MARYLAND DEPARTMENT OF THE ENVIRONMENT

AIR AND RADIATION ADMINISTRATION
APPLICATION FOR A PERMIT TO CONSTRUCT

DOCKET #09-25

COMPANY: Petroleum Management, Inc.

LOCATION: 1030 E. PATAPSCO AVE.
BALTIMORE MD 21226

APPLICATION: Installation of two (2) mixed fuel storage tanks.

ITEM	DESCRIPTION
1	Notice of Application and Informational Meeting
2	Environmental Justice (EJ) Information - MDE Score and Screening Report
3	Permit to Construct Application • Forms 5, 5T, 5EP, and 6 • Emissions calculations • Equipment drawing • Vendor information • Certificate of Liability Insurance • Process flow diagram • Site maps • Analyses of materials • Community outreach documents • Evidence of Zoning Approval • Safety data sheets

DEPARTMENT OF THE ENVIRONMENT
AIR AND RADIATION ADMINISTRATION

NOTICE OF APPLICATION AND INFORMATIONAL MEETING

The Maryland Department of the Environment, Air and Radiation Administration (ARA) received a permit-to-construct application from Petroleum Management, Inc. on July 26, 2025 to install two (2) mixed fuel storage tanks. The proposed modifications will be located 1030 E. Patapsco Ave., Baltimore, MD 21226.

In accordance with HB 1200/Ch. 588 of 2022, the applicant provided an environmental justice (EJ) Score for the census tract in which the project is located. The EJ Score, expressed as a statewide percentile, was shown to be 97.3. This score represents a combined measure of pollution and the potential vulnerability of a population to the effects of pollution.

Copies of the application and other supporting documents are available for public inspection on the Department's website:

https://mde.maryland.gov/programs/Permits/AirManagementPermits/Pages/index.aspx

Any applicant-provided information regarding a description of the indicators contributing to the EJ score can also be found at the listed website. Such information has not yet been reviewed by the Department. A review of the submitted information will be conducted when the Department undertakes its technical review of all documents included in the application.

Pursuant to the Environment Article, Section 1-603, Annotated Code of Maryland, an Informational Meeting has been scheduled so that citizens can discuss the application and the permit review process with the applicant and the Department.

The Informational Meeting will be held in-person on November 13, 2025 from 6:30 PM to 8:00 PM at the Curtis Bay Recreation Center located at 1630 Filbert St., Baltimore, MD 21226. You may also participate in the meeting virtually. Please register to attend using the following link:

https://forms.gle/wWFNbB4CnDwWFsBi9

Registered attendees will receive instructions on how to join virtually using your computer or telephone.

The Department will provide language translation services and/or an interpreter for deaf and hearing impaired persons provided that a request is made for such service at least five (5) days prior to the meeting.

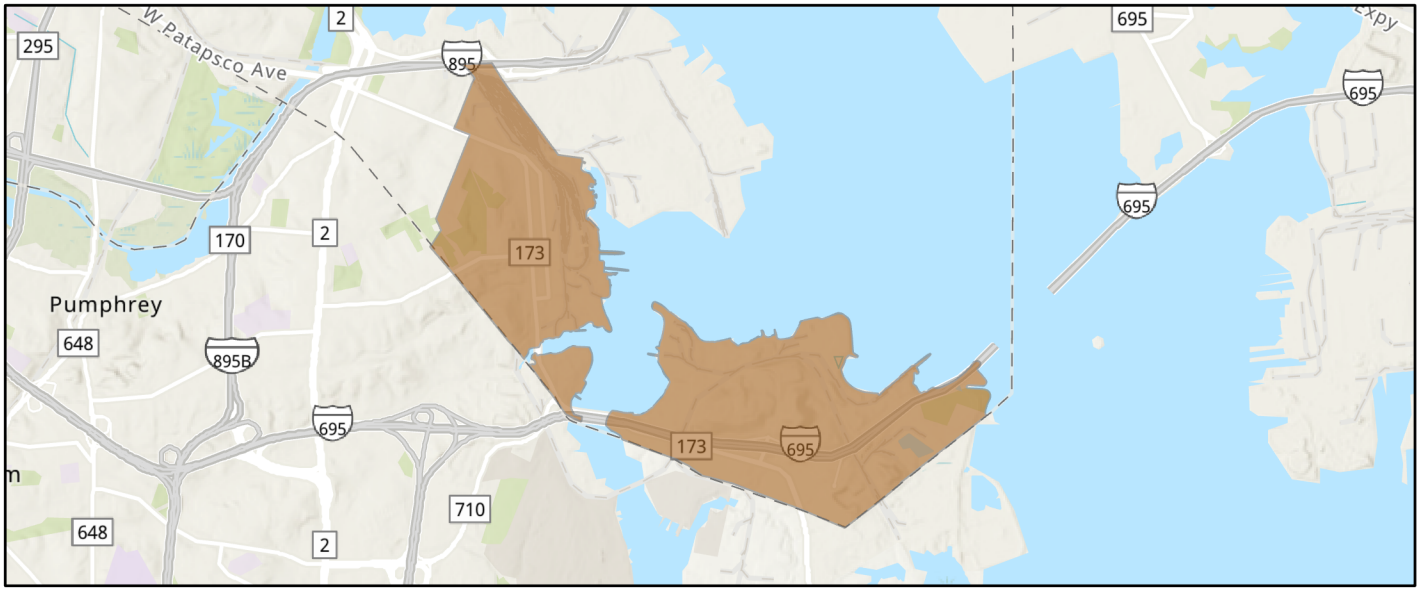
Further information may be obtained by calling Ms. Shannon Heafey at 410-537-4433.

Christopher R. Hoagland, Director
Air and Radiation Administration

MDEnviroScreen Report

Census Tract ID: 24510250500

County: Baltimore City



MDEnviroScreen Summary

EJ Score: 97.3

Overburdened Community: Yes

Underserved Community: Yes

MDEnviroScreen EJ Score Indicators

Pollution Burden Exposure

Indicator	Percentile
PM 2.5	30.6
Ozone	81.3
Diesel PM	73.8
Cancer Risk	9.5
Respirator Hazard	32.4
Traffic	66.4
Toxic Release	99.7
Hazardous Landfill	99.8

Pollution Environmental Effect

Indicator	Percentile
Lead Paint	85
RMP Facility	99.8
Superfund	90.5
Hazardous Waste	97.6
Wastewater	80.7
Brownfield	99.7
Power Plant	94.8
CAFO	0
Mining	0

Sensitive Population

Indicator	Percentile
Low Birth Weight	95
Asthma Discharge	94.8
Myocardial Infarction	99
Lack of Broadband	96.1
Low Income*	81.3

*Low Income is included in Underserved but grouped into Sensitive Population for EJ Score Calculation

*The MDEnviroScreen EJ score represents a combined measure of pollution and the potential vulnerability of a population to the effects of pollution. The EJ score in MDEnviroScreen does not include data from every available map layer. For example, it does not include race/ethnicity or age, however, MDE has made that information available for informational purposes only. Collecting and displaying this data allows users to evaluate the relationships between demographics and pollution burden, and can be used to better understand issues related to environmental justice and racial equity in Maryland. MDE cautions users against using the "Underserved" map layer, or its subcategories, in any manner that would be considered discriminatory under applicable law.

Date Exported: 6/24/2025

EA Engineering, Science, and Technology, Inc., PBC

225 Schilling Circle, Suite 400
Hunt Valley, MD 21031
Telephone: 410-584-7000
Fax: 443-646-8067
www.eaest.com

June 25, 2025

Maryland Department of the Environment
Air and Radiation Administration
1800 Washington Blvd.
Baltimore, Maryland 21230

RE: Permit to Construct Application
Aboveground Fuel Tank Installation
1030 E. Patapsco Avenue, Baltimore, MD 21225
EA Project No. 6321513

To Whom it May Concern:

EA Engineering, Science, and Technology, Inc., PBC (EA) is pleased to submit the accompanying Air Quality Permit to Construct Application package for the proposed aboveground fuel tank (AST) installation at 1030 E. Patapsco Avenue, Baltimore, MD. The proposed facility site is owned and operated by Petroleum Management, Inc. (PMI). The site serves as an operations base for PMI's vacuum pumping and tank cleaning operations. The purpose of this project is to install two (2) 20,000-gallon gasoline ASTs to store petroleum liquids from vacuum truck operations prior to being transported to recycling facilities. The ASTs will be surrounded by an impervious, concrete containment dike structure, with a volume of 22,500 gallons, in accordance with local, state, and federal regulations. Each AST shall be equipped with Stage I Vapor Recovery to mitigate emissions of hydrocarbons during tank fill operations.

If you have any questions, please do not hesitate to contact me at 410-382-4296 or via email at nbrooks@eaest.com.

Sincerely,

EA ENGINEERING, SCIENCE,
AND TECHNOLOGY, INC., PBC

Nelson Brooks

Nelson Brooks, P.E.
Senior Project Manager

Regulatory Applicability

This section details the state and federal air regulations applicable to the proposed installation of two 20,000 gallon aboveground storage tanks (ASTs). The storage tanks will be fixed roof, horizontal, painted white, and have a diameter of 10 ft and length of 34 ft. The ASTs will be used to store a mixture of recovered petroleum products and water from vacuum truck operations at off site tanks and spill or release sites. The maximum expected throughput is 30,000 gallons per month from the vacuum trucks. The mixture typically includes diesel, gasoline, and water, with a maximum percentage of 60% gasoline. For conservative regulatory determination and emissions estimate, the mixture is considered to have the characteristics of RVP 10 gasoline. The tanks will be equipped with Stage I vapor recovery to capture vapors during tank filling operations. The captured vapor will be directed to the vacuum trucks. Once accumulated, the liquids will be transferred to tanker trucks in quantities between 5,000 to 6,000 gallons, to be hauled to recycling facilities.

State Regulations

The ASTs will be subject to general state air pollution control regulations, in addition to the following state regulations.

COMAR 26.11.02.13 Sources Subject to State Permits to Operate

The ASTs are required by State regulations at COMAR 26.11.13.04.C.(1)(a) to have VOC recovery devices (vapor balance line) and are not gasoline storage tanks at gasoline dispensing facilities, so a State permit to operate needs to be obtained once constructed, pursuant to COMAR 26.11.02.13.A.(18).

COMAR 26.11.13.04 Loading Operations for Gasoline and Volatile Organic Compound Storage and Handling

The ASTs fall under the definition of small gasoline storage tank at COMAR 26.11.13.04.C.(1)(a) because they have a capacity of 20,000 gallons. Pursuant to COMAR 26.11.13.04.C.(2), the tanks must be equipped with a properly installed, maintained, and used vapor balance line while gasoline is loaded into the tanks. Pursuant to COMAR 26.11.13.04.D, during loading of the gasoline mixture into tank trucks, loading connections on the vapor lines must be equipped with fittings that have no leaks and automatically and immediately close upon disconnection. In addition, all equipment must be maintained and operated in a manner to prevent avoidable liquid leaks during loading or unloading. The ASTs will comply with all applicable requirements of this section.

COMAR 26.11.15 Toxic Air Pollutants and COMAR 26.11.16 Procedures Related to Requirements for Toxic Air Pollutants

Gasoline contains several compounds that are regulated as toxic air pollutants (TAPs) by MDE. PMI must demonstrate that emissions of TAPs from the ASTs will not endanger human health.

Attached to this application is a demonstration, in accordance with the procedures at COMAR 26.11.16, that emissions of all HAPs from the ASTs will not endanger human health

Federal Regulations

The following federal regulations are not applicable to the ASTs based on a specified exemption.

40 CFR 60 (NSPS) Subpart Kc Standards Of Performance For Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023

Storage Vessels, constructed, reconstructed, or modified after October 4, 2023, with a capacity greater than or equal to 20,000 gallons, used to store volatile organic liquids are subject to the requirements of 40 CFR 60 Subpart Kc. 40 CFR 60.110c(b) specifies sources exempt from the subpart, including, vessels with a design capacity less than or equal to 420,000 gal used for petroleum or condensate stored, processed, or treated prior to custody transfer. These 20,000 gallon ASTs will store a petroleum mixture, followed by custody transfer via unloading to tank trucks, which haul the liquid to recycling facilities. Therefore, 40 CFR 60 Subpart Kc is not applicable to this project.

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

The proposed storage tanks are not subject to 40 CFR 63 Subpart BBBBBB because they will not store gasoline for the purpose of subsequent distribution to gasoline dispensing facilities, so they do not fall under the definition of bulk gasoline terminal or bulk gasoline plant.

AIR QUALITY PERMIT TO CONSTRUCT APPLICATION CHECKLIST

OWNER OF EQUIPMENT/PROCESS	
COMPANY NAME:	Petroleum Management, Inc.
COMPANY ADDRESS:	1030 E Patapsco Avenue. Baltimore, MD 21225
LOCATION OF EQUIPMENT/PROCESS	
PREMISES NAME:	Petroleum Management, Inc.
PREMISES ADDRESS:	1030 E Patapsco Avenue, Baltimore, MD 21225
CONTACT INFORMATION FOR THIS PERMIT APPLICATION	
CONTACT NAME:	Zachary Hisey
JOB TITLE:	Environmental Engineer
PHONE NUMBER:	(717) 316-9429
EMAIL ADDRESS:	zhisey@eaest.com
DESCRIPTION OF EQUIPMENT OR PROCESS	
Two (2) aboveground storage tanks for storage of gasoline (20,000 gallons).	

Application is hereby made to the Department of the Environment for a Permit to Construct for the following equipment or process as required by the State of Maryland Air Quality Regulation, COMAR 26.11.02.09.

Check each item that you have submitted as part of your application package.

☒ Application package cover letter describing the proposed project

☒ Complete application forms (Note the number of forms included or NA if not applicable.)

No. 1 Form 5
No. 1 Form 5T
No. 2 Form 5EP
No. 1 Form 6
No. N/A Form 10
No. N/A Form 11
No. N/A Form 41
No. N/A Form 42
No. N/A Form 44

☒ Vendor/manufacturer specifications/guarantees

☒ Evidence of Workman's Compensation Insurance

☒ Process flow diagrams with emission points

☒ Site plan including the location of the proposed source and property boundary

☒ Material balance data and all emissions calculations

☒ Material Safety Data Sheets (MSDS) or equivalent information for materials processed and manufactured.

☐ Certificate of Public Convenience and Necessity (CPCN) waiver documentation from the Public Service Commission (1)

☒ Documentation that the proposed installation complies with local zoning and land use requirements (2)

(1) Required for emergency and non-emergency generators installed on or after October 1, 2001 and rated at 2001 kW or more.

(2) Required for applications subject to Expanded Public Participation Requirements.

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Air and Radiation Management Administration ▪ Air Quality Permits Program
1800 Washington Blvd ▪ Baltimore, Maryland 21230
(410) 537-3230 ▪ 1-800-633-6101 ▪ www.mde.state.md.us

APPLICATION FOR FUEL BURNING EQUIPMENT

Information Regarding Public Outreach

For Air Quality Permit to Construct applications subject to public review, applicants should consider the following information in the initial stages of preparing a permit application.

If you are not sure at the time you are applying for a permit whether public review of your application is required or for information on steps you can take to engage the surrounding community where your planned project will be located, please contact the Air Quality Permits Program at 410-537-3225 and seek their advice.

Communicating and engaging the local community as early as possible in your planning and development process is an important aspect of your project and should be considered a priority. Environmental Justice or "EJ" is a movement to inform, involve, and engage communities impacted by potential and planned environmental projects by affording citizens opportunities to learn about projects and discuss any concerns regarding impacts.

Although some permit applications are subject to a formal public review process prescribed by statute, the Department strongly encourages you to engage neighboring communities separate from and well ahead of the formal permitting process. Sharing your plans by way of community meetings, informational outreach at local gatherings or through local faith-based organizations can initiate a rewarding and productive dialogue that will reduce anxiety and establish a permanent link with your neighbors in the community.

All parties benefit when there is good communication. The Department can assist applicants in developing an outreach plan that fits the needs of both the company and the public.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Air and Radiation Management Administration ▪ Air Quality Permits Program

APPLICATION FOR PROCESSING/MANUFACTURING EQUIPMENT

Permit to Construct ☒ Registration Update ☐ Initial Registration ☐

1A. Owner of Equipment/Company Name
Petroleum Management, Inc.

Mailing Address
1030 E Patapsco Ave. MD
Street Address
Baltimore MD 21225
City State Zip

Telephone Number
(410) 354-0200

Signature

W. Scott Alexander Operations Manager 6-24-25
Print Name and Title Date

DO NOT WRITE IN THIS BLOCK
2. REGISTRATION NUMBER

County No. (1-2) | Premises No. (3-6)
Registration Class (7) | Equipment No. (8-11)
Data Year (12-13) | Application Date

1B. Equipment Location and Telephone Number (if different from above)
1030 E Patapsco Ave.
Street Number and Street Name
Baltimore Maryland 21225 (410) 354-0200
City/Town State Zip Telephone Number
N/A
Premises Name (if different from above)

3. Status (A= New, B= Modification to Existing Equipment, C= Existing Equipment)

Status (15)	New Construction Begun (MM/YY) (16-19)	New Construction Completed (MM/YY) (20-23)	Existing Initial Operation (MM/YY) (20-23)
A	T B D	T B D	T B D

4. Describe this Equipment: Make, Model, Features, Manufacturer (include Maximum Hourly Input Rate, etc.)
Two 20,000-gal aboveground fuel storage tanks (Highland Tank UL-2085 Cylindrical Fireguard ASTs) with OPW 623V Pressure-Vacuum Vents

5. Workmen's Compensation Coverage 3807445 6/6/2025
Company Richardson Insurance Group, LLC Binder/Policy Number Expiration Date
NOTE: Before a Permit to Construct may be issued by the Department, the applicant must provide the Department with proof of worker's compensation coverage as required under Section 1-202 of the Worker's Compensation Act.

