_2F_5Cl$ -3-chloro-1,1,1,2,3-pentafluoropropane	134251-06-2
HCFC-235da	$C_3H_2F_5Cl$ -2-chloro-1,1,1,3,3-pentafluoropropane	28103-66-4
HCFC-235ca	$C_3H_2F_5Cl$ -1-chloro-1,2,2,3,3-pentafluoropropane	679-99-2
HCFC-235cc	$C_3H_2F_5Cl$ -1-chloro-1,1,2,2,3-pentafluoropropane	677-55-4
HCFC-235fa	$C_3H_2F_5Cl$ -1-chloro-1,1,3,3,3-pentafluoropropane	460-92-4
HCFC-235cb	$C_3H_2F_5Cl$ -3-chloro-1,1,1,2,2-pentafluoropropane	422-02-6
HCFC-235	$C_3H_2F_5Cl$ -2-chloro-1,1,1,2,3-pentafluoropropane	NA
HCFC-235	$C_3H_2F_5Cl$ -1-chloro-1,1,2,3,3-pentafluoropropane	NA
HCFC-235	$C_3H_2F_5Cl$ -2-chloro-1,1,2,3,3-pentafluoropropane	NA
HCFC-241	$C_3H_3FCl_4$ -tetrachlorofluoropropane	NA
HCFC-241	$C_3H_3FCl_4$ -tetrachlorofluoropropane	134190-49-1
HCFC-241	$C_3H_3FCl_4$ -1,1,1,2-tetrachloro-3-fluoropropane	84816-05-7
HCFC-241	$C_3H_3FCl_4$ -1,1,1,3-tetrachloro-3-fluoropropane	23153-22-2
HCFC-241	$C_3H_3FCl_4$ -1,1,2,3-tetrachloro-3-fluoropropane	21981-25-9
HCFC-241	$C_3H_3FCl_4$ -1,1,2,2-tetrachloro-1-fluoropropane	7126-06-9
HCFC-241	$C_3H_3FCl_4$ -1,1,2,3-tetrachloro-2-fluoropropane	3175-26-6
HCFC-241	$C_3H_3FCl_4$ -1,1,1,2-tetrachloro-2-fluoropropane	3175-25-5
HCFC-241	$C_3H_3FCl_4$ -1,1,2,3-tetrachloro-1-fluoropropane	666-27-3
HCFC-241	$C_3H_3FCl_4$ -1,1,1,3-tetrachloro-2-fluoropropane	NA
HCFC-241	$C_3H_3FCl_4$ -1,1,2,2-tetrachloro-3-fluoropropane	NA
HCFC-241	$C_3H_3FCl_4$ -1,2,2,3-tetrachloro-1-fluoropropane	NA
HCFC-241	$C_3H_3FCl_4$ -1,1,3,3-tetrachloro-1-fluoropropane	NA
HCFC-241	$C_3H_3FCl_4$ -1,1,3,3-tetrachloro-2-fluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -trichlorodifluoropropane	127564-90-3
HCFC-242	$C_3H_3F_2Cl_3$ -trichlorodifluoropropane	134237-42-6

TABLE F (continued)

	Chemical	CAS Number
HCFC-242	$C_3H_3F_2Cl_3$ -1,3,3-trichloro-1,1-difluoropropane	460-63-9
HCFC-242	$C_3H_3F_2Cl_3$ -1,2,3-trichloro-1,2-difluoropropane	7164-14-9
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,3-trichloro-2,2-difluoropropane	1112-13-6
HCFC-242	$C_3H_3F_2Cl_3$ -1,2,3-trichloro-1,1-difluoropropane	431-24-3
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,1-trichloro-2,2-difluoropropane	1112-05-6
HCFC-242	$C_3H_3F_2Cl_3$ -1,2,2-trichloro-1,1-difluoropropane	7126-05-8
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,2-trichloro-1,2-difluoropropane	7126-04-7
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,1-trichloro-2,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,2-trichloro-1,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,3-trichloro-1,2-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,2-trichloro-2,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,2,2-trichloro-1,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -2,2,3-trichloro-1,1-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,1-trichloro-3,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,3-trichloro-1,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,2-trichloro-3,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,1,3-trichloro-2,3-difluoropropane	NA
HCFC-242	$C_3H_3F_2Cl_3$ -1,2,3-trichloro-1,3-difluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -dichlorotrifluoropropane	116890-51-8
HCFC-243	$C_3H_3F_3Cl_2$ -dichlorotrifluoropropane	134237-43-7
HCFC-243	$C_3H_3F_3Cl_2$ -2,2-dichloro-1,1,1-trifluoropropane	7126-01-4
HCFC-243cc	$C_3H_3F_3Cl_2$ -1,1-dichloro-1,2,2-trifluoropropane	7125-99-7
HCFC-243	$C_3H_3F_3Cl_2$ -1,2-dichloro-1,1,2-trifluoropropane	7126-00-3
HCFC-243da	$C_3H_3F_3Cl_2$ -2,3-dichloro-1,1,1-trifluoropropane	338-75-0
HCFC-243ca	$C_3H_3F_3Cl_2$ -1,3-dichloro-1,2,2-trifluoropropane	67406-68-2
HCFC-243cb	$C_3H_3F_3Cl_2$ -1,1-dichloro-2,2,3-trifluoropropane	70192-70-0
HCFC-243	$C_3H_3F_3Cl_2$ -3,3-dichloro-1,1,1-trifluoropropane	460-69-5
HCFC-243	$C_3H_3F_3Cl_2$ -1,3-dichloro-1,1,2-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -1,2-dichloro-1,1,3-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -1,1-dichloro-1,2,3-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -2,3-dichloro-1,1,2-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -2,2-dichloro-1,1,3-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -1,2-dichloro-1,2,3-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -1,3-dichloro-1,1,3-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -1,1-dichloro-1,3,3-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -3,3-dichloro-1,1,2-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -2,3-dichloro-1,1,3-trifluoropropane	NA
HCFC-243	$C_3H_3F_3Cl_2$ -1,3-dichloro-1,2,3trifluoropropane	NA
HCFC-244	$C_3H_3F_4Cl$ -chlorotetrafluoropropane	NA
HCFC-244	$C_3H_3F_4Cl$ -chlorotetrafluoropropane	134190-50-4
HCFC-244db	$C_3H_3F_4Cl$ -2-chloro-1,1,1,3-tetrafluoropropane	117970-90-8
HCFC-244ca	$C_3H_3F_4Cl$ -3-chloro-1,1,2,2-tetrafluoropropane	679-85-6
HCFC-244cb	$C_3H_3F_4Cl$ -1-chloro-1,2,2,3-tetrafluoropropane	67406-66-0
HCFC-244fb	$C_3H_3F_4Cl$ -1-chloro-1,1,3,3-tetrafluoropropane	2730-64-5
HCFC-244da	$C_3H_3F_4Cl$ -2-chloro-1,1,3,3-tetrafluoropropane	19041-02-2
HCFC-244bb	$C_3H_3F_4Cl$ -2-chloro-1,1,1,2-tetrafluoropropane	421-73-8
HCFC-244cc	$C_3H_3F_4Cl$ -1-chloro-1,1,2,2-tetrafluoropropane	421-75-0
HCFC-244	$C_3H_3F_4Cl$ -1-chloro-1,1,2,3-tetrafluoropropane	NA
HCFC-244	$C_3H_3F_4Cl$ -3-chloro-1,1,1,2-tetrafluoropropane	NA
HCFC-244	$C_3H_3F_4Cl$ -2-chloro-1,1,2,3-tetrafluoropropane	NA
HCFC-244	$C_3H_3F_4Cl$ -3-chloro-1,1,1,3-tetrafluoropropane	NA
HCFC-244	$C_3H_3F_4Cl$ -3-chloro-1,1,2,3-tetrafluoropropane	NA
HCFC-251	$C_3H_4FCl_3$ -trichlorofluoropropane	NA

TABLE F (continued)