6A. Number of Pieces of Identical Equipment Units to be Registered/Permitted at this Time 2

6B. Number of Stack/Emission Points Associated with this Equipment 2

7. Person Installing this Equipment (if different from Number 1 on Page 1)

Name_____ Title_____

Company_____

Mailing Address/Street_____

City/Town_____ State_____ Telephone (_____) _____

8. Major Activity, Product or Service of Company at this Location

Petroleum Management, Inc's two (2) 20,000 gallon above ground strorage tanks will be used for temporary storage of a water/gasoline/diesel mixture produced as a byproduct of AST water removal services.

9. Control Devices Associated with this Equipment

None [ ] 24-0

Simple/Multiple Cyclone	Spray/Adsorb Tower	Venturi Scrubber	Carbon Adsorber	Electrostatic Precipitator	Baghouse	Thermal/Catalytic Afterburner	Dry Scrubber
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
24-1	24-2	24-3	24-4	24-5	24-6	24-7	24-8

Other

[1] Describe Stage I Vapor Recovery During Tank Fill

24-9

10. Annual Fuel Consumption for this Equipment

OIL-1000 GALLONS	SULFUR %	GRADE	NATURAL GAS-1000 FT^3	LP GAS-100 GALLONS	GRADE
26-31	32-33	34	35-41	42-45	

COAL- TONS	SULFUR %	ASH%	WOOD-TONS	MOISTURE %
46-52	53-55	56-58	59-63	64-65

OTHER FUELS N/A (Specify Type) [ ] 66-1 ANNUAL AMOUNT CONSUMED _____ (Specify Units of Measure)

OTHER FUEL _____ (Specify Type) [ ] 66-2 ANNUAL AMOUNT CONSUMED _____ (Specify Units of Measure)

1= Coke 2= COG 3=BFG 4=Other

11. Operating Schedule (for this Equipment)

Continuous Operation	Batch Process	Hours per Batch	Batch per Week	Hours per Day	Days Per Week	Days per Year
[X]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
67-1	67-2	68-69		70-71	72	73-75

Seasonal Variation in Operation:

No Variation	Winter Percent	Spring Percent	Summer Percent	Fall Percent	(Total Seasons= 100%)
[X]	[ ]	[ ]	[ ]	[ ]	
76	77-78	79-80	81-82	83-84	

12. Equivalent Stack Innformation- is Exhaust through Doors, Windows, etc. Only? (Y/N) N (85)

If not, then	Height Avove Ground (FT)	Inside Diameter at Top	Exit Temperature (°F)	Exit Velocity (FT/SEC)
	9' 3" (86-88)	4 in (89-91)	ambient (92-95)	Variable (96-98)

NOTE:
Attach a block diagram of process/process line, indicating new equipment as reported on this form and all existing equipment, including control devices and emission points.

13. Input Materials (for this equipment only)
Is any of this data to be considered confidential? N (Y or N)

			INPUT RATE		
NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS
1. See attached					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL					

14. Output Materials (for this equipment)
Process/Product Stream

			OUTPUT RATE		
NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS
1. See attached					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL					

15. Waste Streams- Solid and Liquid

			OUTPUT RATE		
NAME	CAS NO. (IF APPLICABLE)	PER HOUR	UNITS	PER YEAR	UNITS
1. See attached					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
TOTAL					

16. Total Stack Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter	Oxides of Sulfur	Oxides of Nitrogen
3.46		
99-104	105-110	111-116

Carbon Monoxide	Volatile Organic Compounds	PM-10
177-122	123-128	129-134

17. Total Fugitive Emissions (for this equipment only) in Pounds Per Operating Day

Particulate Matter	Oxides of Sulfur	Oxides of Nitrogen
135-139	140-144	145-149

Carbon Monoxide	Volatile Organic Compounds	PM-10
150-154	155-159	160-164

Method Used to Determine Emissions (1= Estimate 2= Emission Factor 3= Stack Test 4= Other)

TSP	SOX	NOX	CO	VOC	PM10
165	166	167	168	169	170

AIR AND RADIATION MANAGEMENT ADMINISTRATION USE ONLY

18. Date Rec'd. Local _____ **Date Rec'd. State** _____ **Return to Local Jurisdiction** **Date**_____ **By**_____

Reviewed by Local Jurisdiction Date_____ By_____ **Reviewed by State** Date_____ By_____

19. Inventory Date **Month/Year** (171-174) **Equipment Code** (175-177) **SCC Code** (178-185)

20. Annual Operating Rate (186-192) **Maximum Design Hourly Rate** (193-199) **Permit to Operate Month** (200-201) **Transaction Date (MM/DD/YR)** (202-207)

Staff Code (208-210) **VOC Code** (211 212) **SIP Code** (213 214) **Regulation Code** (215-218) **Confidentiality** (219)

Point Description (220-238) **Action** (239) A: Add C: Change

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FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Applicant Name: Petroleum Management Inc.

Step 1: Quantify premises-wide emissions of Toxic Air Pollutants (TAP) from new and existing installations in accordance with COMAR 26.11.15.04. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Class I or Class II?	Screening Levels (µg/m^3)			Estimated Premises Wide Emissions of TAP			
						Actual Total Existing TAP Emissions	Projected TAP Emissions from Proposed Installation	Premises Wide Total TAP Emissions	
			1-hour	8-hour	Annual	(lb/hr)	(lb/hr)	(lb/hr)	(lb/yr)
ex. ethanol	*64175*	*II*	*18843*	*3769*	*N/A*	*0.60*	*0.15*	*0.75*	*1500*
ex. benzene	*71432*	*I*	*80*	*16*	*0.13*	*0.5*	*0.75*	*1.00*	*400*
*See attached									

(attach additional sheets as necessary.)

Note: Screening levels can be obtained from the Department's website (http://www.mde.maryland.gov) or by calling the Department.

Step 2: Determine which TAPs are exempt from further review. A TAP that meets either of the following Class I or Class II small quantity emitter exemptions is exempt from further TAP compliance demonstration requirements under Step 3 and Step 4.

Class II TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(a))
A Class II TAP is exempt from Step 3 and Step 4 if the Class II TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour, and any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m^3.

Class I TAP Small Quantity Emitter Exemption Requirements (COMAR 26.11.15.03B(3)(b))
A Class I TAP is exempt from Step 3 and Step 4 if the Class I TAP meets the following requirements: Premises wide emissions of the TAP shall not exceed 0.5 pounds per hour and 350 pounds per year, any applicable 1-hour or 8-hour screening level for the TAP must be greater than 200 µg/m^3, and any applicable annual screening level for the TAP must be greater than 1 µg/m^3.

If a TAP meets either the Class I or Class II TAP Small Quantity Emitter Exemption Requirements, no further review under Step 3 and Step 4 are required for that specific TAP.

FORM 5T: Toxic Air Pollutant (TAP) Emissions Summary and Compliance Demonstration

Step 3: Best Available Control Technology for Toxics Requirement (T-BACT, COMAR 26.11.15.05)
In the following table, list all TAP emission reduction options considered when determining T-BACT for the proposed installation. The options should be listed in order beginning with the most effective control strategy to the least effective strategy. Attach supporting documentation as necessary.

Target Pollutants	Emission Control Option	% Emission Reduction	Costs		T-BACT Option Selected? (yes/no)
			Capital	Annual Operating	
ex. ethanol and benzene	*Thermal Oxidizer*	*99*	*$50,000*	*$100,000*	*no*
ex. ethanol and benzene	*Low VOC materials*	*80*	*0*	*$100.000*	*yes*
*See attached					

(attach additional sheets as necessary)

Step 4: Demonstrating Compliance with the Ambient Impact Requirement (COMAR 26.11.15.06)
Each TAP not exempt in Step 2 must be individually evaluated to determine that the emissions of the TAP will not adversely impact public health. The evaluation consists of a series of increasingly non-conservative (and increasingly rigorous) tests. Once a TAP passes a test in the evaluation, no further analysis is required for that TAP. "Demonstrating Compliance with the Ambient Impact Requirement under the Toxic Air Pollutant (TAP) Regulations (COMAR 26.11.15.06)" provides guidance on conducting the evaluation. Summarize your results in the following table. Attach supporting documentation as necessary.

Toxic Air Pollutant (TAP)	CAS Number	Screening Levels ($\mu g/m^3$)			Premises Wide Total TAP Emissions		Allowable Emissions Rate (AER) per COMAR 26.11.16.02A		Off-site Concentrations per Screening Analysis ($\mu g/m^3$)			Compliance Method Used?
		1-hour	8-hour	Annual	(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	1-hour	8-hour	Annual	AER or Screen
ex. ethanol	*64175*	*18843*	*3769*	*N/A*	*0.75*	*1500*	*0.89*	*N/A*	*N/A*	*N/A*	*N/A*	*AER*
ex. benzene	*71432*	*80*	*16*	*0.13*	*1.00*	*400*	*0.04*	*36.52*	*1.5*	*1.05*	*0.12*	*Screen*
*See attached												

(attach additional sheets as necessary)

If compliance with the ambient impact requirement cannot be met using the allowable emissions rate method or the screening analysis method, refined dispersion modeling techniques may be required. Please consult with the Department's Air Quality Permit Program prior to conducting dispersion modeling methods to demonstrate compliance.

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1800 Washington Boulevard ● Baltimore, Maryland 21230
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FORM 5EP: Emission Point Data

Complete one (1) Form 5EP for EACH emission point (stack or fugitive emissions) related to the proposed installation.

Applicant Name: Petroleum Managemnt Inc.

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan:
20,000-gal AST

2. Emission Point Description

Describe the emission point including all associated equipment and control devices:
Stage I Vapor Recovery to be used during tank fill

3. Emissions Schedule for the Emission Point

Continuous or Intermittent (C/I)?	I	**Seasonal Variation** Check box if none: ☒ Otherwise estimate seasonal variation:	
Minutes per hour:	60	Winter Percent	
Hours per day:	1	Spring Percent	
Days per week:	5	Summer Percent	
Weeks per year:	52	Fall Percent	

4. Emission Point Information

Height above ground (ft):	10'1"	Length and width dimensions at top of rectangular stack (ft):	Length: N/A	Width: N/A
Height above structures (ft):	N/A			
Exit temperature (ºF):	ambient	Inside diameter at top of round stack (ft):		0.33 ft
Exit velocity (ft/min):		Distance from emission point to nearest property line (ft):		14 ft
Exhaust gas volumetric flow rate (acfm):		Building dimensions if emission point is located on building (ft)	Height N/A	Length N/A / Width N/A

5. Control Devices Associated with the Emission Point

Identify each control device associated with the emission point and indicate the number of devices. ***A Form 6 is also required for each control device***. If none check none:

- ☐ None
- ☐ Baghouse No. _____
- ☐ Cyclone No. _____
- ☐ Elec. Precipitator (ESP) No. _____
- ☐ Dust Suppression System No. _____
- ☐ Venturi Scrubber No. _____
- ☐ Spray Tower/Packed Bed No. _____
- ☐ Carbon Adsorber No. _____
  - ☐ Cartridge/Canister
  - ☐ Regenerative
- ☐ Thermal Oxidizer No. _____
  - ☐ Regenerative
- ☐ Catalytic Oxidizer No. _____
- ☐ Nitrogen Oxides Reduction No. _____
  - ☐ Selective ☐ Non-Selective
  - ☐ Catalytic ☐ Non-Catalytic
- ☒ Other No. _____
  Specify: Stage I Vapor Recovery

FORM 5EP: Emission Point Data

6. Estimated Emissions from the Emission Point

Criteria Pollutants	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
Particulate Matter (filterable as PM10)	*See attached			
Particulate Matter (filterable as PM2.5)				
Particulate Matter (condensables)				
Volatile Organic Compounds (VOC)				
Oxides of Sulfur (SOx)				
Oxides of Nitrogen (NOx)				
Carbon Monoxide (CO)				
Lead (Pb)				
Greenhouse Gases (GHG)	**At Design Capacity (lb/hr)**	**At Projected Operations**		
		(lb/hr)	**(lb/day)**	**(ton/yr)**
Carbon Dioxide (CO_2)	*See attached			
Methane (CH_4)				
Nitrous Oxide (N_2O)				
Hydrofluorocarbons (HFCs)				
Perfluorocarbons (PFCs)				
Sulfur Hexafluoride (SF6)				
Total GHG (as CO_2e)				
List individual federal Hazardous Air Pollutants (HAP) below:	**At Design Capacity (lb/hr)**	**At Projected Operations**		
		(lb/hr)	**(lb/day)**	**(ton/yr)**
*See attached				

(Attach additional sheets as necessary.)

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Air and Radiation Management Administration ● Air Quality Permits Program
1800 Washington Boulevard ● Baltimore, Maryland 21230
(410)537-3225 ● 1-800-633-6101● www.mde.maryland.gov

FORM 5EP: Emission Point Data

Complete one (1) Form 5EP for EACH emission point (stack or fugitive emissions) related to the proposed installation.

Applicant Name: Petroleum Managment Inc.

1. Emission Point Identification Name/Number

List the applicant assigned name/number for this emission point and use this value on the attached required plot plan:
20,000-gal AST

2. Emission Point Description

Describe the emission point including all associated equipment and control devices:
Stage I Vapor Recovery Line to be used during tank fill

3. Emissions Schedule for the Emission Point

Continuous or Intermittent (C/I)?	I	**Seasonal Variation** Check box if none: ☒ Otherwise estimate seasonal variation:	
Minutes per hour:	60	Winter Percent	
Hours per day:	1	Spring Percent	
Days per week:	5	Summer Percent	
Weeks per year:	52	Fall Percent	

4. Emission Point Information

Height above ground (ft):	9'3"	Length and width dimensions at top of rectangular stack (ft):	Length: TBD	Width: TBD	
Height above structures (ft):	TBD				
Exit temperature (ºF):	TBD	Inside diameter at top of round stack (ft):		TBD	
Exit velocity (ft/min):	TBD	Distance from emission point to nearest property line (ft):		TBD	
Exhaust gas volumetric flow rate (acfm):	TBD	Building dimensions if emission point is located on building (ft)	Height TBD	Length TBD	Width TBD

5. Control Devices Associated with the Emission Point

Identify each control device associated with the emission point and indicate the number of devices. ***A Form 6 is also required for each control device***. If none check none:

- ☐ None
- ☐ Baghouse No. _____
- ☐ Cyclone No. _____
- ☐ Elec. Precipitator (ESP) No. _____
- ☐ Dust Suppression System No. _____
- ☐ Venturi Scrubber No. _____
- ☐ Spray Tower/Packed Bed No. _____
- ☐ Carbon Adsorber No. _____
  - ☐ Cartridge/Canister
  - ☐ Regenerative
- ☐ Thermal Oxidizer No. _____
  - ☐ Regenerative
- ☐ Catalytic Oxidizer No. _____
- ☐ Nitrogen Oxides Reduction No. _____
  - ☐ Selective ☐ Non-Selective
  - ☐ Catalytic ☐ Non-Catalytic
- ☒ Other No. _____
  Specify: Stage I Vapor Recovery

FORM 5EP: Emission Point Data

6. Estimated Emissions from the Emission Point

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		(lb/hr)	(lb/day)	(ton/yr)
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Particulate Matter (condensables)				
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Oxides of Nitrogen (NOx)				
Carbon Monoxide (CO)				
Lead (Pb)				

Greenhouse Gases (GHG)	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
Carbon Dioxide (CO_2)	*See attached			
Methane (CH_4)				
Nitrous Oxide (N_2O)				
Hydrofluorocarbons (HFCs)				
Perfluorocarbons (PFCs)				
Sulfur Hexafluoride (SF6)				
Total GHG (as CO_2e)				

List individual federal Hazardous Air Pollutants (HAP) below:	At Design Capacity (lb/hr)	At Projected Operations		
		(lb/hr)	(lb/day)	(ton/yr)
*See attached				

(Attach additional sheets as necessary.)

AIR QUALITY PERMIT TO CONSTRUCT APPLICATION CHECKLIST

OWNER OF EQUIPMENT/PROCESS	
COMPANY NAME:	Petroleum Management, Inc.
COMPANY ADDRESS:	1030 E Patapsco Avenue. Baltimore, MD 21225
LOCATION OF EQUIPMENT/PROCESS	
PREMISES NAME:	Petroleum Management, Inc.
PREMISES ADDRESS:	1030 E Patapsco Avenue, Baltimore, MD 21225
CONTACT INFORMATION FOR THIS PERMIT APPLICATION	
CONTACT NAME:	Zachary Hisey
JOB TITLE:	Environmental Engineer
PHONE NUMBER:	(717) 316-9429
EMAIL ADDRESS:	zhisey@eaest.com
DESCRIPTION OF EQUIPMENT OR PROCESS	
Two (2) aboveground storage tanks for storage of gasoline (each 20,000 gallons).	

Application is hereby made to the Department of the Environment for a Permit to Construct for the following equipment or process as required by the State of Maryland Air Quality Regulation, COMAR 26.11.02.09.

Check each item that you have submitted as part of your application package.

☒ Application package cover letter describing the proposed project

☒ Complete application forms (Note the number of forms included or NA if not applicable.)

No. 1 Form 5
No. 1 Form 5T
No. 2 Form 5EP
No. 1 Form 6
No. NA Form 10
No. NA Form 11
No. NA Form 41
No. NA Form 42
No. NA Form 44

☒ Vendor/manufacturer specifications/guarantees

☒ Evidence of Workman's Compensation Insurance

☒ Process flow diagrams with emission points

☒ Site plan including the location of the proposed source and property boundary

☒ Material balance data and all emissions calculations

☒ Material Safety Data Sheets (MSDS) or equivalent information for materials processed and manufactured.

☐ Certificate of Public Convenience and Necessity (CPCN) waiver documentation from the Public Service Commission (1)

☒ Documentation that the proposed installation complies with local zoning and land use requirements (2)

(1) Required for emergency and non-emergency generators installed on or after October 1, 2001 and rated at 2001 kW or more.