	Chemical	CAS Number
HCFC-251	$C_3H_4FCl_3$ -trichlorofluoropropane	134190-51-5
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-1-fluoropropane	84847-80-3
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-1-fluoropropane	84847-79-0
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-1-fluoropropane	76985-34-7
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-1-fluoropropane	76985-33-6
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-1-fluoropropane	67832-50-2
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-1-fluoropropane	67832-44-4
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-2-fluoropropane	7126-16-1
HCFC-251	$C_3H_4FCl_3$ -1,2,2-trichloro-3-fluoropropane	70192-89-1
HCFC-251	$C_3H_4FCl_3$ -1,1,3-trichloro-1-fluoropropane	818-99-5
HCFC-251	$C_3H_4FCl_3$ -1,1,3-trichloro-2-fluoropropane	76937-36-5
HCFC-251	$C_3H_4FCl_3$ -1,1,2-trichloro-1-fluoropropane	421-41-0
HCFC-251	$C_3H_4FCl_3$ -1,1,2-trichloro-2-fluoropropane	3175-24-4
HCFC-251	$C_3H_4FCl_3$ -1,1,1-trichloro-2-fluoropropane	NA
HCFC-251	$C_3H_4FCl_3$ -1,1,1-trichloro-3-fluoropropane	NA
HCFC-251	$C_3H_4FCl_3$ -1,1,2-trichloro-3-fluoropropane	NA
HCFC-251	$C_3H_4FCl_3$ -1,1,3-trichloro-3-fluoropropane	NA
HCFC-251	$C_3H_4FCl_3$ -1,2,2-trichloro-1-fluoropropane	NA
HCFC-251	$C_3H_4FCl_3$ -1,2,3-trichloro-1-fluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -dichlorodifluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -dichlorodifluoropropane	134190-52-6
HCFC-252cb	$C_3H_4F_2Cl_2$ -1,1-dichloro-2,2-difluoropropane	1112-01-2
HCFC-252	$C_3H_4F_2Cl_2$ -1,1-dichloro-3,3-difluoropropane	131404-17-6
HCFC-252	$C_3H_4F_2Cl_2$ -1,1-dichloro-1,3-difluoropropane	121612-64-4
HCFC-252	$C_3H_4F_2Cl_2$ -1,2-dichloro-1,1-difluoropropane	7126-15-0
HCFC-252	$C_3H_4F_2Cl_2$ -1,2-dichloro-2,3-difluoropropane	70192-74-4
HCFC-252	$C_3H_4F_2Cl_2$ -2,3-dichloro-1,1-difluoropropane	82578-00-5
HCFC-252	$C_3H_4F_2Cl_2$ -1,3-dichloro-1,1-difluoropropane	819-00-1
HCFC-252	$C_3H_4F_2Cl_2$ -1,3-dichloro-1,2-difluoropropane	111483-26-2
HCFC-252ca	$C_3H_4F_2Cl_2$ -1,3-dichloro-2,2-difluoropropane	1112-36-3
HCFC-252	$C_3H_4F_2Cl_2$ -1,1-dichloro-1,2-difluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -1,1-dichloro-2,3-difluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -1,2-dichloro-1,2-difluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -1,2-dichloro-1,3-difluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -1,3-dichloro-1,3-difluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -2,2-dichloro-1,1-difluoropropane	NA
HCFC-252	$C_3H_4F_2Cl_2$ -2,2-dichloro-1,3-difluoropropane	NA
HCFC-253	$C_3H_4F_3Cl$ -chlorotrifluoropropane	26588-23-8
HCFC-253	$C_3H_4F_3Cl$ -chlorotrifluoropropane	134237-44-8
HCFC-253	$C_3H_4F_3Cl$ -2-chloro-1,1,1-trifluoropropane	421-47-6
HCFC-253	$C_3H_4F_3Cl$ -3-chloro-1,1,1-trifluoropropane	460-35-5
HCFC-253	$C_3H_4F_3Cl$ -1-chloro-1,1,2-trifluoropropane	134251-05-1
HCFC-253	$C_3H_4F_3Cl$ -2-chloro-1,1,2-trifluoropropane	69202-10-4
HCFC-253	$C_3H_4F_3Cl$ -3-chloro-1,1,2-trifluoropropane	121612-65-5
HCFC-253	$C_3H_4F_3Cl$ -1-chloro-1,1,3-trifluoropropane	83124-56-5
HCFC-253cb	$C_3H_4F_3Cl$ -1-chloro-1,2,2-trifluoropropane	70192-76-6
HCFC-253ca	$C_3H_4F_3Cl$ -1-chloro-2,2,3-trifluoropropane	56758-54-4
HCFC-253	$C_3H_4F_3Cl$ -2-chloro-1,1,3-trifluoropropane	NA
HCFC-253	$C_3H_4F_3Cl$ -3-chloro-1,1,3-trifluoropropane	NA
HCFC-253	$C_3H_4F_3Cl$ -1-chloro-1,2,3-trifluoropropane	NA
HCFC-253	$C_3H_4F_3Cl$ -2-chloro-1,2,3-trifluoropropane	NA
HCFC-261	$C_3H_5FCl_2$ -dichlorofluoropropane	127404-11-9
HCFC-261	$C_3H_5FCl_2$ -dichlorofluoropropane	134237-45-9

TABLE F (continued)

	Chemical	CAS Number
HCFC-261	$C_3H_5FCl_2$ -1,1-dichloro-1-fluoropropane	7799-56-6
HCFC-261	$C_3H_5FCl_2$ -1,1-dichloro-2-fluoropropane	53074-31-0
HCFC-261	$C_3H_5FCl_2$ -1,1-dichloro-3-fluoropropane	53074-30-9
HCFC-261	$C_3H_5FCl_2$ -1,2-dichloro-1-fluoropropane	7799-55-5
HCFC-261ba	$C_3H_5FCl_2$ -1,2-dichloro-2-fluoropropane	420-97-3
HCFC-261	$C_3H_5FCl_2$ -1,2-dichloro-3-fluoropropane	453-01-0
HCFC-261	$C_3H_5FCl_2$ -1,3-dichloro-1-fluoropropane	83124-60-1
HCFC-261	$C_3H_5FCl_2$ -1,3-dichloro-2-fluoropropane	816-38-6
HCFC-261	$C_3H_5FCl_2$ -2,2-dichloro-1-fluoropropane	NA
HCFC-262	$C_3H_5F_2Cl$ -chlorodifluoropropane	NA
HCFC-262	$C_3H_5F_2Cl$ -chlorodifluoropropane	134190-53-7
HCFC-262	$C_3H_5F_2Cl$ -1-chloro-1,1-difluoropropane	421-02-3
HCFC-262	$C_3H_5F_2Cl$ -2-chloro-1,1-difluoropropane	430-93-3
HCFC-262	$C_3H_5F_2Cl$ -3-chloro-1,1-difluoropropane	83124-57-6
HCFC-262	$C_3H_5F_2Cl$ -1-chloro-1,2-difluoropropane	430-96-6
HCFC-262	$C_3H_5F_2Cl$ -1-chloro-2,3-difluoropropane	37161-81-2
HCFC-262	$C_3H_5F_2Cl$ -2-chloro-1,3-difluoropropane	102738-79-4
HCFC-262ca	$C_3H_5F_2Cl$ -1-chloro-2,2-difluoropropane	420-99-5
HCFC-262	$C_3H_5F_2Cl$ -2-chloro-1,2-difluoropropane	NA
HCFC-262	$C_3H_5F_2Cl$ -1-chloro-1,3-difluoropropane	NA
HCFC-271	C_3H_6FCl -chlorofluoropropane	NA
HCFC-271	C_3H_6FCl -chlorofluoropropane	134190-54-8
HCFC-271	C_3H_6FCl -1-chloro-1-fluoropropane	430-55-7
HCFC-271	C_3H_6FCl -1-chloro-2-fluoropropane	430-46-6
HCFC-271	C_3H_6FCl -1-chloro-3-fluoropropane	462-38-4
HCFC-271	C_3H_6FCl -2-chloro-1-fluoropropane	20372-78-5
HCFC-271	C_3H_6FCl -2-chloro-2-fluoropropane	420-44-0
	All isomers of the above chemicals	

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Facility Information-Minnesota State Air Quality (AQ) Rules

AQ Facility ID No.: 04100006

Facility Name: Magellan Pipeline Co LP-Alexandria Terminal

Some businesses and activities in Minnesota are subject to the following rules. Read each question to determine if the rule applies to you.

1) Minnesota Standards of Performance for Stationary Sources (Minn. R. ch. 7011)

1a) Does your facility have any equipment that meets the following definition?

"A furnace, boiler or other combustion equipment in Minnesota which burns fossil fuel for the purpose of producing steam, hot water, hot air, or other hot liquid, gas, or solid, where the smoke doesn't have direct contact with the heated medium for which another standard of performance has not been promulgated."

☒ No, my facility **is not** subject to Minn. R. 7011.0500-7011.0551. Go to question 1b.

☐ Yes, my facility **is** subject to Minn. R. 7011.0500-7011.0551. Standards of Performance for Indirect Heating Fossil-Fuel Burning Equipment. (Read the rule to determine the specific requirements that apply to your facility.)

1b) Is your facility type or process equipment found in Table H on page 3? This table contains only state-specific requirements; it does not contain state rules that incorporate federal rules by reference.

☐ No, none of the Minnesota Rules listed in Table H apply to my facility. Go to question 2.

☒ Yes, my facility or process equipment may be subject to the rule associated with it in Table H. Read the associated rule to see if it applies.

1c) After reading through Table H and any rule that may apply to your facility or equipment, list the ones that do apply to your air emission source(s) below. Again, Table H contains only state-specific requirements; it does not contain state rules that incorporate federal rules by reference. You do not need to list the state rule that incorporates a federal rule by reference. You do not need to list the Standards of Performance for Indirect Heating Fossil-Fuel Burning Equipment again, if it applies (see 1a, above).

Minnesota Rule Part that Applies	What the Rule Part Applies to (Whole facility or Specific Piece of Equipment)	Emission Unit ID Number

3) **Standards of Performance for Industrial Process Equipment** (Minn. R. 7011.0700 - 7011.0735)

3a) Do you have any industrial process equipment on-site that is not regulated by another Standard of Performance (NSPS or MN Rules Standard of Performance)?

☐ No, my equipment is not subject to this rule. Go to question 4.

☒ Yes. Go to 3b.

3b) **Opacity Standard**

(Note: Opacity is a measure of visible emissions or how much of the view is obscured by stack emissions. The emissions causing opacity are often smoke or dust.)

For industrial process equipment which was *in operation before July 9, 1969*, the equipment shall not exhibit greater than 20 percent opacity, except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60 minute period and a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60 minute period.

For industrial process equipment which was *not in operation before July 9, 1969*, the equipment shall not exhibit greater than 20 percent opacity.

3c) Does the industrial process equipment have particulate control equipment with a collection efficiency of at least 99 percent if it was in operation before July 9, 1969, or 99.7 percent if it was not in operation before July 9, 1969?

☐ No. Go to question 3d.

☒ Yes. My equipment is not subject to the remaining requirements of this rule. Go to question 4.

3d) Is the industrial process equipment located outside of the seven county Minneapolis-St. Paul metropolitan region **and** outside of the city of Duluth **and** at least 1/4 mile from any residence or public roadway, **and** does the industrial process equipment have particulate control equipment with a collection efficiency of at least 85 percent **and** is the operation of the entire facility in compliance with all ambient air quality standards?

☐ No, my equipment is subject to the remaining requirements. You can determine applicable limits using Table I.