(2) Required for applications subject to Expanded Public Participation Requirements.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Blvd ▪ Baltimore, Maryland 21230
(410) 537-3230 ▪ 1-800-633-6101 ▪ www.mde.state.md.us

Air and Radiation Management Administration ▪ Air Quality Permits Program

APPLICATION FOR PERMIT TO CONSTRUCT
GAS CLEANING OR EMISSION CONTROL EQUIPMENT

1. Owner of Installation Petroleum Management, Inc.	**Telephone No.** 410-354-0200		**Date of Application**
2. Mailing Address 1030 E Patapsco Ave.	**City** Baltimore	**Zip Code** 21225	**County** Baltimore
3. Equipment Location 1030 E Patapsco Ave.	**City/Town or P.O.** Baltimore		**County** Baltimore
4. Signature of Owner or Operator	**Title**		**Print or Type Name**
W. Scott	Operations Manager		W. Scott Alexander
5. Application Type:	**Alteration** ☐		**New Construction** ☑
6. Date Construction is to Start: Estimated July 2025			**Completion Date (Estimate):** Estimated December 2025

7. Type of Gas Cleaning or Emission Control Equipment:

Simple Cyclone ☐ **Multiple Cyclone** ☐ **Afterburner** ☐ **Electrostatic Precipitator** ☐

Scrubber ☐ _____ (type) **Other** ☑ Stage I Vapor Recovery (type)

8. Gas Cleaning Equipment Manufacturer | **Model No.** | **Collection Efficiency (Design Criteria)**

9. Type of Equipment which Control Equipment is to Service:

Aboveground fuel storage tank (gasoline)

10. Stack Test to be Conducted:

Yes ☐ **No** ☑ _____ (Stack Test to be Conducted By) _____ (Date)

11. Cost of Equipment Approx. $150,000

Estimated Erection Cost Approx. $150,000

12. The Following Shall Be Design Criteria:

	INLET	OUTLET
Gas Flow Rate	_____ ACFM*	_____ACFM*
Gas Temperature	_____ °F	_____°F
Gas Pressure	_____ INCHES W.G.	_____INCHES W.G.
	PRESSURE DROP _____	
Dust Loading	_____ GRAINS/ACFD**	_____GRAINS/ACFD**
Moisture Content OR Wet Bulb Temperature	_____ % _____ °F	_____% _____°F
Liquid Flow Rate (Wet Scrubber)	_____ GALLONS/MINUTE	

(WHEN SCRUBBER LIQUID OTHER THAN WATER INDICATE COMPOSITION OF SCRUBBING MEDIUM IN WEIGHT %)

*= ACTUAL CUBIC FEET PER MINUTE **= ACTUAL CUBIC FEET DRY

WHEN APPLICATION INVOLVES THE REDUCTION OF GASEOUS POLLUTANTS, PROVIDE THE CONCENTRATION OF EACH POLLUTANT IN THE GAS STREAM IN VOLUME PERCENT. INCLUDE THE COMPOSITION OF THE GASES ENTERING THE CLEANING DEVICE AND THE COMPOSITION OF EXHAUSTED GASES BEING DISCHARGED INTO THE ATMOSPHERE. USE AVAILABLE SPACE IN ITEM 15 ON PAGE 3.

13. Particle Size Analysis

Size of Dust Particles Entering Cleaning Unit	% of Total Dust	% to be Collected
0 to 10 Microns	_____	_____
10 to 44 Microns	_____	_____
Larger than 44 Microns	_____	_____

14. For Afterburner Construction Only:

Volume of Contaminated Air _____ CFM (DO NOT INCLUDE COMBUSTION AIR)

Gas Inlet Temperature _____ °F

Capacity of Afterburner _____ BTU/HR

Diameter (or area) of Afterburner Throat_____

Combustion Chamber_____ _____ Operating Temperature at Afterburner _____ °F
(diameter) (length)

Retention Time of Gases _____

15. Show Location of Dust Cleaning Equipment in the System. Draw or Sketch Flow Diagram Showing Emission Path from Source to Exhaust Point to Atmosphere.

N/A

Date Received: Local _____ _____ **State** _____

Acknowledgement Date: _____

By _____

Reviewed By:

Local _____

State _____

Returned to Local:

Date_____

By _____

Application Returned to Applicant:

Date_____

By _____

REGISTRATION NUMBER OF ASSOCIATED EQUIPMENT: ☐ ☐☐☐☐

PREMISES NUMBER: ☐☐ ☐☐☐☐

Emission Calculations Revised By _____ **Date** _____

Project Potential Emissions

Pollutants	Potential to Emit	
	lb/hr	tpy
VOC	1.93	0.66
Benzene	6.30E-03	4.37E-03
Hexane	2.00E-02	1.52E-02
Toluene	1.08E-02	8.85E-03
Ethylbenzene	7.88E-04	7.49E-04
2,2,4-Trimethylpentane	1.30E-02	2.47E-02
Napthalene	1.63E-06	1.95E-08
HAPs	5.08E-02	5.38E-02

TANKS 5.1 Output for Standing Emissions

Tank ID	Tank Type	Description	City, State	Company	Meteorological Location	Chemical Name	Annual Standing Losses (lb/yr)	Annual Total Losses (lb/yr)
PMI 1	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	PMI Gasoline	1264.332653	1264.332653
PMI 1	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Benzene		4.290290484
PMI 1	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Hexane (n)		14.94086426
PMI 1	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Toluene		8.722372009
PMI 1	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Ethylbenzene		0.739815447
PMI 1	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Isooctane: (2,2,4-trimethylpentane)		24.4982886
PMI 2	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	PMI Gasoline	1264.332653	1264.332653
PMI 2	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Benzene		4.290290484
PMI 2	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Hexane (n)		14.94086426
PMI 2	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Toluene		8.722372009
PMI 2	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Ethylbenzene		0.739815447
PMI 2	Horizontal Fixed Roof Tank	20,000 gallon A	Baltimore, Maryland	Petroleum Management Inc.	Baltimore, MD	Isooctane: (2,2,4-trimethylpentane)		24.4982886

Note:

1) Based on EPA TANKS 5.1 Output for two horizontal, fixed roof, 20,000 gallon, white tanks

2) PMI Gasoline has the same characteristics as RVP10 gasoline, with speciated HAPs and TAPs

3) Working emissions are not included and are hand calculated in separate table

20,000 gal tank dimensions (ft)

34.08	Length
10	Diameter

VOC Emissions for Filling Operations

Lv, variable filling space loss	6.43	lb/1000 gal throughput
Mv, molecular weight of vapor in storage tank	66	lb/lb*mol
Pva, true vapor pressure at the avarage daily liquid surface temperature	4.06	psia
V1, volume of liquid pumped into system, throughput	8571.43	bbl/yr
V2, volume expansion capacity of system	0	bbl/yr
N2, number of transfers into system	730	dimensionless
Annual Throughput Estimation	360000	Gallons
Estimated Fill Rate	15000	Gallons/hr
Annual Emissions Estimation (No Mitigation)	2315.17	lb/year
Annual Emissions Estimation (With Stage I Vapor Recovery)	46.30	lb/year
Emissions Estimation (With Stage I Vapor Recovery)	1.9293	lb/hr

HAP/TAP Emissions for Filling Operations

HAP/TAP Component	Vapor Mole Percent of Component	Component Emissions Estimation (lb/hr)	Component Emissions Estimation (tpy)
Benzene	0.326719366	0.006303436	7.56412E-05
Hexane	1.034982295	0.019968038	0.000239616
Toluene	0.559147316	0.010787696	0.000129452
Ethylbenzene	0.040825192	0.000787645	9.45174E-06
2,2,4-trimethylpentane	0.671422324	0.012953831	0.000155446
Napthalene	8.43351E-05	1.62709E-06	1.95251E-08

Avg Temperature Deg C 12.83 Total Vapor Pressure of Stock Liquid (psia) 4.06

Speciation Calculation for Filling Operations

HAP/TAP	mol% liquid	A	B	C	Vapor Pressure (psia)	Partial Pressure of Component (psia)	Vapor Mole Percent of Component
Benzene	1.3	6.906	1211	220.79	1.020369712	0.013264806	0.326719366
Hexane	2.5	6.878	1171.5	224.37	1.680811247	0.042020281	1.034982295
Toluene	8	7.017	1377.6	222.64	0.283767263	0.022701381	0.559147316
Ethylbenzene	1.9	6.95	1419.3	212.61	0.087236989	0.001657503	0.040825192
2,2,4-trimethylpentane	10	6.844	1328.1	220.38	0.272597463	0.027259746	0.671422324
napthalene	0.18	7.146	1831.6	211.82	0.001902226	3.42401E-06	8.43351E-05

Notes

1) Assumes an averaged blend of gasoline composition for emissions.

2) Speciation is based on vapor pressure calculated by Antoine's Equation

$$\log_{10} p = A - \frac{B}{C + T}.$$

Ambient Impact and Compliance Demonstration

			Screening Level Concentrations (µg/m^3)			HAP/TAP Emission Rate		Emmision Factor Source (See Notes)	1-hr STEL Calculated Allowable Emission Rate	8-hr TWA Calculated Allowable Emission Rate	Annual Calculated Allowable Emission Rate	1-hr STEL PASS? (AER > TAP Emission Rate)	8-hr TWA PASS? (AER>TAP Emission Rate)	Annual PASS? (AER > TAP Emission Rate)
HAP/TAP	CAS No.	HAP? (Y/N)	1-hr STEL	8-hr TWA	Annual	(lb/hr)	(lb/yr)	EF Source	(lb/hr)2	(lb/hr)3	(lb/yr)	(PASS/FAIL)	(PASS/FAIL)	(PASS/FAIL)
Benzene	71432	Y	79.86707566	15.97341513	0.13	0.006303	8.731863	8	0.21	0.04	36.52	PASS	PASS	PASS
Hexane	110543	Y	1762.372188	176.2372188	0	0.019968		8	0.89	0.46	0	PASS	PASS	
Toluene	108883	Y	565.2760736	376.8507157	0	0.010788		8	0.89	0.89	0	PASS	PASS	
Ethylbenzene	100414	Y	471.0633947	376.8507157	0	0.000788		8	0.89	0.89	0	PASS	PASS	
2,2,4-trimethylpentane	540841	Y	1401.595092	1401.595092	0	0.012954		8	0.89	0.89	0	PASS	PASS	
Napthalene	91203	Y	52.42126789	52.42126789	0	1.63E-06		8	0.1	0.1	0	PASS	PASS	

Notes

1) Gasoline vapor produced during AST fill assumed to be the worst case hourly HAP/TAP emissions

2) Assumes an averaged blend of gasoline composition for emissions.

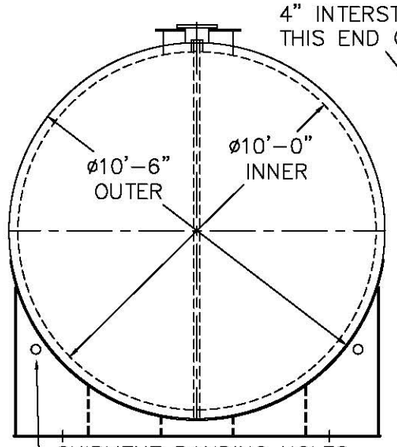
TOUCH UP OF FINISHED PAINT IS REQUIRED BY INSTALLATION CONTRACTOR. TOUCH UP PAINT SHIPPED WITH TANK.

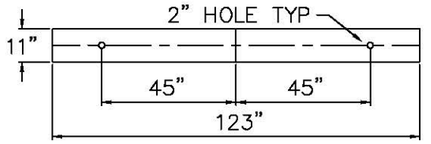
SHIP LOOSE

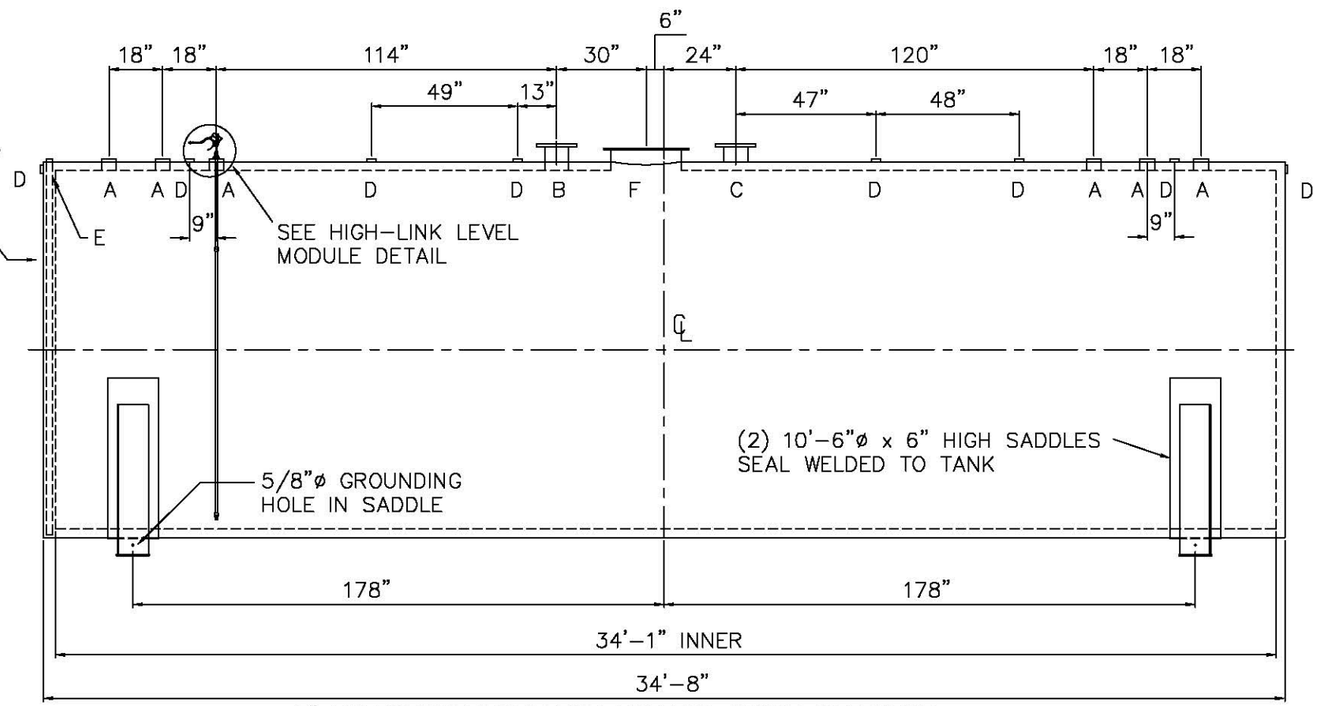
(2) 8" FLANGED EMERGENCY VENTS

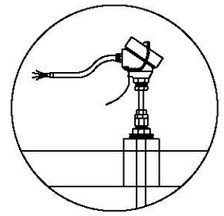
(1) HIGH-LINK LEVEL SHIELD MODEL# LS_XEXD_3500 138" LONG & BUSHING WITH LS_LINK_GPRS COMMUNICATION BOX.

SHIPPING LUGS AS NEEDED

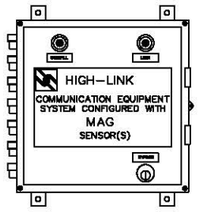








HIGH-LINK LEVEL SHIELD DETAIL



COMMUNICATION BOX DETAIL

DESIGN DATA

CAPACITY : 20,000 GALLONS
TYPE: FIREGUARD® CYLINDRICAL
FIREGUARD® IS A TRADEMARK OF THE STEEL TANK INSTITUTE
NO. REQ. – –
OPERATING PRESSURE – ATMOSPHERIC
SPECIFIC GRAVITY = 1.0
TANK MATERIAL – MILD CARBON STEEL
THICKNESS – INNER – HEADS: 5/16", SHELL: 1/4"
THICKNESS – OUTER – HEADS: 5/16", SHELL: 1/4"
MIN. GAUGE OR THICKNESS (PER U.L. 2085)
CONSTRUCTION – INNER – LAP WELD OUTSIDE ONLY
CONSTRUCTION – OUTER – LAP WELD OUTSIDE ONLY
TANK TEST – INNER – 5 PSIG OUTER – 5 PSIG
INT. FINISH – NONE
EXT. FINISH – SP-6 BLAST, FINISH PAINT WHITE
LABEL– UL 2085 AND FIREGUARD® PER sti

LEGEND

A	4" FEMALE FIREGUARD COUPLING
B	8" FFSO 150# FLANGE – FOR PRIMARY EMERGENCY VENT USE ONLY
C	8" FFSO 150# FLANGE THROUGH OUTER SHELL ONLY, MARK WITH SPECIAL WARNING LABEL INTERSTITIAL EMERGENCY VENT USE ONLY
D	2" FITTING THROUGH OUTER SHELL ONLY WITH CAST IRON PLUG– MFG USE ONLY
E	2" INTERSTITIAL MONITOR PIPE – MALE NPT END
F	24" x 1/4" PLATE TIGHT BOLT MANWAY WITH 1/8" THICK FIBREFLEX GASKET

NOTES:

STRIKER PLATES ARE NOT SUPPLIED ON FIREGUARDS® UNLESS SPECIFIED

Highland Tank

UNLESS NOTED, TOLERANCES ARE +/- 1"

20,000 GAL 120"ø CYL. FIREGUARD®

PATENT: 5,695,089 PATENT: 5,809,650

CUSTOMER:

PROJECT:

QUOTE NO:

CHK'D BY:

SCALE:	DATE:	DWG. BY:	DWG. NO.:
1/4"=1'-0"			20000FGCYL120

Specifications:

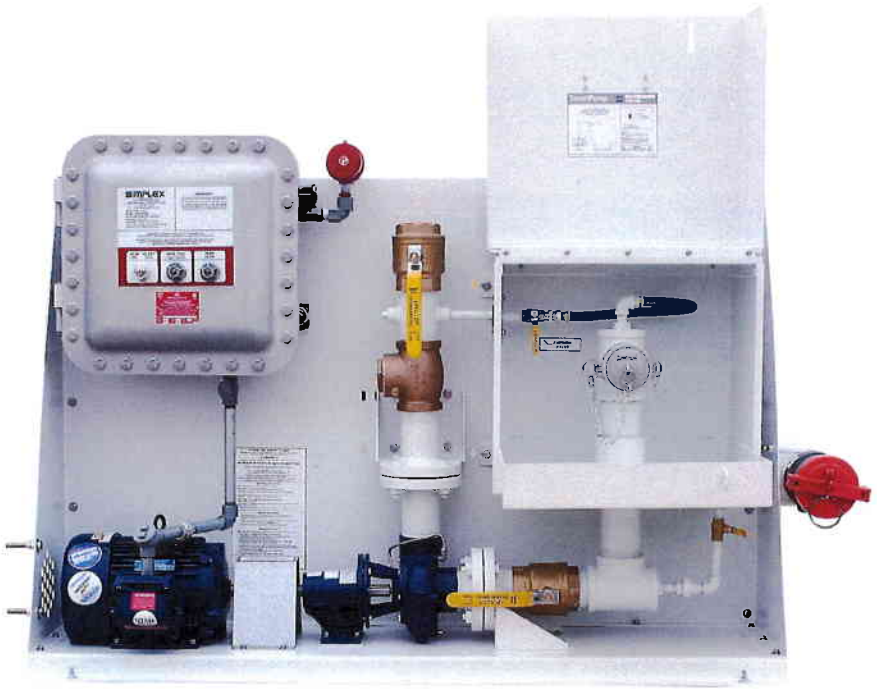
Fitting size: 2", 3" or 4"
Spill containment: 7 gallons
Paint: white
Net weight: 617 lbs. (Oil), 632 lbs. (Gas)
High level floatset: 2"

Includes:

- Freestanding, pad mountable, open construction pumpset with weatherproof and lockable fill box with 7 gallon spill containment sump and weatherproof and lockable control box
- 2", 3" or 4" fittings available
- Quick disconnect hose coupling with dust plug
- Inlet shutoff valve
- Check valve
- Outlet shutoff valve
- Line purging valve
- Spill sump drain valve
- High capacity transfer pump, see details below
- Automatic controller, described below
- Ground stud

Controller Includes:

- High level floatset for installation in 2" tank fitting minimum
- Tank Full visual alarm
- High Level visual alarm
- Tank Leak alarm
- Audible alarm horn activated by alarms above
- Power Available indicator
- Control Power On-Off switch
- Pump Start/Stop push-buttons
- Top-off/hose drain mode push-button
- Pump starter
- Type 3R control enclosure (fuel oil version)
- Type 7 explosion proof control enclosure (gasoline version)



Gas SmartPump with Vapor Recovery

PUMP PERFORMANCE

SmartPump with 5 hp pump, 3" or 4" inlet:	Head (ft.)	Gpm
	75	200
	65	250
	55	300
	40	350
	25	400

SmartPump with 2 hp pump, 2" inlet:	Head (ft.)	Gpm
	55	75
	45	125
	35	150
	15	200

SmartPump Order Checklist

- ☑ If gasoline use, is vapor recovery required? Yes
- ☑ How many tanks to fill? 2
- ☐ 2 hp (150 gpm) or 5 hp (300 gpm) SmartPump?
- ☑ Specify voltage: single phase: 120v or 240v; 3 phase: 208, 240, 416, 480v
- ☑ If 5 hp, 3" or 4" inlet?
- ☑ Tank leak sensing required? YES
- ☑ Accurate tank dimensions required, 2" or 4" fitting required for transmitter (specify)
- ☑ Specify options: Enclosure - Dry Break Fittings

SIMPLEX INC.
5300 Rising Moon Road, Springfield, IL 62711 • simplexdirect.com • 800-637-8603
Nationwide Manufacturing (ISO9001: 2015 certified)

SIMPLEX®

Single-Tank SmartPumps

Includes level transmitter shipped loose for remote tank mounting

MODEL NO.	APPLICATION**	FITTINGS	HP/GPM
SP-2	Oil	2"	2/150
SP-2G	Gas	2"	2/150
SP-3	Oil	3"	5/300
SP-3G	Gas	3"	5/300***
SP-3GV	Gas, with vapor recovery	3"	5/300***
SP-4*	Oil	4"	5/300
SP-4G*	Gas	4"	5/300***
SP-4GV*	Gas, with vapor recovery	4"	5/300***

**4" inlet, 3" internals and outlet*

****APPLICATION**: "Oil" = Class II liquid, flash point > 100° F
"Gas" = Class I liquid, flash point < 100° F

*****SP-3, SP-4 Gasoline (or Explosion-Proof) SmartPumps rated at 5 hp, 300 gpm must be 3-phase voltage. If only single phase is available at job site then a SP-2 at 2 hp, 150 gpm can be used. However, Simplex can install a larger inlet coupling as required.

Two-Tank SmartPumps

Includes two level transmitters and two electrically operated shutoff valves shipped loose for remote tank mounting.

MODEL NO.	APPLICATION**	FITTINGS	HP/GPM
SP-2/2	Oil	2"	2/150
SP-2G/2	Gas	2"	2/150
SP-3/2	Oil	3"	5/300
SP-3G/2	Gas	3"	5/300***
SP-3GV/2	Gas, w/vapor rec.	3"	5/300***
SP-4/2*	Oil	4"	5/300
SP-4G/2*	Gas	4"	5/300***
SP-4GV/2*	Gas, w/vapor rec.	4"	5/300***

**4" inlet, 3" internals and outlet*

****APPLICATION**: "Oil" = Class II liquid, flash point > 100° F
"Gas" = Class I liquid, flash point < 100° F

*****SP-3, SP-4 Gasoline (or Explosion-Proof) SmartPumps rated at 5 hp, 300 gpm must be 3-phase voltage. If only single phase is available at job site then a SP-2 at 2 hp, 150 gpm can be used. However, Simplex can install a larger inlet coupling as required.

Multiple Tank SmartPumps

Two or more tanks: includes level transmitters, and electrically operated shutoff valves for remote tank mounting (one set for each tank) and a thermal expansion pressure relief valve (one for each system) shipped loose. Change model number suffix to indicate number of tanks.

SmartPump Options:

Inlet Fittings:

- Standard quick disconnect coupling: 2", 3" or 4":
  - 2" available for 2 hp SmartPump
  - 3" and 4" available for 5 hp SmartPump
- Dry disconnect adaptor: 2" or 3":
  - 2" available for 2 hp SmartPump
  - 3" available for 5 hp SmartPump

Valves:

- Fusible link fire valve, installed on outlet
- Fire rated shutoff valves, in lieu of standard bronze valves
- Fire rated shutoff valve assembly for installation on aboveground storage tank fuel inlet, including fire rated ball valve and self-closing fusible link valve (shipped loose)

Leak Sensors:

- Tank leak sensor, float switch type, for mounting in a vertical position in collection sumps, monitoring pipes and steel double wall tank sumps. For installation in 2" fitting. SmartPump controller includes: tank leak alarm, tank fill shutoff, alarm contacts.
- Tank leak sensor, as above, except optical type, for restricted space installation in tank annular space, double wall pipe collection sump, etc.
- Tank lead sensor, floatswitch type, adjustable on cord with cinch-lock fitting

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SmartPump Options cont'd:

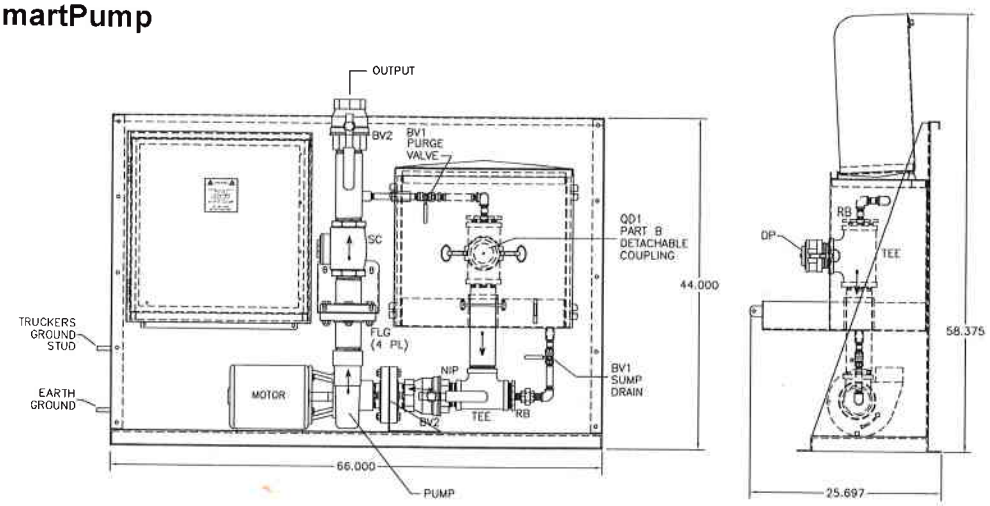
Indicator Gauges:

- Digital level indicator, percent level reading. Includes level transmitter for installation in 2" NPT fitting
- Digital tank monitor with display of tank level in gallons, liters or percent; high and low level alarms, audible alarm; output contact. Includes level transmitter for installation in 2" NPT fitting
- Hydrostatic level gauge, hand pump type with 5" dial type indicator calibrated in gallons. Transmitter installed in 2" tank fitting

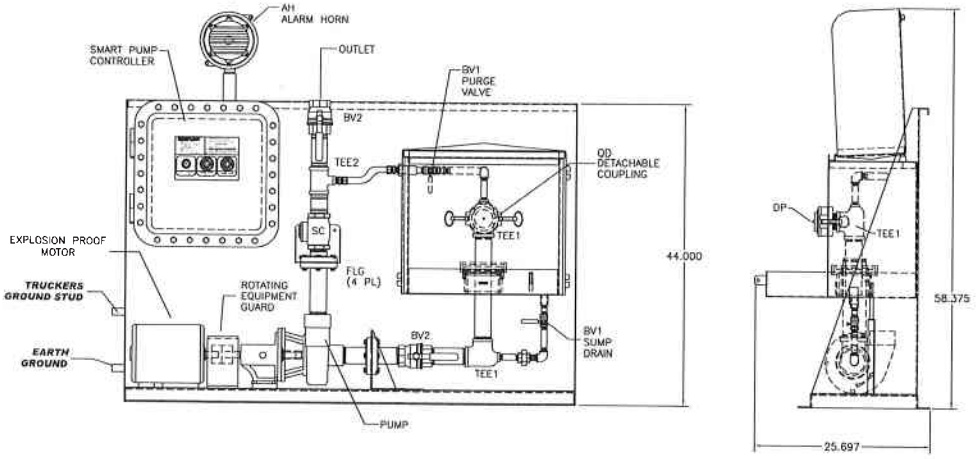
Enclosures:

- Lockable full enclosure with containment basin and hand pump
- Stainless steel cabinet construction for corrosive or coastal environments is also available

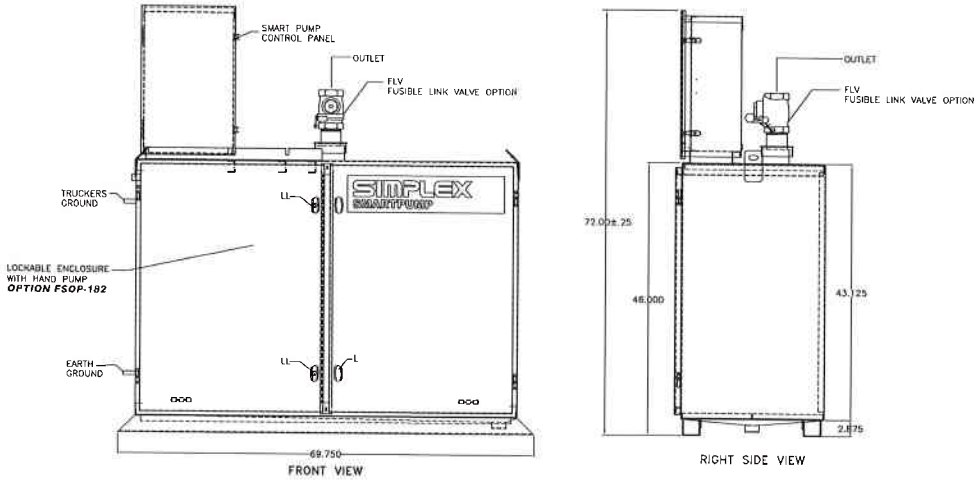
SmartPump



Gas SmartPump



SmartPump with Lockable Enclosure



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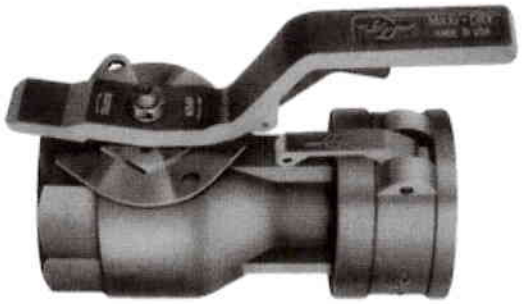
The dry-disconnect below can be used with Simplex Automatic FuelPorts and SmartPumps equipped with an optional dry disconnect adapter.

Dry-disconnect



Optional **Simplex Automatic FuelPort** and **SmartPump** dry-disconnect adapter

OPW 1611 Series Vapor Recovery Adaptor

The OPW 1611AV and 1611AVB are poppeted adaptors, designed to mate with a vapor recovery elbow, for returning gasoline vapor to the tank truck during a fuel delivery to an underground tank.

Materials

Body: Clear anodized aluminum or cast bronze
Stem: Chrome-plated steel
Stem Guide: Acetal resin
Spring: Stainless steel
Gasket: Nitrile

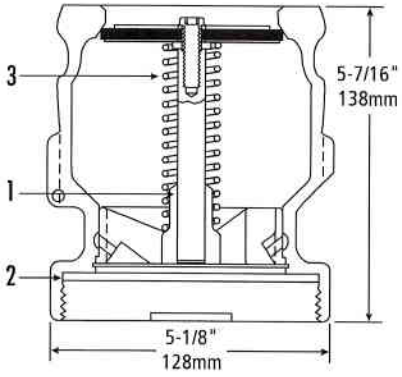
1611AV 3" x 4" (76 x 102mm)

Ordering Specifications

Product #	Elbow Size		Riser Thread				Body Material
	in.	mm	in.	mm	lbs.	kg	
1611AV-1605	3	76	3	76	2.91	1.32	Clear Anodized Aluminum
1611AV-1620	3	76	4	102	3.25	1.48	Clear Anodized Aluminum
1611AVB-1625	3	76	4	102	7.97	3.62	Cast Bronze

Replacement Parts

Key	Part #	Description
1	C02642M	Bridge Guide
Not Shown	H15294M	Screw (3") (76mm)
2	H04145M H04150M	Gasket (3") (76mm) Gasket (3"x 4") (76 x 102mm)
3	H08989M	Spring
61VSA-KIT	Complete Replacement Kit	



Materials

Body: Duratuff®
Pins: Stainless steel
Links: Duratuff®
Gasket: Nitrile
Color: Orange

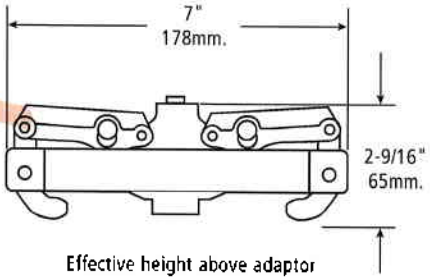
1711T Cap

Ordering Specifications

Product #	in.	mm	lbs.	kg
1711T-7085-EVR	3	76	1.1	.50

Replacement Parts

Part #	Description
H10886M	Nitrile Gasket



Effective height above adaptor
11-9/32"

Materials

Cap: Cast zinc alloy (powder-coated orange)
Lever: Ductile iron
Gasket: Nitrile

1711LPC Cap

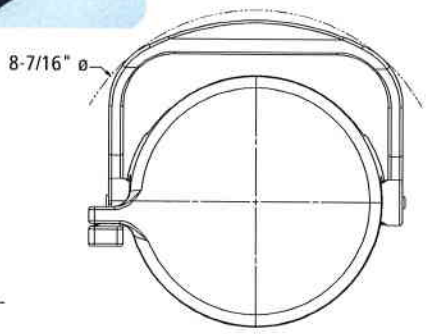
Effective height above adaptor 1/2"

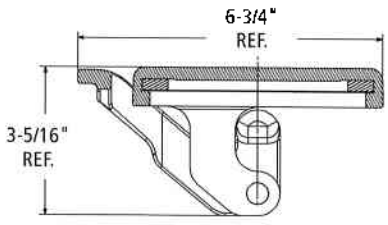
Ordering Specifications

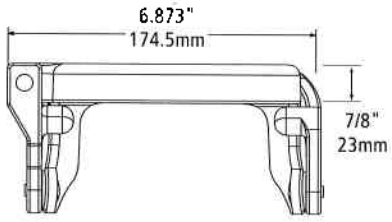
Product #	in.	mm	lbs.	kg
1711LPC-0300	3	76	3.5	1.59

Replacement Parts

Part #	Description
H15005M	Nitrile Gasket







Listings and Certifications

Look for this label for authentic OPW EVR Approved products.
OPW 1711 Series Caps are EVR Approved for E85

OPW Stage I Vapor Recovery Caps

OPW 1711T

The OPW 1711T Vapor Recovery Cap is for use with the OPW 1611AV, 61VSA, 1611AVB and 1611VR Adaptors. The 1711T is installed on the vapor recovery adaptor, when not in use, to prevent vapors from escaping and to prevent water, dust and debris from entering the tank. Constructed of Duratuff® to help prevent corrosion, the OPW 1711T will couple to Civacon/OPW 4" Kamloks, and features a center post that allows an even distribution of force when coupling to the adaptor. The 1711T can be locked with a padlock.

OPW 1711LPC Low Profile Vapor Cap

The OPW 1711LPC Low Profile Top-Seal Vapor Cap is designed for tight installations where the clearance between the top of the vapor adaptor and the underside of the spill container or manhole cover is limited. The rugged iron lever provides a positive cam-action that seats the cap firmly in the adaptor groove for a water and vapor-tight seal. When engaged, the lockable cap adds only 1/2" to the final height of the adaptor. The cap is powder-coated API Orange to signify vapor recovery. The 1711LPC can be used with the OPW 3" 1611AV, 1611AVB and 61VSA series vapor adaptors.

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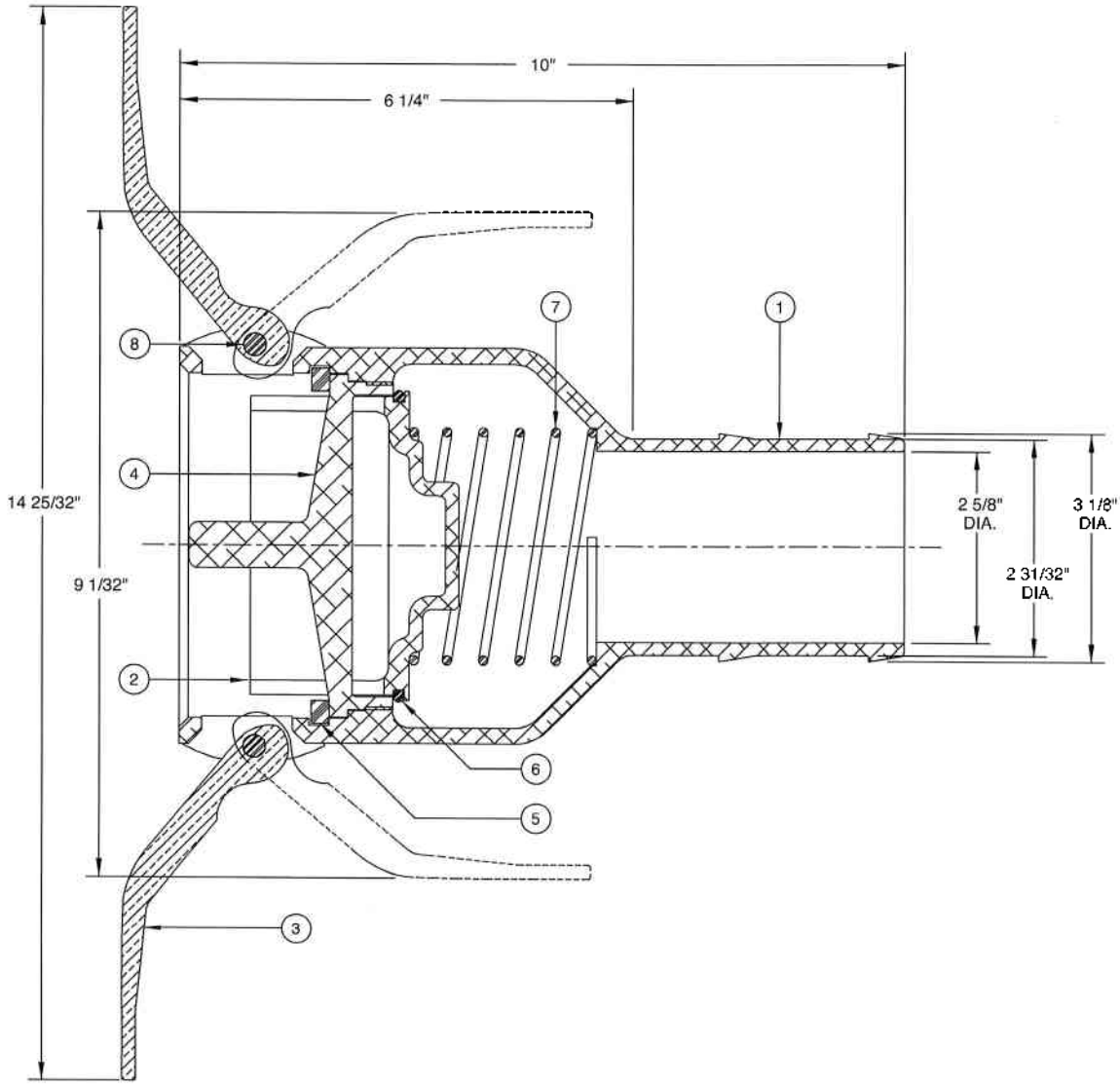
civacon™
AN OPW FLUID TRANSFER GROUP COMPANY

633CPP-4030 4" x 3" Vapor Coupler

Replacement Parts

Rev. 0, January 2003



ITEM	PART NUMBER	DESCRIPTION	QTY.
1	D01116A	BODY	1
2	C02844AH	POPPET	1
3	D00272B	PADDLE ARM	2
4	C02843AH	GUIDE RING	1

ITEM	PART NUMBER	DESCRIPTION	QTY.
5	H08945M	GASKET (BUNA)	1
6	H07408M	O-RING (BUNA)	1
7	H09110M	SPRING	1
8	H20144M	GROOVE PIN	2

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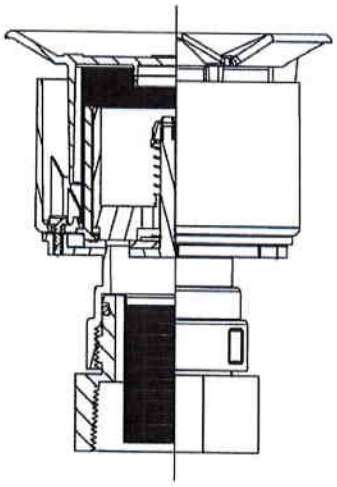
4304 Mattox Road • Kansas City, MO 64150 • www.civacon.com

OPW 623V Pressure Vacuum Vent

Pressure Vacuum Vents are installed on the top of vent pipes from underground or above ground fuel storage tanks. The vent cap and internal wire screen are designed to protect the tank vent lines against intrusion and blockage from water, debris or insects. A normally closed poppet in the valve opens at a predetermined pressure or vacuum setting to allow the tank to vent.



Materials

Top/Body: Polypropylene
Base: Anodized aluminum
Poppet: Anodized aluminum
Screen: Stainless steel mesh
Gasket: Closed cell foam

623V
Vent Must Be Mounted Vertically

Features

- **Pressure/Vacuum Setting –** 2.5" to 6" water column pressure settings and -6" to -10" water column vacuum settings are factory preset and tested
- **Reliable Service –** cycle tested to the equivalent of 80 years of service in the most severe environment without leakage problems
- **Corrosion-Resistant Construction –** a Duratuff® composite body ensures a long service life
- **Easy Installation –** the 623V is available in 2" and 3" threaded versions
- **Complies with NFPA 30 Requirements –** for venting gasoline vapors upward
- **Manifold Vent Pipes –** vent pipes may be manifolded to produce a single Pressure Vacuum Vent line. The 623V is designed to exceed California's requirements of a maximum vapor leak rate of 0.17 SCFH at 2.00 inches H2O
- **High Maximum Flow Rate –** 6450 SCFH at 2 psi (0.1 bar) pressure drop
- **Leak Rate –** multiple pressure vacuum vents may be installed on a single site. The 623V exceeds California standards with a leak rate of 0.05 SCFH or less at 2.00 inches H2O
- **Maintenance –** no tools required. A removable snap fit top allows for easy maintenance (recommended yearly)
- **100-Mesh Stainless Steel Wire Screens –** helps prevent debris and insects from entering the tank vent lines. An added screen installed at the base prevents debris from intruding from the vent stack
- **Adaptor Bushing –** removable hex threaded bushing designed for easy installation on NPT threaded risers. Allows easy access to lower screen
- **ATEX Approved –** for flame arrestor applications

Ordering Specifications

Product #	Description	Identification Label Color	lb.	kg
623V-2203	2.5" to 6" WC Pres., -6" to -10" WC Vac. 2" Thread-On	Yellow	1.55	.70
623V-3203	2.5" to 6" WC Pres., -6" to -10" WC Vac. 3" Thread-On	Yellow	2.20	1.00

Replacement Parts

Part #	Description
C05086M	Lower Screen
H14895M	Upper Screen
C05089	2" Threaded Base Adaptor
C05122	3" Threaded Base Adaptor

Conversion Table

Measurement Units	=	Oz.	PSI	In H2O (WC)	In Hg (Merc)	Bar
Bar	x	236.0	14.5	401.4	29.53	
In. Hg (Mercury)	x	7.843	0.49	13.6		0.034
In H2O (WC)	x	0.578	0.04		0.074	0.002
PSI	x	16.00		27.68	2.04	0.069
Oz.	x		0.063	1.73	0.128	0.004

623V Instruction Sheet
Order Number: **H14898M**

Listings and Certifications

OPW 623V & 523V — ATEX Approved — Patent No. WO2004/036096AZ

Vapor Recovery Piping (3" dia.)

SureThread™

ASTM A53 Type F Grade A—**Submittal Data Sheet**

Scope
Covers black and hot-dip galvanized continuous weld Grade A pipe. Pipe is intended for mechanical and pressure applications and is acceptable for ordinary uses in steam, water, gas and air lines. Wheatland ASTM A53 is UL Listed and FM Approved for NPS sizes 1-4 for fire sprinkler applications, and FM Approved for NPS sizes ½ and ¾. Pipe is not intended for flanging. Produced to ASTM A53/A53M (latest revision). All Wheatland black and galvanized pipe (⅛-6 NPS) is approved for drinking water usage.

Hot-dip Galvanized
The average weight of zinc coating shall not be less than 1.8 ounces per square foot of surface (inside and outside). When galvanized pipe is bent or otherwise fabricated to a degree that causes zinc coating to stretch or compress beyond the limit of elasticity, some flaking of the coating may occur.

HYDROSTATIC TESTING

Hydrostatic testing pressures for plain-end pipe are listed below.

NPS	STANDARD WEIGHT—PSI	EXTRA-STRONG WEIGHT—PSI
½-1	1,500	1,500
1¼-1½	2,000	2,000
2-3	2,500	2,500
3½-4	2,800	2,800

End Finish
Plain End:
NPS 1½ and smaller: Unless otherwise specified on order, end finish shall be at the option of the manufacturer.
NPS 2 and larger: For STD and Schedule 80 weights, ends should be beveled to angle of 30°, +5°, -0° with a root face of 1/16" ± 1/32".

Threaded: to ANSI Standard B 1.20.1
Couplings: to ASTM Standard A865

CHEMICAL REQUIREMENTS

Composition, maximum percentage.

CARBON	MANGANESE	PHOSPHORUS	SULFUR
0.30	1.20	0.05	0.045

COPPER	NICKEL	CHROMIUM	MOLYBDENUM	VANADIUM
0.40	0.40	0.40	0.15	0.08

Tensile Requirements
The combination of these five elements shall not exceed 1%.

Tensile Strength, min.	48,000 psi
Yield Strength, min.	30,000 psi
Elongation in 2"	Refer to A53 Table x 4.1 (latest revision—ASTM A53/A53M)

BENDING TEST (COLD)—NPS 2 & UNDER

	DEGREE OF BEND	DIAMETER OF MANDREL
Standard	90°	12 x outside of pipe diameter
Close Coiling	90°	8 x outside of pipe diameter

FLATTENING TEST—NPS 2½ AND GREATER

As a test for quality of the weld, position the weld at 90° from the direction of force and flatten until the OD is ¾ of the original outside diameter. No cracks shall occur along the inside or outside surface of the weld.

DIMENSIONS & WEIGHTS: BLACK PLAIN END

NOMINAL SIZE	OD INCHES	Sch. 40 WALL INCHES	Sch. 40 WEIGHT LB./FT.	Sch. 80 WALL INCHES	Sch. 80 WEIGHT LB./FT.
⅛	0.840	0.109	0.85	0.147	1.09
¼	1.050	0.113	1.13	0.154	1.48
1	1.315	0.133	1.68	0.179	2.17
1¼	1.660	0.140	2.27	0.191	3.00
1½	1.900	0.145	2.72	0.200	3.63
2	2.375	0.154	3.66	0.218	5.03
2½	2.875	0.203	5.80	0.276	7.67
3	3.500	0.216	7.58	0.300	10.26
3½	4.000	0.226	9.12	0.318	12.52
4	4.500	0.237	10.80	0.337	15.00

Permissible Variations in Wall Thickness
Minimum wall thickness at any point shall not be more than 12.5% under nominal wall thickness specified.

Permissible Variations in Outside Diameter

NPS	1½ and under	± 0.016"
NPS	2 and over	± 1%

Permissible Variations in Weight per Foot
Pipe shall not vary more than ± 10% from the standard specified.

Product Marking
Each length of pipe NPS ½ and larger is continuously stenciled to show the manufacturer, the grade of pipe (ASTM A53), the kind of pipe (F for continuous weld, A for Grade A), the size (Schedule 80 for extra strong) and length. Stencil markings indicate UL Listing and FM Approval for sizes NPS 1-4 for use in fire sprinkler pipe applications. Bar coding is acceptable as a supplementary identification method. Wheatland stencils "SureThread" on the pipe to ensure that you are receiving our SureThread product.

SUBMITTAL INFORMATION

PROJECT: _____ CONTRACTOR: _____ DATE: _____

ENGINEER: _____ SPECIFICATION REFERENCE: _____ SYSTEM TYPE: _____

LOCATIONS: _____ COMMENTS: _____

WST-031217

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Sharon, PA 16146
P 800.257.8182
F 724.346.7260

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CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 8/9/2024

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PRODUCER	CONTACT NAME: Steven McAndrew
Richardson Insurance Group, LLC 117 Church Lane Second Fl Hunt Valley MD 21030	PHONE (A/C, No, Ext): 410-666-4419 FAX (A/C, No): E-MAIL ADDRESS: StevenM@richardsoninsgroup.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : WESTCHESTER SURPLUS LINES INS CO	10172
INSURER B : ACE Property and Casualty Insurance Company	20699
INSURER C : Chesapeake Employers Insurance Company	11039
INSURER D : Zurich American Ins Co	16535
INSURER E :	
INSURER F :	

INSURED PETRREC-01

Petroleum Recovery and Remediation Management Inc.; Petroleum Management Inc.
1030 E. Patapsco Ave
Baltimore MD 21225

COVERAGES **CERTIFICATE NUMBER:** 2008034558 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X **COMMERCIAL GENERAL LIABILITY** [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:			G71501619 006	3/13/2024	3/13/2025	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG 	$ 1,000,000 $ 100,000 $ 10,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	**AUTOMOBILE LIABILITY** X ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY [ ] MCS-90 Endt [ ] CA9948 Endt			H08471009 006	3/13/2024	3/13/2025	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) 	$ 1,000,000 $ $ $ $
A	[ ] **UMBRELLA LIAB** [X] OCCUR X **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			G71501620 006	3/13/2024	3/13/2025	EACH OCCURRENCE AGGREGATE 	$ 5,000,000 $ 5,000,000 $
C	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N: N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		3807445	6/6/2024	6/6/2025	X PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
D A A	DC/VA Work Comp Pollution Liability Professional Liability			WC4685716-12 G71501619 006 G71501619 006	6/6/2024 3/13/2024 3/13/2024	6/6/2025 3/13/2025 3/13/2025	$1M / $1M / $1M $1,000,000 Limit $1,000,000 Limit	$5,000 Deductible $5,000 Deductible