☐ Yes, my equipment is not subject to the remaining requirements of this rule. Go to question 4.

4) Return to Form CAP-GI-09, question 6b.

Table H: Minnesota Standards of Performance for Stationary Sources *

Facility or Equipment Type	Associated Minnesota Rule
Direct Heating Equipment	7011.0600 through 7011.0625
Concrete Manufacturing Plants	7011.0850 through 7011.0860
Stage One Vapor Recovery	7011.0865 through 7011.0870
Hot Mix Asphalt Plants	7011.0900 through 7011 0925
Bulk Agricultural Commodity Facilities (Grain Elevators)	7011.1000 through 7011.1015
Coal Handling Facilities	7011.1100 through 7011.1140
Incinerators (waste combustors)	7011.1201 through 7011.1285
Sewage Sludge Incinerators	7011.1300 through 7011.1325
Petroleum Refineries	7011.1400 through 7011.1430
Liquid Petroleum and Volatile Organic Compounds (VOCs) Storage Vessels	7011.1500 through 7011.1515
Sulfuric Acid Plants	7011.1600 through 7011.1630
Nitric Acid Plants	7011.1700 through 7011.1725
Brass and Bronze Plants	7011.1900 through 7011.1915
Iron and Steel Plants	7011.2000 through 7011.2015
Inorganic Fibrous Materials	7011.2100 through 7011.2105
Stationary Internal Combustion Engine (Generators)	7011.2300
Municipal Solid Waste Landfills	7011.3500 through 7011.3510
Asbestos	7011.9921 through 701109927

* This table does **not** include Minnesota Rules which incorporate federal New Source Performance Standards (NSPS) and/or National Emission standards for Hazardous Air Pollutant Sources (NESHAPS) by reference.

MINNESOTA POLLUTION CONTROL AGENCY
520 Lafayette Road North
St. Paul, MN 55155-4194

CAP-IA

Insignificant activities

Air Quality Permit Program

Doc Type: Permit Application

Instructions on page 2

1a) AQ Facility ID number: 04100006 **1b)** Agency Interest ID number: 2181

2) Facility name: Magellan Pipeline Co LP-Alexandria Terminal

3) Check and describe insignificant activities

	Rule citation	Description of activities at the facility
☐	7007.1300, subp. 3(A)	
☐	7007.1300, subp. 3(B)(1)	
☐	7007.1300, subp. 3(B)(2)	
☐	7007.1300, subp. 3(C)(1)	
☐	7007.1300, subp. 3(C)(2)	
☐	7007.1300, subp. 3(D)	
☐	7007.1300, subp. 3(E)	
☒	7007.1300, subp. 3(F)	Fuel additive storage tanks, butane unloading, ethanol unloading, biodiesel unloading
☐	7007.1300, subp. 3(G)	
☐	7007.1300, subp. 4	
☐	7008.4100	
☐	7008.4110	

4) If you are applying for an option 1 capped permit for your facility, have you included all quantifiable insignificant activities on the appropriate forms (e.g. CAP-GI-04, CAP-GI-05B, CAP-GI-05C, CAP-GI-07, etc)?

☐ Yes ☒ No I am applying for an option 2 capped permit.

Form CAP-IA instructions

Three tables of insignificant activities are provided below.

- **Table IA-01.1, Insignificant activities not required to be listed**, specifies those activities that **do not** need to be included in your permit application.
- **Table IA-01.2**, **Insignificant activities required to be listed,** specifies those activities that must be included in your application, on the CAP-IA form.

Attachment 1

Emission Calculation Summary Tables

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Facility Totals

		Criteria Pollutants (ton/yr)			Hazardous Air Pollutants (ton/yr)							Greenhouse Gases (ton/yr)			
Emissions Unit	EU No.	VOC	CO	NOx	2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes	Total HAP	CO_2	CH_4	N_2O	CO_2e
Gasoline-loading Uncaptured Emissions	EU 001	18.36	-	-	0.13	0.15	0.02	0.26	0.21	0.08	0.85	-	-	-	-
VCU Stack	SV 001	49.07	14.03	5.61	0.39	0.44	0.05	0.79	0.64	0.25	2.55	3,981.40	0.17	0.03	3,995.72
Distillate-loading Emissions	EU 001	2.07	-	-	0.02	0.02	2.07E-03	0.03	0.03	0.01	0.11	-	-	-	-
Tank No. 4010	TK 001	2.53	-	-	0.02	0.02	2.53E-03	0.04	0.03	0.01	0.13	-	-	-	-
Tank No. 153	TK 002	2.22	-	-	0.02	0.02	2.22E-03	0.04	0.03	0.01	0.12	-	-	-	-
Tank No. 157	TK 003	1.01	-	-	8.06E-03	9.07E-03	1.01E-03	0.02	0.01	5.04E-03	0.05	-	-	-	-
Tank No. 552	TK 004	0.18	-	-	1.45E-03	1.63E-03	1.81E-04	2.89E-03	2.35E-03	9.03E-04	9.39E-03	-	-	-	-
Tank No. 553	TK 005	12.06	-	-	0.10	0.11	0.01	0.19	0.16	0.06	0.63	-	-	-	-
Tank No. 554	TK 006	0.18	-	-	1.45E-03	1.63E-03	1.81E-04	2.89E-03	2.35E-03	9.03E-04	9.39E-03	-	-	-	-
Tank No. 555	TK 007	0.18	-	-	1.45E-03	1.63E-03	1.81E-04	2.89E-03	2.35E-03	9.03E-04	9.39E-03	-	-	-	-
Tank No. 556	TK 008	0.18	-	-	1.45E-03	1.63E-03	1.81E-04	2.89E-03	2.35E-03	9.03E-04	9.39E-03	-	-	-	-
Tank No. 557	TK 009	0.18	-	-	1.45E-03	1.63E-03	1.81E-04	2.89E-03	2.35E-03	9.03E-04	9.39E-03	-	-	-	-
Tank No. 558	TK 010	0.18	-	-	1.43E-03	1.61E-03	1.79E-04	2.86E-03	2.32E-03	8.93E-04	9.29E-03	-	-	-	-
Tank No. 559	TK 011	2.17	-	-	0.02	0.02	2.17E-03	0.03	0.03	0.01	0.11	-	-	-	-
Tank No. 560	TK 012	0.18	-	-	1.45E-03	1.63E-03	1.81E-04	2.89E-03	2.35E-03	9.03E-04	9.39E-03	-	-	-	-
Tank No. 561	TK 013	0.18	-	-	1.45E-03	1.63E-03	1.81E-04	2.89E-03	2.35E-03	9.03E-04	9.39E-03	-	-	-	-
Tank No. 682	TK 014	0.32	-	-	2.57E-03	2.89E-03	3.22E-04	5.14E-03	4.18E-03	1.61E-03	0.02	-	-	-	-
Tank No. 683	TK 015	0.32	-	-	2.57E-03	2.89E-03	3.21E-04	5.14E-03	4.18E-03	1.61E-03	0.02	-	-	-	-
Tank No. 684	TK 016	3.63	-	-	0.03	0.03	3.63E-03	0.06	0.05	0.02	0.19	-	-	-	-
Tank No. 685	TK 017	3.10	-	-	0.02	0.03	3.10E-03	0.05	0.04	0.02	0.16	-	-	-	-
Tank No. 686	TK 018	3.49	-	-	0.03	0.03	3.49E-03	0.06	0.05	0.02	0.18	-	-	-	-
Tank No. 687	TK 019	3.36	-	-	0.03	0.03	3.36E-03	0.05	0.04	0.02	0.17	-	-	-	-
Tank No. 688	TK 020	0.32	-	-	2.57E-03	2.89E-03	3.22E-04	5.14E-03	4.18E-03	1.61E-03	0.02	-	-	-	-
Tank No. 761	TK 021	0.48	-	-	3.81E-03	4.28E-03	4.76E-04	7.61E-03	6.18E-03	2.38E-03	0.02	-	-	-	-
Tank No. 762	TK 022	0.48	-	-	3.81E-03	4.28E-03	4.76E-04	7.61E-03	6.18E-03	2.38E-03	0.02	-	-	-	-
Tank No. 763	TK 023	0.48	-	-	3.81E-03	4.28E-03	4.76E-04	7.61E-03	6.18E-03	2.38E-03	0.02	-	-	-	-
Tank No. 1343	TK 024	4.37	-	-	0.03	0.04	4.37E-03	0.07	0.06	0.02	0.23	-	-	-	-
Tank No. 1344	TK 025	4.39	-	-	0.04	0.04	4.39E-03	0.07	0.06	0.02	0.23	-	-	-	-
Tank No. 1346	TK 026	0.64	-	-	5.15E-03	5.79E-03	6.43E-04	1.03E-02	8.36E-03	3.22E-03	0.03	-	-	-	-
Tank No. 1347	TK 027	5.19	-	-	0.04	0.05	5.19E-03	0.08	0.07	0.03	0.27	-	-	-	-
Tank No. 1348	TK 028	4.39	-	-	0.04	0.04	4.39E-03	0.07	0.06	0.02	0.23	-	-	-	-
Tank No. 1441	TK 029	0.87	-	-	6.99E-03	7.86E-03	8.74E-04	0.01	0.01	4.37E-03	0.05	-	-	-	-
Tank No. 154	TK 030	0.03	-	-	2.66E-04	2.99E-04	3.33E-05	5.32E-04	4.32E-04	1.66E-04	1.73E-03	-	-	-	-
Tank No. 429	TK 031	0.33	-	-	2.66E-03	2.99E-03	3.33E-04	5.32E-03	4.32E-03	1.66E-03	0.02	-	-	-	-
Tank Roof Landings	TBD	6.50	-	-	0.05	0.06	6.50E-03	0.10	0.08	0.03	0.34	-	-	-	-
Tank Cleaning Events	TBD	20.29	-	-	0.16	0.18	0.02	0.32	0.26	0.10	1.06				
Additives Tanks - 13 Tanks	Insig.	1.06	-	-	8.48E-03	9.54E-03	1.06E-03	0.02	0.01	5.30E-03	0.06	-	-	-	-
Equipment Fugitives	FS 001	1.09	-	-	8.72E-03	9.81E-03	1.09E-03	0.02	0.01	5.45E-03	0.06	-	-	-	-
Butane Unloading	Insig.	0.47	-	-	-	-	-	-	-	-	0.00	-	-	-	-
Ethanol Unloading	Insig.	0.12	-	-	1.97E-05	2.22E-05	2.46E-06	3.94E-05	3.20E-05	1.23E-05	1.28E-04	-	-	-	-
PTE for All Emissions Units		156.66	14.03	5.61	1.23	1.39	0.15	2.46	2.00	0.77	8.01	3,981.40	0.17	0.03	3,995.72
PTE Excluding Insig. Activities		155.01	14.03	5.61	1.22	1.38	0.15	2.45	1.99	0.76	7.95	3,981.40	0.17	0.03	3,995.72