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

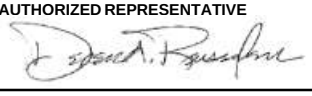
CERTIFICATE HOLDER

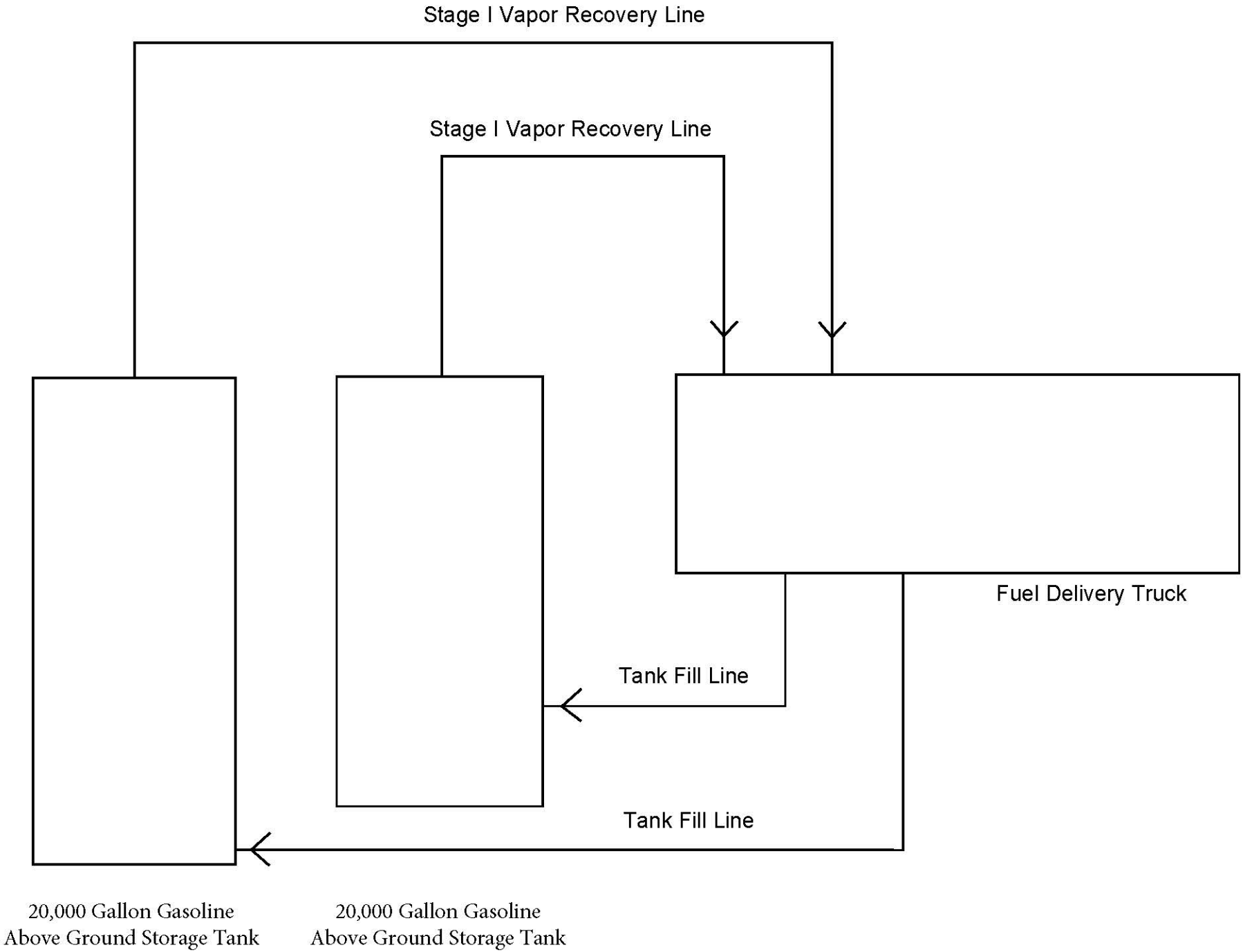
Proof of Insurance

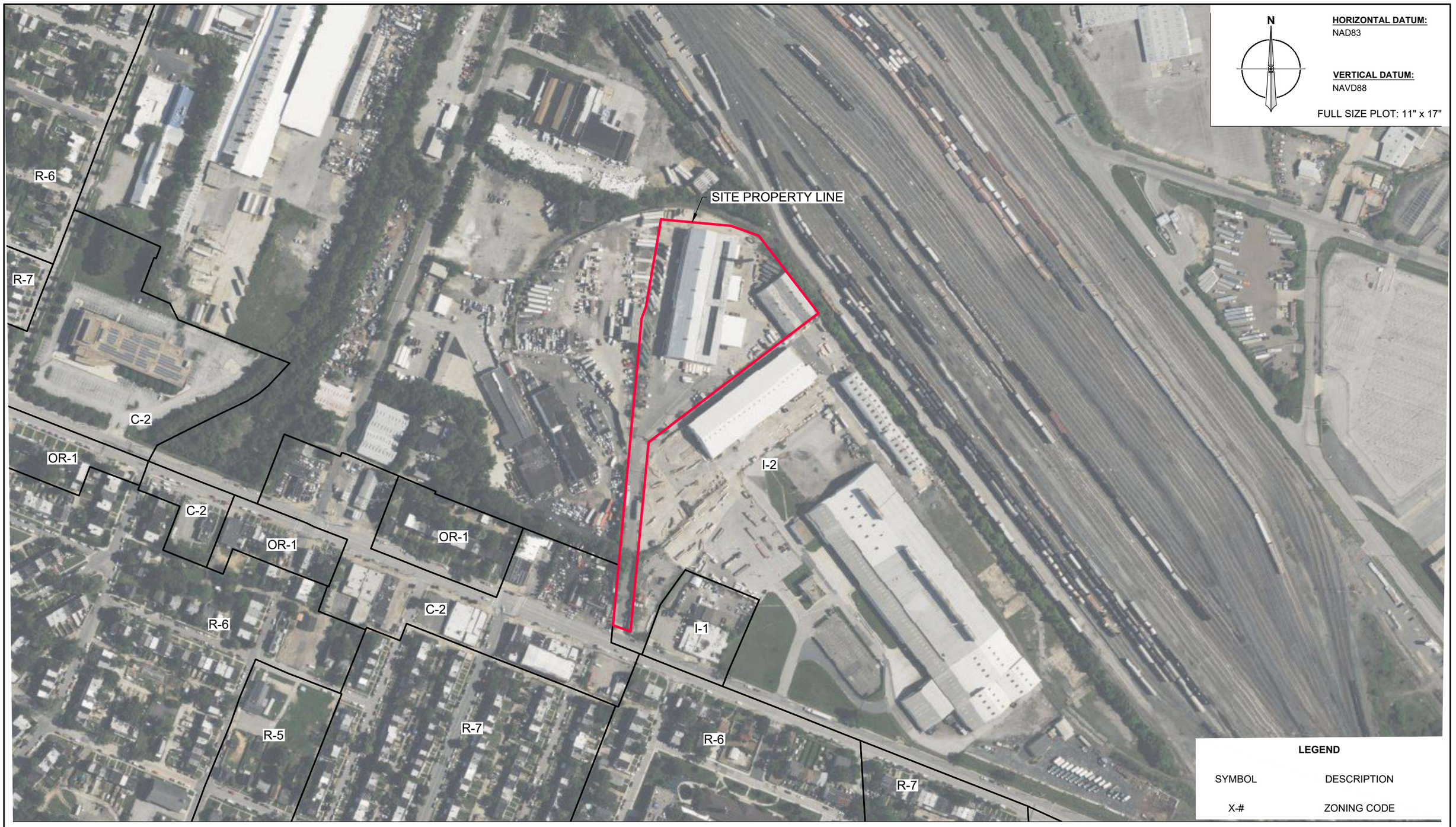
CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE




Stage I Vapor Recovery Line
Stage I Vapor Recovery Line
Fuel Delivery Truck
Tank Fill Line
Tank Fill Line
20,000 Gallon Gasoline
Above Ground Storage Tank
20,000 Gallon Gasoline
Above Ground Storage Tank



EA Engineering, Science, and Technology, Inc., PBC

225 Schilling Circle, Suite 400
Hunt Valley, Maryland 21031
(410) 584-7000

www.eaest.com

0 125 250

GRAPHIC SCALE IN FEET

DATE: SEPT 2024

SITE LOCATION

1030 E PATAPSCO AVE, BALTIMORE, MARYLAND

FILE PATH: Q:\PROJECTS\63215I3 - PMI PATAPSCO AVE AST INSTALLATION II\CAD\PRODUCTION\FIGURES\63215I3 - 01 - ARA APP SITE PLAN.DWG [FIG 2] HUSSELBEE, CLAIRE 5/27/2025 9:37 AM

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0 15 30
GRAPHIC SCALE IN FEET

DATE: MAY 2025

PROPOSED ABOVEGROUND STORAGE TANK INSTALLATION
1030 E PATAPSCO AVE, BALTIMORE, MARYLAND

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com
VELAP ID 460040

04 October 2024

Scott Alexander
Petroleum Management, Inc.
1030 East Patapsco Ave.
Baltimore, MD 21225
RE: PMI

Enclosed are the results of analyses for samples received by the laboratory on 09/25/24 08:37.

Maryland Spectral Services, Inc. is a TNI 2016 Standard accredited laboratory and as such, all analyses performed at Maryland Spectral Services included in this report are 2016 TNI certified except as indicated at the end of this report. Please visit our website at www.mdspectral.com for a complete listing of our TNI 2016 Standard accreditations.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Will Brewington
President

Maryland spectral Services

Analytical Chemistry Services

1500 Caton Center Dr Suite G
Baltimore MD 21227
410-247-7600
www.mdspectral.com

Analytical Results

Project: PMI

Project Number: TRANS MIX
Project Manager: Scott Alexander

Reported:
10/04/24 16:14

Client Sample ID	Alternate Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PMI TRANSMIX		4092502-01	Oil	09/25/24 07:00	09/25/24 08:37

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Analytical Results

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Project: PMI

Project Number: TRANS MIX
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Analytical Results

Project: PMI

Project Number: TRANS MIX
Project Manager: Scott Alexander

Reported:
10/04/24 16:14

Notes and Definitions

RE	Sample reanalyses are done at the laboratory's discretion as a mechanism to improve data quality. Any client requested reanalysis will be identified with a sample qualifier.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
%-Solids	Percent Solids is a supportive test and as such does not require accredidation

If this report contains any samples analyzed for gasoline range organics (GRO) by EPA Method 8015C and no trip blank was shipped, stored, and received with the sample(s) as required by Section 3.1 of the EPA Method, the sample analysis contained in this report cannot exclude the possibility that any reportable GRO measurement was due to environmental contamination of the sample during shipping or storage.

Will Brewington, President

All analyses performed at Maryland Spectral Services included in the report are TNI certified except as indicated at the end of the report.

Company Name:	Project Manager:	Analysis Requested	CHAIN-OF-CUSTODY RECORD
Petroleum Mgmt. Inc.	Scott Alexander		Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410-247-7600 * Fax 410-247-7602 reporting@mdspectral.com
Project Name: PMI	Project ID: Transmix		
Sampler(s): S. Alexander	P.O. Number:		Matrix Codes: NPW - non-potable water DW - drinking water
State of Origin: MD			

Field Sample ID:	Date	Time	DW	NPW	Soil	Other	Grab	Composite	# of containers	Vapor Pressure							Preservative	Field Notes	MSS Lab ID
PMI Transmix	9/25/24	07:00				X			1	X							None		4092502-01 A

Relinquished by: (Signature)	Date /Time	Relinquished by: (Signature)
(Printed) S. Alexander	9/25/24 8:38	(Printed)
Relinquished by: (Signature)	Date /Time	Received by lab: (Signature)
(Printed)	9/25/24 8:37	(Printed) Rachel Horner

Special Instructions / QC Requirements & Comments:

Please indicate if any of the following certifications are required:
- ☐ Virginia VELAP
- ☐ Pennsylvania NELAP
- ☐ West Virginia DEP
- ☐ MD Drinking Water
- ☐ VA Drinking Water
- ☐ Other _____

Turn Around Time:
- ☒ Normal (7 day)
- ☐ 5 day
- ☐ 4 day
- ☐ 3 day
- ☐ Rush (2 day)
- ☐ Next Day
- ☐ Other: _____
- ☐ Specific Due Date: _____

Delivery Method:
- ☐ Courier
- ☐ Client
- ☐ UPS
- ☐ Fed Ex
- ☐ USPS
- ☐ Other _____

Lab Use:
Temp: 4.5 °C
- ☑ Received on Ice
- ☑ Received Same Day
- ☒ T-41 ☐ T-45

Sample Disposal:
- ☐ Return to Client
- ☐ Disposal by lab
- ☐ Archive for __ days

ANALYTICAL RESULTS

Lab ID:	3975570001	Date Collected:	09/25/2024 07:00	Matrix:	Organic Liquid (OL)
Sample ID:	4092502-01	Date Received:	09/27/2024 12:24	Collector:	Steve Richardson
Description:	PMI TRANSMIX				

Parameter	Result	Qual	Unit	RL	MDL	DF	Min	Max	Analyzed	By
Vapor Pressure (VP) by ASTM D5191 [A]										
DVPE (ASTM Method)	3.37		psi	1.00		1			10/02/2024 11:04	KCL
DVPE (EPA Method)	3.53		psi	1.00		1			10/02/2024 11:04	KCL
RVPE (CARB Method)	3.23		psi	1.00		1			10/02/2024 11:04	KCL
Total VP (Ptot)	4.06		psi	1.00		1			10/02/2024 11:04	KCL
DVPE (ASTM Method)	23.2		kPa	1.0		1			10/02/2024 11:04	KCL
DVPE (EPA Method)	24.4		kPa	1.0		1			10/02/2024 11:04	KCL
RVPE (CARB Method)	22.3		kPa	1.0		1			10/02/2024 11:04	KCL
Total VP (Ptot)	28.0		kPa	1.0		1			10/02/2024 11:04	KCL
Container Size Used	1-L					1			10/02/2024 11:04	KCL

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Air and Radiation Management Administration ▪ Air Quality Permits Program
1800 Washington Blvd ▪ Baltimore, Maryland 21230
(410) 537-3230 ▪ 1-800-633-6101 ▪ www.mde.state.md.us

APPLICATION FOR FUEL BURNING EQUIPMENT

Information Regarding Public Outreach

For Air Quality Permit to Construct applications subject to public review, applicants should consider the following information in the initial stages of preparing a permit application.

If you are not sure at the time you are applying for a permit whether public review of your application is required or for information on steps you can take to engage the surrounding community where your planned project will be located, please contact the Air Quality Permits Program at 410-537-3225 and seek their advice.

Communicating and engaging the local community as early as possible in your planning and development process is an important aspect of your project and should be considered a priority. Environmental Justice or "EJ" is a movement to inform, involve, and engage communities impacted by potential and planned environmental projects by affording citizens opportunities to learn about projects and discuss any concerns regarding impacts.

Although some permit applications are subject to a formal public review process prescribed by statute, the Department strongly encourages you to engage neighboring communities separate from and well ahead of the formal permitting process. Sharing your plans by way of community meetings, informational outreach at local gatherings or through local faith-based organizations can initiate a rewarding and productive dialogue that will reduce anxiety and establish a permanent link with your neighbors in the community.

All parties benefit when there is good communication. The Department can assist applicants in developing an outreach plan that fits the needs of both the company and the public.

PETROLEUM MANAGEMENT, INC.
1030 E. Patapsco Avenue ♦ Baltimore, Maryland 21225
Phone: (410) 354-0200 ♦ Fax: (410) 721-1390

June 16, 2025

Maryland Department of the Environment
Air and Radiation Administration
1800 Washington Blvd.
Baltimore, MD 21230

RE: Permit to Construct Application
Public Outreach Efforts
AST Installations, 1030 E. Patapsco Ave.

To whom it may concern:

Following discussion with MDE during initial meeting and consult with Air and Radiation Administration, Petroleum Management, Inc. (PMI) initiated our Public Outreach efforts in November 2024 by contacting via mail and email efforts to several community associations as suggested. Community Associations that were included in our outreach were:

-Chesapeake Bay Trust
-Dundalk Renaissance
-Greater Baybrook Alliance
-SB7 Coalition
-South Baltimore Community Land Trust
-South Baltimore Gateway Partnership
-Turner Station Conservation Teams
-Community of Curtis Bay Association

To date, the only response received by PMI to our public outreach was from the Community of Curtis Bay Association (CCBA) on January 21, 2025 expressing concerns with our planned construction. We respectfully responded to the CCBA via email on March 7, 2025 with a request for a meeting to discuss these concerns. As requested by CCBA, PMI presented a written response that was transmitted via email on March 17, 2025. On March 18, 2025, PMI again responded via email to a question by CCBA regarding cited Environmental Justice scores referenced for our proposed location. To date, we have not received any further questions or additional concerns from CCBA or any of the other community associations regarding our proposed construction.

As we submit application for the necessary Permit to Construct, PMI remains open to discuss any questions or concerns from any interested community associations as part of our Public Outreach efforts.

Respectfully submitted.

W. Scott Alexander
Operations Manager

Enc.

PETROLEUM MANAGEMENT, INC.
1030 E. Patapsco Avenue ♦ Baltimore, Maryland 21225
Phone: (410) 354-0200 ♦ Fax: (410) 721-1390

PEI MEMBER

NFPA MEMBER

January 20, 2025

Community of Curtis Bay Association
1630 Filbert Street
Baltimore, MD 21226
ccba21226@gmail.com

To whom it may concern:

As part of our community outreach efforts, Petroleum Management, Inc. (PMI) would like to introduce our company and services with regards to our growth and intended plans for our Patapsco Avenue facility. Established in 1997, PMI has been serving Maryland, DC and Northern Virginia communities, businesses and municipalities for over 25 years. Providing for over 50 employees and families, several of which are Baltimore City residents, PMI considers our history of growth as a continuing source of employment opportunity, education, advancement for local citizens. Providing petroleum recovery and remediation services, our goal is to protect our environment by recovering petroleum products for recycling, minimizing impacts to surface and groundwaters of the State and minimizing the landfill application of petroleum impacted materials and solids. Our scope of services has evolved over the years to include installation, closure and maintenance of Underground (UST) and Aboveground (AST) storage tank systems, response to emergency spills and clean-ups, fuel quality management, excavation and hauling services, and environmental consulting services.

As our growth and reach of services expands, our needs to manage recovered materials has expanded as well. Recovered petroleum products and petroleum impacted liquids from spills, UST and AST storage systems, secondary containment structures and oil/water separator systems are recovered daily by our fleet of vacuum trucks. The goal of recovery is to separate petroleum products from water and solids to facilitate the most responsible recycling or disposal options for each. In order to accomplish this goal effectively, our facilities need bulk storage to unload trucks daily, facilitate the separation process and segregate the resulting components. The ability to unload trucks daily also minimizes the transport and risk of large volumes of material in transit, public exposure, and unnecessary cross contamination of materials. Unloading to bulk storage also provides a safer, more controlled storage environment as opposed to keeping the materials in constant transit until full capacity.

As we encounter petroleum products, we are faced with the task of separating diesel fuels and gasoline from water or aqueous solution. Our criteria for separation of gasoline from diesel fuels is that of flash point and the designation as Class I (flash point <100°F) or Class II (flash point >100°F) liquids. In order to accomplish and best manage this separation of recycling streams, PMI would like to install new AST storage systems at our Patapsco Avenue Facility located at 1030 E. Patapsco Avenue, Brooklyn, MD 21225. The storage systems would consist of one (1) 20,000-gallon AST and one (1) 10,000-gallon AST. These AST systems would be located at the far North West corner of the property, adjacent the railroad spur and neighboring CSX Curtis Bay railyard. This location positions the tank systems upgradient of any open storm drain inlets, >4000 ft. from the nearest

down-gradient surface water feature (Stonehouse Cove), and minimizes any public exposure as the location is >500 ft. from the gated and secured property entrance and >1200 ft. from the closest public right of way or residential setting at Patapsco Ave. In accordance with Maryland Department of the Environment (MDE) regulations, the AST systems would be double-wall construction, have a secondary containment dike surrounding, overfill prevention and release detection equipment and Stage I Vapor Recovery to comply with MDE and EPA Clean Air Act requirements. Also, in compliance with both MDE's Air & Radiation Management Program and the EPA Clean Air Act requirements, PMI intends to apply for both a Permit to Construct and Permit to Operate the proposed gasoline AST systems.

As the property is located in the I-2 General Industrial District and acceptable for the proposed industrial activity, PMI understands the nature of our business and the hazards associated with petroleum handling, storage and transportation. As such, we would like to offer this explanation of our plans to construct and operate these Class I storage tanks to open this proposal up to community review, questioning and concerns. Please feel free to contact me to discuss any additional details.

Respectfully submitted,

W. Scott Alexander
Operations Manager
Office: 410-354-0200
Cell: 301-674-4002
scott@petromgt.net

Enc.

-Site Location Plan
-Site Map
-Tank Specifications
-Zoning Approval Letter

cc: Maryland Department of the Environment
EA Engineering, Science & Technology, Inc.

Community of Curtis Bay Association
ccba21226@gmail.com

www.ilovecurtisbay.com

Jan 21st 2025

Maryland Department of the Environment
1800 Washington Blvd
Baltimore, Maryland 21230

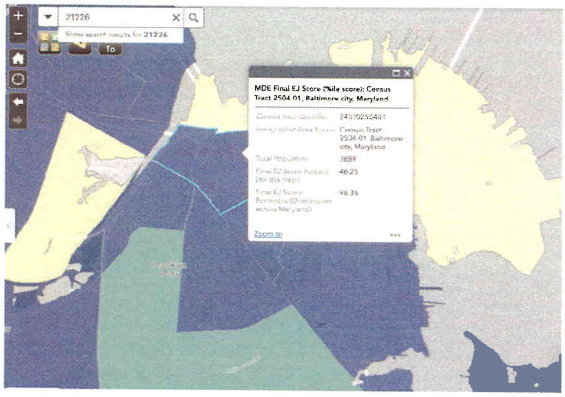
Petroleum Management Inc.
1030 E. Patapsco Avenue
Brooklyn, MD 21225

Subject: Opposition to the Proposed Expansion of Petroleum Management Inc.'s Facility at 1030 E. Patapsco Avenue

Dear Maryland Department of the Environment and Petroleum Management Inc.,

On behalf of the Community of Curti Bay Association, we are writing to express strong opposition to the proposed expansion of Petroleum Management Inc.'s facility at 1030 E. Patapsco Avenue. The proposed installation of additional above-ground storage tanks (ASTs) in an already overburdened community raises significant concerns regarding environmental justice, public health, and community safety.

Curtis Bay, as you may be aware, is among the most overburdened communities in Maryland, with an extraordinarily high concentration of polluting facilities (*See MD EJ Screen readouts below showing the community to be in the top 98-100th% statewide for measures of environmental burden)*, including the CSX coal terminal near PMI's site. .This terminal has a history of catastrophic events, such as the December 2021 explosion, which posed immense risks to nearby residents and students at Benjamin Franklin High School. Adding to this existing burden, PMI's past safety failures—such as the tragic fire at your facility that resulted in the loss of a worker's life—further highlight the dangers of expanding operations in an area already grappling with the cumulative impacts of industrial pollution and safety risks.



Your proposal states that new AST storage systems will minimize transport risks and public exposure by providing safer and more controlled storage environments. However, these claims do not sufficiently address the risks associated with increasing the volume of stored hazardous materials in an overburdened area. Curtis Bay residents already experience disproportionate health burdens, including asthma, cancer risks, and other adverse health outcomes linked to air pollution and environmental exposure. Introducing additional petroleum storage systems only exacerbates these risks and contradicts the principles of Maryland's environmental justice policies aimed at protecting vulnerable communities.

Moreover, the proposed expansion's proximity to Benjamin Franklin High School raises grave concerns about the safety of students, staff, and families. The area is already subject to coal dust exposure, noise, and hazardous materials transportation. Adding bulk petroleum storage adjacent to a school and residential areas increases the risk of fire, explosion, and other catastrophic events that could irreversibly harm the community.

We urge the Maryland Department of the Environment to carefully consider these cumulative impacts and reject this proposal. Curtis Bay cannot bear the burden of yet another expansion of industrial operations that prioritize corporate growth over community safety and environmental health. Instead, we call for meaningful investments in reducing pollution, improving public health, and addressing the disproportionate environmental burdens that this community has faced for decades.

We also call on Petroleum Management Inc. to prioritize transparency, community engagement, and environmental stewardship in its operations. Expanding your facility in Curtis Bay contradicts these principles and places an already vulnerable community at greater risk. We urge you to explore alternative solutions that do not exacerbate existing environmental and public health inequities.

We look forward to a response from MDE and PMI regarding this matter and remain committed to advocating for the health, safety, and well-being of Curtis Bay residents.

Sincerely,

Community of Curtis Bay Association Board of Directors

www.ilovecurtisbay.com

Resources on cumulative pollution burden in Curtis Bay:

Baltimore Magazine Feature: Concentration of polluting industry
Peer Reviewed Article: Community Cumulative Impacts Concerns
Academic - Government Collaboration: Collaborative Coal Dust Report
Peer Reviewed Article: Coal dust exposure in Curtis Bay
Peer Reviewed Article: Diesel Truck Emissions
News Coverage: Curtis Bay Energy Medical Waste Incinerator

PETROLEUM MANAGEMENT, INC.
1030 E. Patapsco Avenue ♦ Baltimore, Maryland 21225
Phone: (410) 354-0200 ♦ Fax: (410) 721-1390

March 17, 2025

Community of Curtis Bay Association
1630 Filbert Street
Baltimore, MD 21226
ccba21226@gmail.com

RE: Class I AST Installs
1030 E. Patapsco Ave.

Dear CCBA Board,

Regarding history of PMI operation at the 5218 Curtis Ave. facility. PMI began operation as a transfer facility at Curtis Ave. with the installation of (4) 20,000-gallon ASTs in 2013. As a facility managing the storage and handling of used oils, fuels and petroleum products, we obtained the appropriate Oil Operations Permit from MDE's Oil Control Program as directed with inspections and renewals as required. Not until area survey and site inspection by EPA in September 2020 did we become aware of potential VOC emission violations and possible requirement for an Air Quality Permit. In full compliance with both EPA and MDE directives we diligently began investigation of emissions from the site as well as reduction and elimination of any high VOC and high vapor pressure materials from our liquid storage. We also immediately began conversation and cooperation with MDE's Air and Radiation Administration to seek out and obtain any required permits from this Department. After adjustments to our operations and storage capability at the site, MDE's Air and Radiation Administration made the determination that an Air Quality Permit was no longer required. To date, PMI has fully complied with any EPA and MDE directives, acknowledged and corrected any violations reported, paid any fines due and successfully completed the Administrative Compliance Order on Consent as issued by the EPA.

In response to the history and findings of operations at the Curtis Ave. facility, PMI has positioned a full-time site manager at the location and also positioned a full-time Operations Manager as well as a full-time Health and Safety Officer within the company to assure regulatory compliance. Improvements and operations at the Patapsco Ave. location will receive the same level of oversight and management as the standard now set at Curtis Ave. and is actively seeking out all applicable permits required.

Regarding PMI's proposal to establish bulk storage at the Patapsco Ave. location, we would like to make the following points and address the concerns of CCBA.

Environmental Justice & EJ Score in Area:

- Proposed AST location is at furthest extent or margin of the referenced EJ zone, adjacent the CSX railyard and location of least exposure. Opposite railyard, the EJ score drops from 100% to 14.9% statewide.
- Site is bordered on 4 sides by already existing commercial and industrial activity.

Public Health and Community Safety:

- Proposed AST storage will not generate any additional noise or dust in the area.
- Capacity for bulk storage will reduce volume and frequency of petroleum transportation, especially on the Patapsco Ave., Pennington Ave., and Curtis Ave. corridors of Curtis Bay.
- Capacity for bulk storage will allow for all trucks to be unloaded daily, leaving empty each morning with fewer partially loaded trucks in transit through the area.
- Volume of stored petroleum product would not increase. Through-put would remain the same only contained in ASTs rather than held on DOT regulated truck tanks.
- Better controlled storage and transfer operations with use of regulated tank systems in compliance with all applicable COMAR regulations and NFPA standards.
- Proposed AST location is not adjacent (next to or adjoining) school or residential area.
    - Nearest residential setting or right-of-way is >1000 feet.
    - Referenced High School is >1/4 mile (>1500 feet).
- Referenced fire event at Curtis Ave. facility (3/7/22) occurred at the Water Treatment Facility.
    - Petroleum AST storage at the site did not contribute to the fire nor affected by the fire activity.
- Proposed AST storage will have the same Stage I Vapor Recovery systems for emission control as any local gas station.
- Proposed AST storage is UL2085 specification providing for concrete insulated, double-wall tanks with a 2-hour fire rating. Piping systems will have appropriate fire/thermal isolation valves per NFPA standards.

Development Incentives

- Enterprise Zone – Focus Area Incentives
    - PMI was directed and attracted to the property by State & City Programs to bring industrial/commercial development back to these distressed areas.
    - PMI has repaired, remediated and improved the otherwise vacant and distressed property.
    - Any pre-existing environmental conditions at the site have been remediated or addressed.
- City of Baltimore has provided approval regarding Zoning and Land Use for the intended operations.

Please review these responses and let us know if you have any questions or interest in having an in-person meeting to discuss further. We appreciate your interest in our project as we pursue any required permits.

Regards,

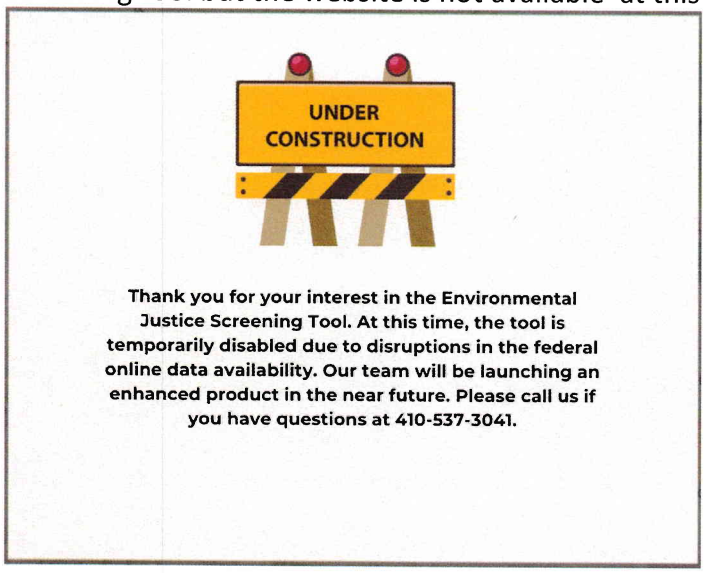
W. Scott Alexander
Operations Manager

Outlook

Re: Community Outreach

From Scott Alexander <scott@petromgt.net>
Date Tue 3/18/2025 8:44 AM
To Curtis Bay Community Association <ccba21226@gmail.com>
Cc Suna Yi Sariscak <suna.sariscak@maryland.gov>; Husselbee, Claire <chusselbee@eaest.com>; aneca.atkinson@maryland.gov <aneca.atkinson@maryland.gov>; Chris Hoagland -MDE- <Chris.Hoagland@maryland.gov>

Good morning CCBA,
Yes, our location at 1030 E PATAPSCO AVE, BALTIMORE, MD, 21225 is in Census Tract: 24510250500.
Our reference to EJ score and our location was to show that the proposed AST site is located at the perimeter or margins of the 98-100% EJ score boundaries, furthest away as possible on our property from concentrated areas elsewhere in the community. Bordered by the CSX Railyard to the North/Northeast, the EJ score opposite our location drops to 14.9%. My apologies for not providing applicable map views from the MD EJ Screening Tool but the website is not available at this time. Possibly Ms. Atkinson at MDE can confirm.



Thank you,
-Scott

W. Scott Alexander
Operations Manager
scott@petromgt.net

Petroleum Management, Inc.
1030 E. Patapsco Ave.
Baltimore, MD 21225
Office# 410-354-0200
Cell# 301-674-4002

From: Curtis Bay Community Association <ccba21226@gmail.com>
Sent: Monday, March 17, 2025 6:59 PM
To: Scott Alexander <scott@petromgt.net>

Cc: Suna Yi Sariscak <suna.sariscak@maryland.gov>; Husselbee, Claire <chusselbee@eaest.com>; aneca.atkinson@maryland.gov <aneca.atkinson@maryland.gov>; Chris Hoagland -MDE- <Chris.Hoagland@maryland.gov>
Subject: Re: Community Outreach

Hi Scott,

We haven't reviewed your entire letter but can you please cite where you came up with an EJ score of 14.9% for the proposed location? Just to make sure we are in the same reality ...we are talking about 1030 E PATAPSCO AVE, BALTIMORE, MD, 21225 in Census Tract: 24510250500 --- correct?

From your letter (attached) ... we've cc'd Aneca Atkinson from MDE on this email to see the claim made about the location's EJ score.

> Environmental Justice & EJ Score in Area:
> o Proposed AST location is at furthest extent or margin of the referenced EJ zone, adjacent the CSX railyard and location of least exposure. Opposite railyard, the EJ score drops from 100% to 14.9% statewide.
> o Site is bordered on 4 sides by already existing commercial and industrial activity.

On Mon, Mar 17, 2025 at 3:22 PM Scott Alexander <scott@petromgt.net> wrote:

> **Dear CCBA Board,**
> **Please find attached our response to your concerns. Please review and respond with any questions or request for an in-person meeting to discuss.**
>
> Thank you,
> **W. Scott Alexander**
> **Operations Manager**
> **scott@petromgt.net**
>
> *Petroleum Management, Inc.*
> *1030 E. Patapsco Ave.*
> *Baltimore, MD 21225*
> *Office# 410-354-0200*
> *Cell# 301-674-4002*

From: Curtis Bay Community Association <ccba21226@gmail.com>
Sent: Monday, March 10, 2025 1:59 AM
To: Scott Alexander <scott@petromgt.net>
Cc: Suna Yi Sariscak <suna.sariscak@maryland.gov>
Subject: Re: Community Outreach

Dear Mr. Alexander,

Please share your written response with us and we will certainly review. At present, we are facing a large number of community concerns including a large # of expansion and permit renewal requests. In order to make best use of limited time - we always appreciate having written materials to consider prior to any verbal meetings.

A key point that any written response to our initial letter should include is the matter of PMI's apparent ~8 years of operation at the Curtis Ave location without the required Title V major source permit (based

on EPA's determination of VOC emissions exceeding the threshold). We've read the EPA consent order and found your initial communication to CCBA to be severely lacking in terms addressing the key issues it raises (EG operating as a major source of hazardous air pollutants in a community without a permit).

On Fri, Mar 7, 2025 at 12:24 PM Scott Alexander <scott@petromgt.net> wrote:

> Community of Curtis Bay Association,
>
> Petroleum Management, Inc. would like the opportunity to respond to the Community's concerns with the proposed improvements at our Patapsco Ave. facility. Out of respect for these concerns, we have drafted a response and would like to present this to CCBA for discussion. As suggested by MDE we would like to arrange for a meeting at your convenience. Please let us know how we can best present our response to the Board.
>
> We look forward to hearing from you.
> Regards,
>
> **W. Scott Alexander**
> **Operations Manager**
> **scott@petromgt.net**
>
> *Petroleum Management, Inc.*
> *1030 E. Patapsco Ave.*
> *Baltimore, MD 21225*
> *Office# 410-354-0200*
> *Cell# 301-674-4002*

From: Curtis Bay Community Association <ccba21226@gmail.com>
Sent: Wednesday, January 22, 2025 1:59 PM
To: Scott Alexander <scott@petromgt.net>
Cc: Suna Yi Sariscak <suna.sariscak@maryland.gov>; Husselbee, Claire <chusselbee@eaest.com>; info@sbclt.org <info@sbclt.org>; Chris Hoagland -MDE- <Chris.Hoagland@maryland.gov>; aneca.atkinson@maryland.gov <aneca.atkinson@maryland.gov>; Angelo Bianca -MDE- <angelo.bianca@maryland.gov>
Subject: Re: Community Outreach

Dear Mr. Alexander,

Hope you are well and thank you for reaching out. Please see the attached reply from the Community of Curtis Bay Association.

Sincerely,
CCBA Board
www.ilovecurtisbay.com

On Mon, Jan 20, 2025 at 11:18 AM Scott Alexander <scott@petromgt.net> wrote:

> Community of Curtis Bay Association,
> As requested by MDE and South Balitmore Community Land Trust, please find attached information regarding the proposed improvement activity at our 1030 E. Patapsco Ave. location. Please review and contact me with any questions or concerns.
>
> Thank you,

W. Scott Alexander
Operations Manager
scott@petromgt.net

Petroleum Management, Inc.
1030 E. Patapsco Ave.
Baltimore, MD 21225
Office# 410-354-0200
Cell# 301-674-4002

C-1 Commercial clusters or pedestrian-oriented corridors of commercial uses that serve the immediate neighborhood. Ensures compatibility between neighboring residential and commercial uses.

C-1-E Commercial clusters or pedestrian-oriented corridors of commercial uses that serve the immediate neighborhood and allow for clustering of entertainment uses. Ensures compatibility between neighboring residential and commercial uses.

C-1-VC Village Center Business District Intended for areas of pedestrian-oriented corridors of commercial uses that serve the immediate neighborhood in a village center environment.

C-2 Small to medium-scale commercial use, typically located along urban corridors. Designed to accommodate pedestrians and, in some instances, the automobile. Mixed-use development is appropriate within this district.

C-3 Intensive commercial use including key commercial nodes that require additional controls regarding site development, particularly for shopping centers and larger retail establishments.

C-4 Heavy Commercial intended for areas of more intense commercial, including uses related to motor vehicles and those that may require outdoor storage. Setbacks, buffering and site development controls mitigate negative impacts on neighboring uses.

C-5 Downtown Zoning District. The district is divided into a series of sub-districts that provide design standards to recognize and achieve the different physical characteristics of Downtown.