Criteria Pollutants (lbs/hr)			Hazardous Air Pollutants (lbs/hr)							Greenhouse Gases (lbs/hr)			
VOC	CO	NOx	2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes	Total HAP	CO_2	CH_4	N_2O	CO_2e
4.19	-	-	2.98E-02	3.35E-02	3.72E-03	5.95E-02	4.84E-02	1.88E-02	1.93E-01	-	-	-	-
11.20	3.20	1.28	8.96E-02	1.01E-01	1.12E-02	1.79E-01	1.46E-01	5.60E-02	5.83E-01	908.99	0.04	0.01	912.27
0.47	-	-	3.77E-03	4.24E-03	4.72E-04	7.55E-03	6.13E-03	2.36E-03	2.45E-02	-	-	-	-
0.58	-	-	4.63E-03	5.21E-03	5.78E-04	9.26E-03	7.52E-03	2.89E-03	3.01E-02	-	-	-	-
0.51	-	-	4.05E-03	4.56E-03	5.06E-04	8.10E-03	6.58E-03	2.53E-03	2.63E-02	-	-	-	-
0.23	-	-	1.84E-03	2.07E-03	2.30E-04	3.68E-03	2.99E-03	1.15E-03	1.20E-02	-	-	-	-
0.04	-	-	3.30E-04	3.71E-04	4.12E-05	6.60E-04	5.36E-04	2.06E-04	2.14E-03	-	-	-	-
2.75	-	-	2.20E-02	2.48E-02	2.75E-03	4.41E-02	3.58E-02	1.38E-02	1.43E-01	-	-	-	-
0.04	-	-	3.30E-04	3.71E-04	4.12E-05	6.60E-04	5.36E-04	2.06E-04	2.14E-03	-	-	-	-
0.04	-	-	3.30E-04	3.71E-04	4.12E-05	6.60E-04	5.36E-04	2.06E-04	2.14E-03	-	-	-	-
0.04	-	-	3.30E-04	3.71E-04	4.12E-05	6.60E-04	5.36E-04	2.06E-04	2.14E-03	-	-	-	-
0.04	-	-	3.30E-04	3.71E-04	4.12E-05	6.60E-04	5.36E-04	2.06E-04	2.14E-03	-	-	-	-
0.04	-	-	3.26E-04	3.67E-04	4.08E-05	6.52E-04	5.30E-04	2.04E-04	2.12E-03	-	-	-	-
0.50	-	-	3.96E-03	4.46E-03	4.96E-04	7.93E-03	6.44E-03	2.48E-03	2.58E-02	-	-	-	-
0.04	-	-	3.30E-04	3.71E-04	4.12E-05	6.60E-04	5.36E-04	2.06E-04	2.14E-03	-	-	-	-
0.04	-	-	3.30E-04	3.71E-04	4.12E-05	6.60E-04	5.36E-04	2.06E-04	2.14E-03	-	-	-	-
0.07	-	-	5.87E-04	6.61E-04	7.34E-05	1.17E-03	9.54E-04	3.67E-04	3.82E-03	-	-	-	-
0.07	-	-	5.87E-04	6.61E-04	7.34E-05	1.17E-03	9.54E-04	3.67E-04	3.82E-03	-	-	-	-
0.83	-	-	6.64E-03	7.47E-03	8.30E-04	1.33E-02	1.08E-02	4.15E-03	4.31E-02	-	-	-	-
0.71	-	-	5.65E-03	6.36E-03	7.07E-04	1.13E-02	9.19E-03	3.53E-03	3.68E-02	-	-	-	-
0.80	-	-	6.37E-03	7.17E-03	7.96E-04	1.27E-02	1.04E-02	3.98E-03	4.14E-02	-	-	-	-
0.77	-	-	6.14E-03	6.91E-03	7.68E-04	1.23E-02	9.98E-03	3.84E-03	3.99E-02	-	-	-	-
0.07	-	-	5.87E-04	6.61E-04	7.34E-05	1.17E-03	9.54E-04	3.67E-04	3.82E-03	-	-	-	-
0.11	-	-	8.69E-04	9.77E-04	1.09E-04	1.74E-03	1.41E-03	5.43E-04	5.65E-03	-	-	-	-
0.11	-	-	8.69E-04	9.77E-04	1.09E-04	1.74E-03	1.41E-03	5.43E-04	5.65E-03	-	-	-	-
0.11	-	-	8.69E-04	9.77E-04	1.09E-04	1.74E-03	1.41E-03	5.43E-04	5.65E-03	-	-	-	-
1.00	-	-	7.99E-03	8.99E-03	9.98E-04	1.60E-02	1.30E-02	4.99E-03	5.19E-02	-	-	-	-
1.00	-	-	8.01E-03	9.01E-03	1.00E-03	1.60E-02	1.30E-02	5.01E-03	5.21E-02	-	-	-	-
0.15	-	-	1.18E-03	1.32E-03	1.47E-04	2.35E-03	1.91E-03	7.35E-04	7.64E-03	-	-	-	-
1.19	-	-	9.48E-03	1.07E-02	1.19E-03	1.90E-02	1.54E-02	5.93E-03	6.16E-02	-	-	-	-
1.00	-	-	8.01E-03	9.01E-03	1.00E-03	1.60E-02	1.30E-02	5.01E-03	5.21E-02	-	-	-	-
0.20	-	-	1.60E-03	1.80E-03	2.00E-04	3.19E-03	2.59E-03	9.98E-04	1.04E-02	-	-	-	-
0.01	-	-	6.08E-05	6.84E-05	7.60E-06	1.22E-04	9.87E-05	3.80E-05	3.95E-04	-	-	-	-
0.08	-	-	6.07E-04	6.83E-04	7.59E-05	1.21E-03	9.87E-04	3.80E-04	3.95E-03	-	-	-	-
18.07	-	-	1.19E-02	1.34E-02	1.48E-03	2.38E-02	1.93E-02	7.42E-03	7.72E-02	-	-	-	-
169.11	-	-	3.71E-02	4.17E-02	4.63E-03	7.41E-02	6.02E-02	2.32E-02	2.41E-01	-	-	-	-
0.24	-	-	1.94E-03	2.18E-03	2.42E-04	3.87E-03	3.15E-03	1.21E-03	1.26E-02	-	-	-	-
0.25	-	-	1.99E-03	2.24E-03	2.49E-04	3.98E-03	3.23E-03	1.24E-03	1.29E-02	-	-	-	-
0.11	-	-	-	-	-	-	-	-	0.00E+00	-	-	-	-
0.03	-	-	4.50E-06	5.06E-06	5.63E-07	9.00E-06	7.31E-06	2.81E-06	2.93E-05	-	-	-	-
216.82	3.20	1.28	0.28	0.32	0.04	0.56	0.46	0.18	1.83	908.99	0.04	7.66E-03	912.27
216.45	3.20	1.28	0.28	0.31	0.03	0.56	0.45	0.17	1.82	908.99	0.04	7.66E-03	912.27

Magellan Pipeline Co., LP - Alexandria
Terminal Potential to Emit - July 2022
Loading Rack

Maximum Loading Rack Throughput 630,720,000 gal/yr

Criteria Pollutants

Product Loaded	Gasoline & Ethanol	Distillate Fuels	Totals
Control Device	VCU	None	
Saturation Factor S	1.00	1.00	
Loading Temperature T, (°F)	40.96	40.96	
Avg. True Vapor Pressure P (psia)	4.835	0.004	
Vapor Molecular Weight M	62.00	130.00	
Throughput Q, (gal/yr)	336,000,000	294,720,000	
Loading Loss Factor L_L (lb/1000-gal)	7.46	0.014	
Uncontrolled VOC (L_L*Q), ton/yr	1,253.43	2.07	1,255.50
Vapor Capture Efficiency	0.987	NA	
VOC Emission Factor (mg/l-loaded)	35.00	NA	
Uncaptured VOC Emissions (ton/yr) - Loading Fugitiv	16.29	2.07	18.36
Controlled VOC Emissions (ton/yr)	49.07	0.00	49.07
Total VOC Emissions (ton/yr)	65.37	2.07	67.43
NOx Emission Factor (lb./1000-gal-loaded)	0.0334	0.00	
NOx Emissions (ton/yr)	5.61	0.00	5.61
CO Emission Factor (lb./1000-gal-loaded)	0.0835	0.00	
CO Emissions (ton/yr)	14.03	0.00	14.03

Total Potential VOC and HAP Emissions (ton/yr)

Process/Emission Point	VOC	2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Mixed Xylenes
		0.80% of VOC	0.90% of VOC	0.10% of VOC	1.60% of VOC	1.30% of VOC	0.50% of VOC
Gasoline-loading uncaptured emissions	16.29	0.130	0.147	0.016	0.261	0.212	0.081
VCU stack	49.07	0.393	0.442	0.049	0.785	0.638	0.245
Distillate loading emissions	2.07	0.017	0.019	2.07E-03	0.033	0.027	0.010
Total Emissions (ton/yr)	**67.43**	**0.539**	**0.607**	**0.067**	**1.079**	**0.877**	**0.337**

Notes

1. Loading loss equation from AP-42, Section 5.2. $L_L = 12.46*SPM/T$
2. Saturation Factor (S) is for vapor-balanced submerged loading.
3. Physical properties for gasoline are from TankESP for Gasoline RVP13 at the annual average loading temperature.
4. Physical properties for distillate fuels are from TankESP for Jet Kerosene at the annual average loading temperature.
5. VOC factor for VCU is the proposed permit limit of 35 mg VOC emitted for every liter of gasoline loaded.
6. VOC emissions from distillate loading assumed to be uncontrolled.
7. Gasoline HAP fractions from Table 3-2 of *Gasoline Distribution Industry (Stage 1)-Background Information for Proposed Standards* (EPA January 1994).
8. Gasoline HAP fractions assumed for emissions from distillate-fuel loading.
9. 2,2,4 TMP is 2,2,4 trimethylpentane.
10. NOx and CO emission factors are from the VCU manufacturer.
11. TMP is trimethylpentane.

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Tanks in Normal Operation, VOC Emissions

EU	Tank No.	Tank Type[1]	Diameter (ft)	Height (ft)	Capacity (gal)	Annual Turnovers	Potential Throughput (gal/yr)	Potential Throughput (gal/hr)	Most Volatile Product Stored	VOC Emissions Standing (lb./yr)	VOC Emissions Working (lb./yr)	VOC Emissions Total (lb./yr)	VOC Emissions Total (lb./hr)	VOC Emissions Total (ton/yr)
TK 001	4010	IFR	80	48	1,484,532	104.00	154,391,328	17,625	Gasoline RVP13	4,700	367	5,068	0.58	2.53
TK 002	153	VFR	25	24	75,264	104.00	7,827,456	894	Denatured Ethanol	617	3,820	4,437	0.51	2.22
TK 003	157	VFR	25	25	76,272	2.00	152,544	17	Transmix	1,576	439	2,015	0.23	1.01
TK 004	552	VFR	45	40	434,532	104.00	45,191,328	5,159	Jet Kerosene	49	312	361	0.04	0.18
TK 005	553	VFR	45	40	423,612	104.00	44,055,648	5,029	Denatured Ethanol	2,696	21,422	24,118	2.75	12.06
TK 006	554	VFR	45	40	434,574	104.00	45,195,696	5,159	Jet Kerosene	49	312	361	0.04	0.18
TK 007	555	VFR	45	40	434,490	104.00	45,186,960	5,158	Jet Kerosene	49	312	361	0.04	0.18
TK 008	556	VFR	45	40	434,616	104.00	45,200,064	5,160	Jet Kerosene	49	312	361	0.04	0.18
TK 009	557	VFR	45	40	434,574	104.00	45,195,696	5,159	Jet Kerosene	49	312	361	0.04	0.18
TK 010	558	VFR	45	40	434,532	104.00	45,191,328	5,159	Jet Kerosene	51	307	357	0.04	0.18
TK 011	559	IFR	45	40	373,086	104.00	38,800,944	4,429	Gasoline RVP13	4,175	167	4,342	0.50	2.17
TK 012	560	VFR	45	40	434,616	104.00	45,200,064	5,160	Jet Kerosene	49	312	361	0.04	0.18
TK 013	561	VFR	45	40	434,574	104.00	45,195,696	5,159	Jet Kerosene	49	312	361	0.04	0.18
TK 014	682	VFR	60	40	772,716	104.00	80,362,464	9,174	Jet Kerosene	89	555	643	0.07	0.32
TK 015	683	VFR	60	40	772,422	104.00	80,331,888	9,170	Jet Kerosene	89	554	643	0.07	0.32
TK 016	684	IFR	60	40	691,110	104.00	71,875,440	8,205	Gasoline RVP13	7,016	251	7,267	0.83	3.63
TK 017	685	IFR	60	40	702,114	104.00	73,019,856	8,336	Gasoline RVP13	5,937	255	6,192	0.71	3.10
TK 018	686	IFR	60	40	710,808	104.00	73,924,032	8,439	Gasoline RVP13	6,718	258	6,976	0.80	3.49
TK 019	687	IFR	60	40	684,432	104.00	71,180,928	8,126	Gasoline RVP13	6,480	248	6,728	0.77	3.36
TK 020	688	VFR	60	40	772,590	104.00	80,349,360	9,172	Jet Kerosene	89	555	643	0.07	0.32
TK 021	761	VFR	72	41	1,143,660	104.00	118,940,640	13,578	Jet Kerosene	131	820	951	0.11	0.48
TK 022	762	VFR	72	41	1,143,870	104.00	118,962,480	13,580	Jet Kerosene	131	820	951	0.11	0.48
TK 023	763	VFR	72	41	1,144,080	104.00	118,984,320	13,583	Jet Kerosene	131	820	951	0.11	0.48
TK 024	1343	IFR	85	40	1,338,246	104.00	139,177,584	15,888	Gasoline RVP13	8,413	333	8,745	1.00	4.37
TK 025	1344	IFR	85	40	1,444,800	104.00	150,259,200	17,153	Gasoline RVP13	8,413	359	8,772	1.00	4.39
TK 026	1346	VFR	85	40	1,527,708	104.00	158,881,632	18,137	Jet Kerosene	180	1,107	1,287	0.15	0.64
TK 027	1347	IFR	85	40	1,444,716	104.00	150,250,464	17,152	Gasoline RVP13	10,023	359	10,382	1.19	5.19
TK 028	1348	IFR	85	40	1,444,590	104.00	150,237,360	17,150	Gasoline RVP13	8,413	359	8,772	1.00	4.39
TK 029	1441	VFR	90	48	2,092,062	104.00	217,574,448	24,837	Jet Kerosene	241	1,507	1,748	0.20	0.87
TK 030	154	VFR	25	25	76,272	104.00	7,932,288	906	Jet Kerosene	10	57	67	0.01	0.03
TK 031	429	IFR	30	24	74,004	12.00	888,048	101	Transmix	659	6	665	0.08	0.33
										77,321	37,927	115,248	13.16	57.62

NOTES

1. VFR is Vertical Fixed Roof, IFR is Internal Floating Roof, HFR is Horizontal Fixed Roof
2. Tank 157 (TK 003) is the low-pressure mainline relief tank.
3. TMP is trimethylpentane.

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Tanks in Normal Operation, HAP Emissions

		HAP Emissions (lb./hr)						HAP Emissions (ton/yr)					
EU	Tank No.	2,2,4 TMP 0.80% of VOC	Benzene 0.90% of VOC	Ethylbenzene 0.10% of VOC	Hexane 1.60% of VOC	Toluene 1.30% of VOC	Total Xylenes 0.50% of VOC	2,2,4 TMP 0.80% of VOC	Benzene 0.90% of VOC	Ethylbenzene 0.10% of VOC	Hexane 1.60% of VOC	Toluene 1.30% of VOC	Total Xylenes 0.50% of VOC
TK 001	4010	0.005	0.005	0.001	0.009	0.008	0.003	0.020	0.023	0.003	0.041	0.033	0.013
TK 002	153	0.004	0.005	0.001	0.008	0.007	0.003	0.018	0.020	0.002	0.035	0.029	0.011
TK 003	157	0.002	0.002	0.000	0.004	0.003	0.001	0.008	0.009	0.001	0.016	0.013	0.005
TK 004	552	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 005	553	0.022	0.025	0.003	0.044	0.036	0.014	0.096	0.109	0.012	0.193	0.157	0.060
TK 006	554	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 007	555	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 008	556	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 009	557	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 010	558	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 011	559	0.004	0.004	0.000	0.008	0.006	0.002	0.017	0.020	0.002	0.035	0.028	0.011
TK 012	560	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 013	561	0.000	0.000	0.000	0.001	0.001	0.000	0.001	0.002	0.000	0.003	0.002	0.001
TK 014	682	0.001	0.001	0.000	0.001	0.001	0.000	0.003	0.003	0.000	0.005	0.004	0.002
TK 015	683	0.001	0.001	0.000	0.001	0.001	0.000	0.003	0.003	0.000	0.005	0.004	0.002
TK 016	684	0.007	0.007	0.001	0.013	0.011	0.004	0.029	0.033	0.004	0.058	0.047	0.018
TK 017	685	0.006	0.006	0.001	0.011	0.009	0.004	0.025	0.028	0.003	0.050	0.040	0.015
TK 018	686	0.006	0.007	0.001	0.013	0.010	0.004	0.028	0.031	0.003	0.056	0.045	0.017
TK 019	687	0.006	0.007	0.001	0.012	0.010	0.004	0.027	0.030	0.003	0.054	0.044	0.017
TK 020	688	0.001	0.001	0.000	0.001	0.001	0.000	0.003	0.003	0.000	0.005	0.004	0.002
TK 021	761	0.001	0.001	0.000	0.002	0.001	0.001	0.004	0.004	0.000	0.008	0.006	0.002
TK 022	762	0.001	0.001	0.000	0.002	0.001	0.001	0.004	0.004	0.000	0.008	0.006	0.002
TK 023	763	0.001	0.001	0.000	0.002	0.001	0.001	0.004	0.004	0.000	0.008	0.006	0.002
TK 024	1343	0.008	0.009	0.001	0.016	0.013	0.005	0.035	0.039	0.004	0.070	0.057	0.022
TK 025	1344	0.008	0.009	0.001	0.016	0.013	0.005	0.035	0.039	0.004	0.070	0.057	0.022
TK 026	1346	0.001	0.001	0.000	0.002	0.002	0.001	0.005	0.006	0.001	0.010	0.008	0.003
TK 027	1347	0.009	0.011	0.001	0.019	0.015	0.006	0.042	0.047	0.005	0.083	0.067	0.026
TK 028	1348	0.008	0.009	0.001	0.016	0.013	0.005	0.035	0.039	0.004	0.070	0.057	0.022
TK 029	1441	0.002	0.002	0.000	0.003	0.003	0.001	0.007	0.008	0.001	0.014	0.011	0.004
TK 030	154	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000
TK 031	429	0.001	0.001	0.000	0.001	0.001	0.000	0.003	0.003	0.000	0.005	0.004	0.002
		0.105	0.118	0.013	0.210	0.171	0.066	0.461	0.519	0.058	0.922	0.749	0.288

NOTES

1. HAP speciation for normal gasoline from Table 3-2 of Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards, EPA-453/R-94-002a, January 1994.
2. 2,2,4 TMP is 2,2,4 trimethylpentane.

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Tank Roof Landings

EU No.	Tank No.	Most Volatile Product Stored	VOC per Landing Event (lb./event)	Landing Events per Year	Roof Landing VOC (ton/yr)	Hazardous Air Pollutants (ton/yr)					
						2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes
						0.80% of VOC	0.90% of VOC	0.10% of VOC	1.60% of VOC	1.30% of VOC	0.50% of VOC
TK 001	4010	Gasoline RVP 13	789.63	3	1.18	9.48E-03	0.01	1.18E-03	0.02	0.02	5.92E-03
TK 011	559	Gasoline RVP 13	238.68	3	0.36	2.86E-03	3.22E-03	3.58E-04	5.73E-03	4.65E-03	1.79E-03
TK 016	684	Gasoline RVP 13	332.62	3	0.50	3.99E-03	4.49E-03	4.99E-04	7.98E-03	6.49E-03	2.49E-03
TK 017	685	Gasoline RVP 13	235.69	3	0.35	2.83E-03	3.18E-03	3.54E-04	5.66E-03	4.60E-03	1.77E-03
TK 018	686	Gasoline RVP 13	235.69	3	0.35	2.83E-03	3.18E-03	3.54E-04	5.66E-03	4.60E-03	1.77E-03
TK 019	687	Gasoline RVP 13	246.79	3	0.37	2.96E-03	3.33E-03	3.70E-04	5.92E-03	4.81E-03	1.85E-03
TK 024	1343	Gasoline RVP 13	770.86	3	1.16	9.25E-03	0.01	1.16E-03	0.02	0.02	5.78E-03
TK 025	1344	Gasoline RVP 13	473.02	3	0.71	5.68E-03	6.39E-03	7.10E-04	0.01	9.22E-03	3.55E-03
TK 027	1347	Gasoline RVP 13	517.37	3	0.78	6.21E-03	6.98E-03	7.76E-04	0.01	0.01	3.88E-03
TK 028	1348	Gasoline RVP 13	495.29	3	0.74	5.94E-03	6.69E-03	7.43E-04	0.01	9.66E-03	3.71E-03
Totals					6.50	0.05	0.06	0.007	0.10	0.08	0.03

NOTES

1. Emissions estimated using methods from AP-42 Section 7.1.3.2.2 TankESP, assuming two 3-day roof landings per tank occuring in April.
2. The roof-landings emissions-estimating spreadsheet is included with the permit application as a document separate from this PTE spreadsheet.
3. TMP is trimethylpentane.

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Tank Cleaning Events

EU No.	Tank No.	Most Volatile Product Stored	VOC per Vapor Space Purge Event (lb./event)	VOC per Forced Ventilation Event (lb./event)	Total Cleaning VOC (ton/yr)	Hazardous Air Pollutants (ton/yr)					
						2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes
						0.80% of VOC	0.90% of VOC	0.10% of VOC	1.60% of VOC	1.30% of VOC	0.50% of VOC
TK 001	4010	Gasoline (RVP13)	1,442.27	6,525.79	3.98	0.03	0.04	0.00	0.06	0.05	0.02
TK 024	1343	Gasoline (RVP13)	1,628.79	6,525.79	4.08	0.03	0.04	0.00	0.07	0.05	0.02
TK 025	1344	Gasoline (RVP13)	1,628.79	6,525.79	4.08	0.03	0.04	0.00	0.07	0.05	0.02
TK 027	1347	Gasoline (RVP13)	1,628.79	6,525.79	4.08	0.03	0.04	0.00	0.07	0.05	0.02
TK 028	1348	Gasoline (RVP13)	1,628.79	6,525.79	4.08	0.03	0.04	0.00	0.07	0.05	0.02
Totals			7,957.45	32,628.95	20.29	0.16	0.18	0.02	0.32	0.26	0.10

NOTES

1. Emissions estimated using methods from AP-41 Ch. 7.1 Eqn. 4-2 for vapor space purge events and
2. The cleaning event emissions-estimating spreadsheet is included with the permit application as a document separate from this PTE spreadsheet.
3. TMP is trimethylpentane.
4. Conservatively estimating no more than 5 tanks will be cleaned in a given year. The 5 tanks calculated here represent the greatest emission generating tanks during a typical 2-day cleaning process.

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Small Tanks Potential to Emit

EU	Tank No.	Tank Type	Regulatory Status	Diameter (ft)	Height or Length (ft)	Capacity (gal)	Annual Tank Turnovers	Throughput (gal/year)	Most Volatile Product Stored	VOC Emissions				
										Standing (lb./year)	Working (lb./year)	Total (lb./year)	Total (lb./hour)	Total (ton/year)
AD-1	Additive Tank No. 1	VFR	Insignificant	8.00	11.00	4,000.00	12.00	48,000	Jet Naphtha	55.66	78.34	134.00	0.02	0.07
AD-2	Additive Tank No. 2	HFR	Insignificant	5.25	12.00	1,990.00	12.00	23,880	Jet Naphtha	29.57	39.17	68.74	0.01	0.03
AD-3	Additive Tank No. 3	VFR	Insignificant	12.00	17.00	14,300.00	12.00	171,600	Jet Naphtha	174.07	278.30	452.37	0.05	0.23
AD-4	Additive Tank No. 4	VFR	Insignificant	6.00	6.17	1,300.00	12.00	15,600	Jet Naphtha	19.38	26.80	46.18	0.005	0.02
AD-5	Additive Tank No. 5	VFR	Insignificant	6.00	12.00	2,500.00	12.00	30,000	Jet Naphtha	33.41	51.54	84.95	0.010	0.04
AD-6	Additive Tank No. 6	HFR	Insignificant	8.00	21.25	7,900.00	12.00	94,800	Jet Naphtha	116.32	154.61	270.93	0.031	0.14
AD-7	Additive Tank No. 7	HFR	Insignificant	5.33	12.00	2,180.00	12.00	26,160	Jet Naphtha	30.44	41.23	71.67	0.008	0.04
AD-8	Additive Tank No. 8	VFR	Insignificant	6.00	10.00	2,100.00	12.00	25,200	Jet Naphtha	28.94	41.23	70.17	0.008	0.04
AD-9	Additive Tank No. 9	HFR	Insignificant	8.00	21.42	8,000.00	12.00	96,000	Jet Naphtha	117.25	164.92	282.17	0.032	0.14
AD-10	Additive Tank No. 10	HFR	Insignificant	10.00	20.00	11,700.00	12.00	140,400	Jet Naphtha	165.82	237.07	402.89	0.046	0.20
AD-11	Additive Tank No. 11	HFR	Insignificant	4.00	10.92	1,000.00	12.00	12,000	Jet Naphtha	15.95	20.61	36.57	0.004	0.02
AD-12	Additive Tank No. 12	HFR	Insignificant	6.00	10.33	2,000.00	12.00	24,000	Jet Naphtha	32.84	41.23	74.07	0.008	0.04
AD-13	Additive Tank No. 13	HFR	Insignificant	5.33	18.00	3,000.00	12.00	36,000	Jet Naphtha	45.66	61.84	107.51	0.01	0.05

EU	Tank No.	HAP Emissions (lb./hr)						HAP Emissions (ton/yr)					
		2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes	2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes
		0.80% of VOC	0.90% of VOC	0.10% of VOC	1.60% of VOC	1.30% of VOC	0.50% of VOC	0.80% of VOC	0.90% of VOC	0.10% of VOC	1.60% of VOC	1.30% of VOC	0.50% of VOC
AD-1	Additive Tank No. 1	1.22E-04	1.38E-04	1.53E-05	2.45E-04	1.99E-04	7.65E-05	5.60E-04	6.30E-04	7.00E-05	1.12E-03	9.10E-04	3.50E-04
AD-2	Additive Tank No. 2	6.28E-05	7.06E-05	7.85E-06	1.26E-04	1.02E-04	3.92E-05	2.40E-04	2.70E-04	3.00E-05	4.80E-04	3.90E-04	1.50E-04
AD-3	Additive Tank No. 3	4.13E-04	4.65E-04	5.16E-05	8.26E-04	6.71E-04	2.58E-04	1.84E-03	2.07E-03	2.30E-04	3.68E-03	2.99E-03	1.15E-03
AD-4	Additive Tank No. 4	4.22E-05	4.74E-05	5.27E-06	8.43E-05	6.85E-05	2.64E-05	1.60E-04	1.80E-04	2.00E-05	3.20E-04	2.60E-04	1.00E-04
AD-5	Additive Tank No. 5	7.76E-05	8.73E-05	9.70E-06	1.55E-04	1.26E-04	4.85E-05	3.20E-04	3.60E-04	4.00E-05	6.40E-04	5.20E-04	2.00E-04
AD-6	Additive Tank No. 6	2.47E-04	2.78E-04	3.09E-05	4.95E-04	4.02E-04	1.55E-04	1.12E-03	1.26E-03	1.40E-04	2.24E-03	1.82E-03	7.00E-04
AD-7	Additive Tank No. 7	6.55E-05	7.36E-05	8.18E-06	1.31E-04	1.06E-04	4.09E-05	3.20E-04	3.60E-04	4.00E-05	6.40E-04	5.20E-04	2.00E-04
AD-8	Additive Tank No. 8	6.41E-05	7.21E-05	8.01E-06	1.28E-04	1.04E-04	4.01E-05	3.20E-04	3.60E-04	4.00E-05	6.40E-04	5.20E-04	2.00E-04
AD-9	Additive Tank No. 9	2.58E-04	2.90E-04	3.22E-05	5.15E-04	4.19E-04	1.61E-04	1.12E-03	1.26E-03	1.40E-04	2.24E-03	1.82E-03	7.00E-04
AD-10	Additive Tank No. 10	3.68E-04	4.14E-04	4.60E-05	7.36E-04	5.98E-04	2.30E-04	1.60E-03	1.80E-03	2.00E-04	3.20E-03	2.60E-03	1.00E-03
AD-11	Additive Tank No. 11	3.34E-05	3.76E-05	4.17E-06	6.68E-05	5.43E-05	2.09E-05	1.60E-04	1.80E-04	2.00E-05	3.20E-04	2.60E-04	1.00E-04
AD-12	Additive Tank No. 12	6.76E-05	7.61E-05	8.46E-06	1.35E-04	1.10E-04	4.23E-05	3.20E-04	3.60E-04	4.00E-05	6.40E-04	5.20E-04	2.00E-04
AD-13	Additive Tank No. 13	9.82E-05	1.10E-04	1.23E-05	1.96E-04	1.60E-04	6.14E-05	4.00E-04	4.50E-04	5.00E-05	8.00E-04	6.50E-04	2.50E-04
		1.92E-03	2.16E-03	2.40E-04	3.84E-03	3.12E-03	1.20E-03	8.48E-03	9.54E-03	1.06E-03	0.02	0.01	5.30E-03

NOTES

1. VFR is Vertical Fixed Roof, HFR is Horizontal Fixed Roof
2. HAP speciation for normal gasoline from Table 3-2 of Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards, EPA-453/R-94-002a, January 1994.
3. TMP is trimethylpentane.

Magellan Pipeline Co., LP - Alexandria
Terminal Potential to Emit - July 2022
Equipment Fugitives

Component	Component Count	VOC Emission Factor per Component (kg/hr)	VOC Emission Factor per Component (lb/hr)	VOC (ton/yr)	Potential HAP Emissions (ton/yr) 2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes
					0.80% of VOC	0.90% of VOC	0.10% of VOC	1.60% of VOC	1.30% of VOC	0.50% of VOC
Valves, light liquid service	1,150	4.30E-05	9.48E-05	0.48	3.82E-03	4.30E-03	4.78E-04	7.64E-03	6.21E-03	2.39E-03
Valves, vapor service	6	1.30E-05	2.87E-05	7.53E-04	6.03E-06	6.78E-06	7.53E-07	1.21E-05	9.79E-06	3.77E-06
Pump seals, light liquid service	60	5.40E-04	1.19E-03	0.31	2.50E-03	2.82E-03	3.13E-04	5.01E-03	4.07E-03	1.56E-03
Pump seals, vapor service	0	6.50E-05	1.43E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fittings, light liquid service	3,800	8.00E-06	1.76E-05	0.29	2.35E-03	2.64E-03	2.94E-04	4.70E-03	3.82E-03	1.47E-03
Fittings, vapor service	10	4.20E-05	9.26E-05	4.06E-03	3.24E-05	3.65E-05	4.06E-06	6.49E-05	5.27E-05	2.03E-05
Other components, light liquid service	0	1.30E-04	2.87E-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other components, vapor service	1	1.20E-04	2.65E-04	1.16E-03	9.27E-06	1.04E-05	1.16E-06	1.85E-05	1.51E-05	5.79E-06
				1.09	8.72E-03	9.81E-03	1.09E-03	0.02	0.01	5.45E-03

NOTES

1. All emission factors are from Table 2-3 of EPA Bulletin 453/R-95-017, *Protocol for Equipment Leak Emission Estimates*, November 1995
2. HAP speciation for normal gasoline from Table 3-2 of Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards, EPA-453/R-94-002a, January 1994.
3. TMP is trimethylpentane.

Alexandria, MN Terminal
Potential to Emit - Butane Unloading, Sampling, and System Maintenance

Summary of Potential VOC Emissions for Butane Unloading Station

Emissions Source	Potential VOC Emissions			
	Truck Unloading	Sample Tee Purging	Maintenance	Total
Butane Station #1	0.40	0.02	0.05	0.47
Totals	0.40	0.02	0.05	0.47

Butane Unloading Emissions per Station
Potential emissions from butane-unloading are estimated using the following equation: *Maximum Hourly Emissions* = $V*D*E_H$

V = Hose volume (ft^3)
D = Density of Butane (lb/gal)
E_H = Events per Hour

Annual Emissions = $V*D*E_A$
E_A = Events per Year

Emission Source	Diameter (in)	Length (ft)	Volume (ft^3)	Volume (gal)	Density (lb/gal)	Events per Year	Potential to Emit (ton/yr)
Butane Truck Unloading	2	1.50	0.03	0.245	5.06	650	0.40

Butane Sample Tee Purging Emissions per Station
Potential emissions from butane sample-tee purging are estimated using the following equation: *Maximum Hourly Emissions* = $V*D*E_H$
V = Tee volume (ft^3)

The estimate is based on the following assumptions:

Purged tubing volume, ft^3	0.0177
Purges per hr	1
Purges per year	50
Maximum annual purge volume, ft^3/yr	0.883

Volume (ft^3)	Volume (gal)	Density (lb/gal)	Potential to Emit (ton/yr)
0.0177	0.132	5.06	0.02

Butane Routine Maintenance Emissions per Station
Potential emissions from butane system maintenace are estimated using the following equation: *Maximum Hourly Emissions* = $V*D*E_H$
V = Hose volume (ft^3)

Emission Source	Diameter (in)	Length (ft)	Volume (ft^3)	Volume (gal)	Density (lb/gal)	Events per Year	Potential to Emit (ton/yr)
Butane System Routine Maintenance	2	20.00	0.44	3.264	5.06	6	0.05

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Ethanol Unloading

Unloading pipe diameter	16.00	inches
Unloading pipe diameter	1.33	feet
Unloading pipe length	8.00	feet
Unloading pipe volume	11.17	ft^3
Volume loaded while pipe is venting	55.71	gallon/unloading-event
Maximum unloading tanker volume	8,000	gallon
Gasoline loading rate/limit	336,000,000	gallon/year
Max unloading rate (10% of gasoline rate)	33,600,000	gallon/year
Maximum number of trucks unloaded	4,200	trucks/year
Volume loaded while pipe is venting	233.962	1000-gallon/year
Moleclular weight, M	48.86	lb/lb-mole
Saturation factor, S (AP-42 Table 5.2-1)	0.60	dimensionless
Vapor pressure of ethanol, P	1.51	psia
Mean temperature of liquid unloaded, T	63.22	°F
Loading loss factor L_L	1.05	lb. VOC/1000-gal-loaded
Potential VOC emissions from venting ethanol delivery pipe	246.40	lb./yr
	0.03	lb./hr
	0.12	ton/year

HAP Emissions

	2,2,4 TMP	Benzene	Ethylbenzene	Hexane	Toluene	Total Xylenes
Gasoline % of VOC	0.800%	0.900%	0.100%	1.600%	1.300%	0.500%
Denatured Ethanol % of VOC	0.016%	0.018%	0.002%	0.032%	0.026%	0.010%
Potential HAP Emissions (ton/yr)	1.97E-05	2.22E-05	2.46E-06	3.94E-05	3.20E-05	1.23E-05
Potential HAP Emissions (lb./hr)	4.50E-06	5.06E-06	5.63E-07	9.00E-06	7.31E-06	2.81E-06

NOTES

1. Denatured ethanol includes up to 2% gasoline as denaturant. Therefore, potential HAP fractions are 2% of those used for gasoline.
2. TMP is trimethylpentane.

Magellan Pipeline Co., LP - Alexandria Terminal
Potential to Emit - July 2022
Greenhouse Gases

Physical Properties and Emissions Factors

Fuel Combusted in VCU	Liquid Density (lb./gal)	High Heating Value (HHV) (MMBtu/gal)	High Heating Value (HHV) ($MMBtu/ft^3$)	GHG Emissions Factors (ton/MMBtu) CO_2	GHG Emissions Factors (ton/MMBtu) CH_4	GHG Emissions Factors (ton/MMBtu) N_2O	GHG Emissions Factors (lb./MMBtu) CO_2	GHG Emissions Factors (lb./MMBtu) CH_4	GHG Emissions Factors (lb./MMBtu) N_2O
Gasoline	6.20	0.125		0.0709	3.10E-06	6.01E-07	156.3078	0.0068	0.0013
Natural gas			1.020E-03	0.0531	9.50E-07	9.50E-08	117.0655	0.0021	0.0002

Greenhouse Gases from Combusting Fuel Vapors in the VCU

Fuel Combusted	Weight of Vapors Combusted (ton/yr)	Liquid Volume of Vapors Combusted (gal/yr)	Energy of Vapors Combusted (MMBtu/yr)	CO_2 (ton/yr)	CH_4 (ton/yr)	N_2O (ton/yr)
Gasoline vapor	1,253.43	404,332	50,542	3,950.02	0.17	3.35E-02

Greenhouse Gas Emissions from Combusting Natural Gas in the VCU Pilot

Fuel Combusted	Volume of Gas Combusted[2] (ft^3/yr)	Energy of Gas Combusted (MMBtu/yr)	CO_2 (ton/yr)	CH_4 (ton/yr)	N_2O (ton/yr)
Natural gas	525,600.00	536	31.38	5.61E-04	5.61E-05

Total Greenhouse Gas Emissions

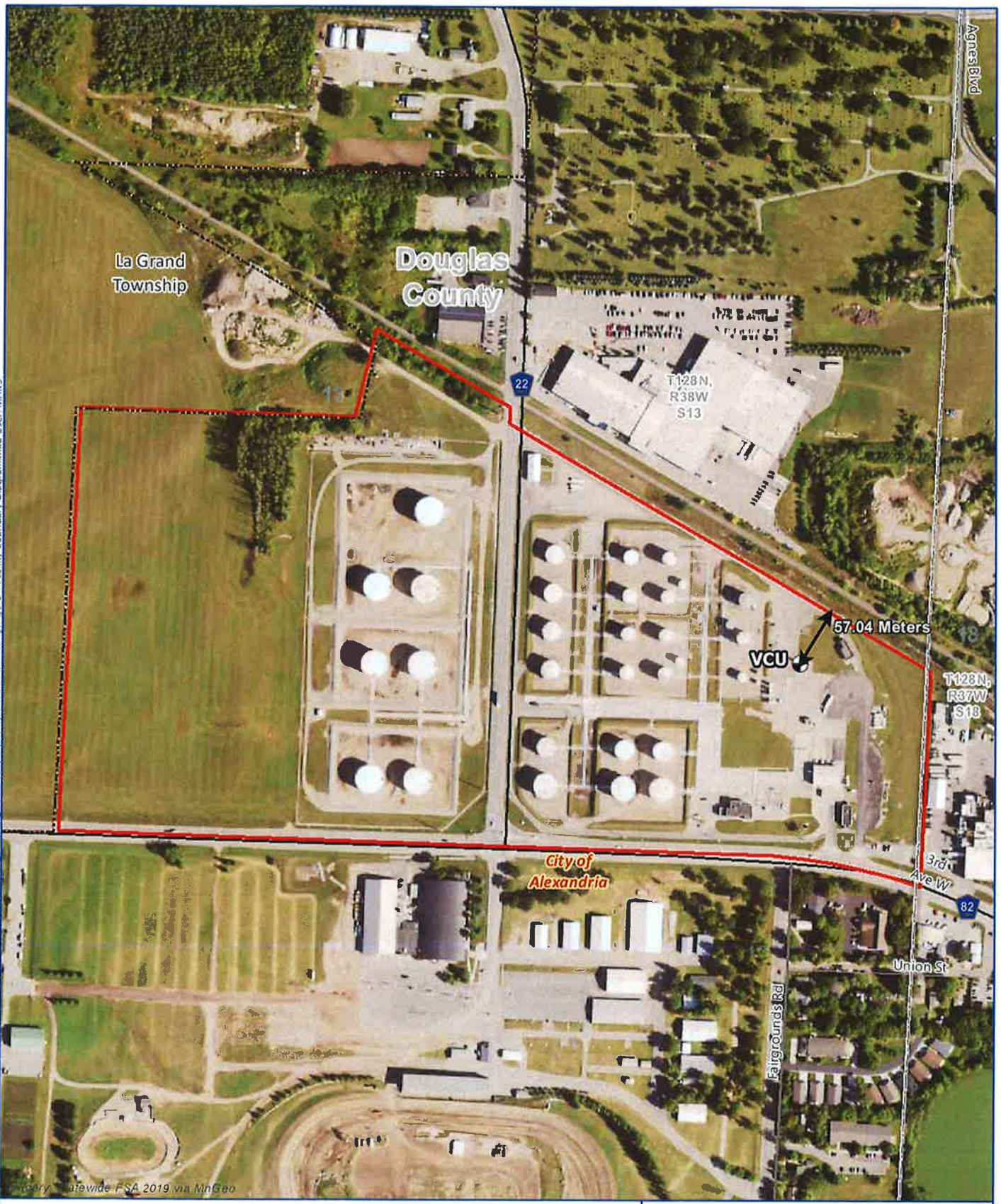
Pollutant	PTE-Mass Basis (ton/yr)	Global Warming Potential	PTE- CO_2e (ton/yr)
CO_2	3,981.40	1.00	3,981.40
CH_4	0.17	25.00	4.33
N_20	0.034	298.00	9.99
Totals	3,981.60		3,995.72

NOTES

1. Emission Factors and heating values from Tables 4-3 and 4-5 of *Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry*, Aug. 2009.
2. Based on data from the VCU manufacturer of continuous feed of 1 scfm for the VCU pilot.
3. Global Warming Potential values from Table 3-1 of *Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry*, Aug. 2009.

Attachment 2

Ambient Air Quality Analysis



VCU

Facility Boundary

0 125 250 500

Feet

0 50 100 200

Meters

FENCE LINE DISTANCES FOR EMISSION POINTS
Capped Permit Application
Magellan Pipeline Co LP - Alexandria
Magellan Midstream Partners, L.P.
Alexandria, MN

FIGURE 1

Barr Footer: ArcGIS 10.7.1, 2020-04-22 17:32 File: \\Client\Magellan_Midstream\Work Orders\Alexandria Terminal 23211007\Maps\Reports\AirPermitting\Figure 1 Facility Boundary Diagram.mxd User: MAK3

Attachment 1 CAPS Spreadsheet

Yellow cells = required inputs (for each stack/vent considered--inputs not required for unused stacks)
White cells = optional inputs
All other cells locked

Screening Date:	April 28, 2022
AQ Facility ID No.:	04100006
Facility Name:	Magellan Pipeline Co LP - Alexandria
Facility Location:	Alexandria, MN
Address:	709 3rd Ave West
Address (cont'd)	Alexandria, MN 56308

Criteria Pollutant Screening Results Table

Chemical	Fraction of 1-hr std	Fraction of 3-hr std	Fraction of 24-hr std	Fraction of annual std
SO_2				
NO_2				0.313
PM_{10}				

Emissions		Stack(s)#1		Stack(s)#2		Stack(s)#3		Stack(s)#4		Stack(s)#5		Stack(s)#6		Stack(s)#7	
	Optional stack description >>>	VCU													
Pollutant Name	Total annual emissions (tpy)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
SO_2		0	0												
NO_2	5.61		5.61												
PM_{10}		0	0												

Default Dispersion Factors	notes	Stack(s)#1	Stack(s)#2	Stack(s)#3	Stack(s)#4	Stack(s)#5	Stack(s)#6	Stack(s)#7
Stack height (1-99 m)	required for lookup	12.19						
Distance to property line (10-10,000 m)	required for lookup	57.04						
1-hr dispersion factor	automatic lookup	2421						
3-hr dispersion factor	automatic lookup	1599						
24-hr dispersion factor	automatic lookup	653						
Annual dispersion factor	automatic lookup	84						

Optional Specific Dispersion Factors*	notes	Stack(s)#1	Stack(s)#2	Stack(s)#3	Stack(s)#4	Stack(s)#5	Stack(s)#6	Stack(s)#7
1-hr dispersion factor	enter dispersion factors manually	2422						
3-hr dispersion factor	enter dispersion factors manually	217.98						
24-hr dispersion factor	enter dispersion factors manually	968.8						
Annual dispersion factor	enter dispersion factors manually	193.76						

*Optional specific dispersion factors refers to dispersion factors developed via an external method such as the DISPERSE batch process, the SCREEN3 model or other screening or refined air dispersion modeling. After developing the dispersion factors they are entered manually on this sheet. If the optional specific dispersion factors cells are filled in, they are used preferentially over the Default Dispersion Factors lookup table values above.

09/07/21
10:44:43

```
 ***  SCREEN3 MODEL RUN  ***
 *** VERSION DATED 13043 ***

C:\Users\hrz\Desktop\Alexandria VCU Screen 3\Alexandria VCU Screen 3.scr

SIMPLE TERRAIN INPUTS:
   SOURCE TYPE            =        POINT
   EMISSION RATE (G/S)    =      1.00000
   STACK HEIGHT (M)       =      12.1920
   STK INSIDE DIAM (M)    =       1.8288
   STK EXIT VELOCITY (M/S)=       0.0060
   STK GAS EXIT TEMP (K)  =     418.9833
   AMBIENT AIR TEMP (K)   =     293.0000
   RECEPTOR HEIGHT (M)    =       1.5000
   URBAN/RURAL OPTION     =        RURAL
   BUILDING HEIGHT (M)    =       0.0000
   MIN HORIZ BLDG DIM (M) =       0.0000
   MAX HORIZ BLDG DIM (M) =       0.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

   STACK EXIT VELOCITY WAS CALCULATED FROM
   VOLUME FLOW RATE =  0.15851283E-01 (M**3/S)

BUOY. FLUX =    0.015 M**4/S**3;  MOM. FLUX =    0.000 M**4/S**2.

*** FULL METEOROLOGY ***
```

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
57.	2422.	3	1.0	1.0	320.0	7.62	7.42	4.46	NO
100.	2305.	4	1.0	1.0	320.0	7.61	8.20	4.66	NO
200.	1559.	4	1.0	1.0	320.0	7.61	15.57	8.50	NO
300.	922.4	4	1.0	1.0	320.0	7.61	22.61	12.10	NO
400.	618.0	6	1.0	1.1	10000.0	12.58	14.73	7.24	NO
500.	639.2	6	1.0	1.1	10000.0	12.58	18.04	8.56	NO
MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 57. M:									
65.	2480.	3	1.0	1.0	320.0	7.62	8.46	5.08	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	2480.	65.	0.

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****