EC-1 Educational Campus Zoning. Primary and secondary educational facilities which is restricted to education-related uses. Allows for the development of a campus master plan.

EC-2 Educational Campus Zoning. A campus district for colleges and universities that allows for certain non-educational uses and dormitories for students.

H Hospital Campus Zoning. Addresses the special needs and impacts of a large-scale, multi-functional hospitals and medical campuses.

BSC Bio-Science Campus Zoning. Accommodates bio-science campuses, including supportive uses and some residential. The BSC District allows a broad mix of uses, integrating manufacturing, office, and research and development, etc

I-1 Light Industrial Zoning. Light manufacturing, fabricating, processing, wholesale distributing and warehousing uses.

I-2 General Industrial Zoning. Manufacturing, fabricating, processing, wholesale distributing and warehousing. Commercial uses and open storage allowed.

I-MU Industrial Mixed-Use Zoning. Primarily for existing industrial buildings and permits both light industrial uses and a variety of non-industrial uses, such as dwellings, commercial, creating a mixed-use environment.

MI Maritime Industrial Zoning. Preserves deep-water frontage of the Port of Baltimore for maritime use. Maritime shipping can be conducted without the intrusion of non-industrial uses.

OIC Office-Industrial Campus is intended for developments of architecturally coordinated office and industrial structures built in a campus-like atmosphere.

OR-1 Office Residential Zoning. A mix of office and residential uses. Areas maintain a residential character. 40' Maximum building height.

OR-2 Office Residential zoning. A mix of office and residential uses, maintaining a residential character. 100' maximum building height.

OS Open Space Zoning. Intended to protect and promote public and private open space, provide public reflective, cultural, educational and recreational opportunities, enhance the urban environment and protect natural resources.

R-1 Detached Residential Zoning District intended for neighborhoods of detached dwellings. Limited non-residential uses that are compatible with these residential environments may be allowed.

R-1-A Detached dwellings upon lots of two or more acres in areas of countryside character. Environmental sensitivity is required to preserve natural features. Limited non-residential use.

R-1-B Detached dwellings located upon lots of one or more acre in areas of countryside character. Environmental sensitivity is required to preserve natural features. Limited non-residential uses.

R-1-C Detached dwellings located upon lots 21,780 square feet or more in area of established low density development.

R-1-D Low density neighborhoods of detached dwellings located upon lots 14,520 square feet or more. Limited non-residential uses.

R-1-E Detached dwellings located upon lots of 9,000 square feet or more. Limited non-residential uses.

R-2 Detached and Semi-Detached Residential Zoning District intended for residential neighborhoods that accommodate both detached and semi-detached dwellings. Limited non-residential uses.

R-3 Detached Residential Zoning District intended for neighborhoods of detached dwellings. Limited non-residential uses.

R-4 Detached and Semi-Detached Residential Zoning District intended for neighborhoods that accommodate detached and semi-detached dwellings. Limited non-residential uses.

R-5 Transitional Residential Zoning District. Accommodates both detached and semi-detached dwellings, rowhouse developments and limited low-rise multi-family garden apartment developments. Limited non-residential uses.

R-6 Low density rowhouse neighborhoods. Landscaped front yards, setback buildings. Accommodates detached and semi-detached dwellings, rowhouse developments and multi-family developments. Limited non-residential uses.

R-7 Mixed Residential Zoning including detached and semi-detached dwellings, rowhouse developments, and multi-family developments of a larger scale. Limited non-residential uses.

R-8 Traditional form of urban rowhouse. Continuous rowhouse development along full blocks built to or only modestly set back from the street. Also accommodates other residential types of a similar density. Limited non-residential uses.

R-9 Multi-Family Zoning District. Higher density, mid -rise, housing types, including single-family homes, both detached and semi-detached, rowhouse developments, and multi-family developments. Significant open space. Limited non-residential uses.

R-10 Areas of significant residential density accommodated in concentrated high rise and rowhouse development environments. Limited non-residential uses.

TOD-1 Transit Oriented Development - Encourages development conducive to increased transit usage. TOD-1 is employed in areas around existing and anticipated transit stations. Restrictive height/limited retail use.

TOD-2 Transit Oriented Development - Encourages development conducive to increased transit usage. TOD-2 is employed in areas around existing and anticipated transit stations. Restrictive height/full mix of retail use.

TOD-3 Transit Oriented Development - Encourages development conducive to increased transit usage. TOD-3 is employed in areas around existing and anticipated transit stations. Significant height/limited retail use.

TOD-4 Transit Oriented Development - Encourages development conducive to increased transit usage. TOD-4 is employed in areas around existing and anticipated transit stations. Significant height/full mix of retail use.

R-MU Rowhouse Mixed-Use Overlay District allows a mixed-use rowhouse environment, where some rowhouse structures are used for residential and others for first-floor commercial uses. Tied to base parcel zoning.

D-MU Detached Dwelling Mixed-Use Overlay District allows a mixed-use detached environment, where some structures are used for residential and others for first-floor commercial uses. Tied to base parcel zoning.

AE Adult Use Overlay District is intended to provide an area in which to operate an adult use.

W-1 W-1 Overlay District is intended to preserve, create, and enhance public views of and access to the waterfront by providing a public promenade and preserving public access in non industrious areas. Traditional Hardscape, bulkhead edge.

W-2 W-2 Overlay District is intended to preserve, create, and enhance public views of and access to the waterfront by providing a public promenade and preserving public access in non industrious areas. Natural shore, landscaped edge.

TransForm Baltimore Zoning Code

MAP LEGEND & ZONING DISTRICT SUMMARY

§ 11-204. I-1 Light Industrial District.

(a) *Intent.*

The I-1 Light Industrial Zoning District is intended to provide for a wide variety of light manufacturing, fabricating, processing, wholesale distributing, and warehousing uses.

(b) *Light industrial uses.*

Light industrial uses are enclosed low-intensity, non-nuisance light fabrication and assembly-type manufacturing, with little to no outside impacts.

(Ord. 16-581.)

§ 11-205. I-2 General Industrial District.

(a) *Intent.*

The I-2 General Industrial Zoning District is intended to provide for a wide variety of general manufacturing, fabricating, processing, wholesale distributing, and warehousing uses.

(b) *Uses.*

(1) General industrial uses include fabrication, warehousing and assembly-type manufacturing, which may result in some moderate external effects, such as smoke, noise, glare, or vibration, and typically include outdoor storage and related outdoor activities.

(2) Commercial uses and outdoor storage of materials are allowed.

(Ord. 16-581.)

§ 11-206. MI Maritime Industrial District.

(a) *Intent.*

The MI Maritime Industrial Zoning District is intended to ensure the preservation of deep-water frontage of the Port of Baltimore for maritime industrial uses by delineating an area where maritime shipping and maritime industrial uses can be conducted without the intrusion of non-industrial uses and where investment in maritime infrastructure is encouraged.

(b) *Nature of uses.*

The nature of these activities may result in external effects, such as smoke, noise, glare, or vibration, and typically include outdoor storage and related outdoor activities.

(Ord. 16-581.)

BALTIMORE CITY
DEPARTMENT OF HOUSING &
COMMUNITY DEVELOPMENT

November 08, 2024

Petroleum Management, Inc,
5218 Curtis Avenue
Baltimore, MD 21226
Attn: W. Scott Alexander

Re: 1030 E. Patapsco Avenue

To Whom it May Concern:

This is in response to your request for zoning verification with reference to the above listed property.

The subject property is located in an I-2 General Industrial District. The I-2 Genera[Industrial Zoning District is intended to provide for a wide variety of general manufacturing, fabricating, processing, wholesale distributing, and warehousing uses. General industrial uses include fabrication, warehousing and assembly-type manufacturing, which may result in some moderate external effects, such as smoke, noise, glare, or vibration, and typically include outdoor storage and related outdoor activities. Commercial uses and outdoor storage of materials are allowed. The use of the premises for oil and gasoline operations, storage and transfer of oil and gasoline is permitted, subject to permitting and compliance with all other applicable regulations.

Should you have any additional questions regarding this property, you may contact the Office of the Zoning Administrator at (410) 396-4126

Sincerely,

Geoffrey M. Veale
Zoning Administrator

SAFETY DATA SHEET

SECTION 1 ◆ IDENTIFICATION

Explorer Pipeline Company 6120 South Yale Ave., Suite 1100 Tulsa, OK 74136	FOR EMERGENCY SOURCE INFORMATION CONTACT: ✦ (918) 493 - 5100	
GHS PRODUCT IDENTIFIER: Unleaded Gasoline, All Grades **EPL Code:** 22, 26, 3E, 4E, 3C, 3D, 3R, 3S, 3T, 3U, 3V, 3X, 4C, 4D, 4 F, 4G, 4H, 4J, 4K, 4M, 4S, 4T, 4U, 4X, 31-38 and 40-49	**CHEMICAL FAMILY:** Petroleum Hydrocarbon	**PRODUCT USES:** Used primarily as a fuel source for internal combustion engines.

SECTION 2 ✳ HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Aspiration Hazard - Category 1	Carcinogenicity - Category 1A	Flammable Liquid - Category 1
Germ Cell Mutagenicity - Category 1B	Hazardous to the Aquatic Environment – Acute Hazard - Category 3	Skin Corrosion/Irritation - Category 2
Specific Target Organ Toxicity (Repeat Exposure) - Category 1 (liver, kidneys, bladder, blood, bone marrow, nervous system)	Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)	
Hazardous to the Aquatic Environment – Chronic Hazard - Category 2	Eye Damage/Irritation - Category 2B	Toxic to Reproduction - Category 1A

GHS LABEL ELEMENTS

Gasoline, Unleaded, All Grades

GHS PICTOGRAMS				SIGNAL WORD
				**DANGER**

HAZARD STATEMENTS

Causes damage to organs (liver, kidneys, bladder, blood, bone marrow, nervous system) through prolonged or repeated exposure.	May be fatal if swallowed and enters airways.	
Causes skin irritation.	Harmful to aquatic life.	Extremely flammable liquid and vapor.
May damage fertility or the unborn child.	May cause drowsiness or dizziness.	
May cause genetic defects.	May cause respiratory irritation.	May cause cancer.

PRECAUTIONARY STATEMENTS

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed.	
Ground/bond container and receiving equipment.	Use only non-sparking tools.
Use explosion-proof electrical/ ventilating/ lighting/equipment.	
Take precautionary measures against static discharge.	Keep out of reach of children
Wear protective gloves/protective clothing/eye protection/face protection.	
Wash hands and forearms thoroughly after handling.	Obtain special instructions before use.
Do not breathe mist/vapors/spray.	Use only outdoors or in well-ventilated area.

Do not eat, drink or smoke when using this product.		Avoid release to the environment.	
Do not handle until all safety precautions have been read and understood.			
Response			
In case of fire: Use water spray, fog, dry chemical fire extinguishers or handheld fire extinguisher.			
IF exposed or concerned: Get medical advice/attention.			
IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.			
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor/physician if you feel unwell.			
Get medical advice/attention if you feel unwell.			
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.			
Storage			
Store in a well-ventilated place	Keep cool	Store locked up	Keep container tightly closed
Disposal			
Dispose of contents/container in accordance with local/regional/national/international regulations.			
SUPPLIER INFORMATION			
Explorer Pipeline Company	6120 South Yale Ave., Suite 1100	Tulsa, Oklahoma 74136	

SECTION 3 ▼ COMPOSITION/INFORMATION OF INGREDIENTS

INGREDIENT	CAS NUMBER	PERCENTAGE (%)
Gasoline	86290-81-5	60-100
Toluene	108-88-3	10-30
Xylenes (o-, m-, p- isomers)	1330-20-7	10-30
Hexane	110-54-3	5-10
Benzene	71-43-2	5-10
Trimethyl benzene	25551-13-7	1-5
1,2,4-Trimethyl benzene	95-63-6	1-5
Cumene	98-82-8	1-5
Cyclohexane	110-82-7	1-5
Ethyl benzene	100-41-4	1-5
Naphthalene	91-20-3	1-5
Styrene	100-42-5	0.1-1

SECTION 4 ✚ FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids, Get Medical Aid.

SKIN: Quickly remove contaminated clothing and immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

INGESTION: Do not induce vomiting. Call a physician and/or transport to an emergency facility immediately.

INHALATION: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give cardiopulmonary resuscitation. If breathing is difficult, give medical oxygen.

NOTE TO PHYSICIAN: TREAT SYMPTOMATICALLY AND SUPPORTIVELY

SECTION 5 ⌘ FIRE-FIGHTING MEASURES

SEE SECTION 9 FOR FLAMMABILITY PROPERTIES

EXTREMELY FLAMMABLE! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, these vapors can burn in the open or explode in confined spaces. Being heavier than air, flammable vapors may travel long distances along the ground before reaching a point of ignition and flashing back.

SUITABLE EXTINGUISHING MEDIA: Water fog, dry chemical, foam, or Carbon Dioxide. Use water spray to cool nearby containers and structure exposed to fire. Water fog or spray are of value in cooling tanks and containers but may not achieve extinguishment.
HAZARDOUS REACTIONS/DECOMPOSITION: Burning or excessive heating may produce carbon monoxide and carbon dioxide, also other harmful gases/vapors including oxides and/or other compounds of chlorine, manganese, and bromine.
SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS: For fires involving this material, do not enter any enclosed or confined space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. If firefighters cannot work upwind of the fire, respiratory protective equipment must be worn. Cool tanks and containers exposed to fire with water. Burning liquid will float on water. Notify appropriate authorities if liquid enters sewer/waterways.

SECTION 6 ❖ ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Use personal protective equipment. All equipment used when handling the product must be grounded. Ensure adequate ventilation. Take precautionary measures against static discharges. Keep people away from and upwind of spill/leak. Stop leak if you can do so without risk.
METHODS FOR CONTAINMENT	A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Dike far ahead of liquid spill for later disposal.
METHODS FOR CLEANING UP	Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal.
OTHER INFORMATION	Water spray may reduce vapor but may not prevent ignition in closed spaces.

SECTION 7 ⚷ HANDLING AND STORAGE

Prior to working with this product workers should be trained on its proper handling and storage

PRECAUTIONS FOR SAFETY HANDLING	✦ Use only as a motor fuel. ✦ Do not siphon by mouth. ✦ Handle as a flammable liquid. ✦ Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion. ✦ Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents."
STORAGE PROCEDURES	✦ Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. ✦ Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition. ✦ Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". ✦ Avoid storage near incompatible materials.
INCOMPATIBILITIES	✦ Keep away from strong oxidizers.

SECTION 8 ⊕ EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Chemical Name	ACGIH TLV (2019)	OSHA PEL	NIOSH IDLH
Toluene	TWA: 20 ppm	TWA: 200 ppm	500 ppm
Xylenes (all isomers)	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm	900 ppm
Hexane	TWA: 50 ppm *Skin*	TWA: 500	1,100 ppm
Benzene	TWA: 0.5 ppm STEL: 2.5 ppm *Skin*	TWA: 1 ppm STEL: 5	500 ppm
Trimethyl benzene	TWA: 25 ppm	Not Applicable	Not Applicable
1,2,4-Trimethyl benzene	TWA: 25 ppm	Not Applicable	Not Applicable
Cumene	TWA: 50 ppm	TWA: 50 ppm	900 ppm
Cyclohexane	TWA: 100 ppm	TWA: 300 ppm	1,300 ppm
Ethyl benzene	TWA: 20 ppm	TWA: 100 ppm	800 ppm
Naphthalene	TWA: 10 ppm STEL: 15 ppm *Skin*	TWA: 10 ppm	250 ppm
Styrene	TWA: 20 ppm STEL: 40 ppm	TWA: 100 ppm Ceiling: 200	700 ppm

ENGINEERING CONTROLS: Use adequate ventilation to keep vapor concentrations of this product below occupational exposure limits and flammability limits, particularly in confined areas.

PERSONAL PROTECTIVE EQUIPMENT

- **EYES:** Eye protection (ANSI Z87.1 approved) should be worn whenever there is a likelihood of misting or splashing/spraying liquid. Suitable eyewash station should be available. Contact lenses must not be worn.
- **SKIN/BODY:** Chemical protective clothing is recommended based on a thorough PPE hazard assessment. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for specific information.
- **HAND PROTECTION:** Gloves constructed of nitrile, neoprene, or PVC are recommended. Consult manufacturer specifications for specific information.
- **RESPIRATORY PROTECTION:** A NIOSH approved air purifying respirator (APR) with properly selected cartridges may be permissible under certain circumstances where airborne concentrations may exceed exposure limits. Protection provided by APRs is limited, calculate the maximum use concentration for the exposure situation. Use a positive pressure air supplied (Grade D) respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where APRs may not provide adequate protection.
- **OTHER HYGIENIC AND WORK PRACTICES:** Safety shower and eyewash or equivalent should be available for emergency use. Use good personal hygiene practices. In case of skin contact, wash with mild soap and water or a waterless hand cleaner. Immediately remove soaked clothing and wash thoroughly before reuse.

SECTION 9 ⚡ PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (760 MM HG): 104 °F/38 °C	**PERCENT VOLATILE BY VOLUME:** Slight - 100%
SPECIFIC GRAVITY (H_2O = 1): 0.72	**VISCOSITY UNITS, TEMP:** < 1.4 cSt @ 37.7 °C
EVAPORATION RATE (BuAc = 1): Unavailable	**VAPOR DENSITY (AIR =1):** 4
VAPOR PRESSURE AT 25°C: 400 mm Hg	**SOLUBILITY IN WATER:** Negligible
APPEARANCE AND ODOR: Reddish golden-brown liquid; petroleum distillates odor.	
FLASH POINT: (Method Used) -40 °F/-40 °C	**FLAMMABLE LIMITS:** LEL: 1.4% UEL: 7.6%

AUTOIGNITION TEMPERATURE: 49-850 °F / 9.4-454 °C	VOC CONTENT: 100%

SECTION 10 ¤ STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures

HAZARDOUS REACTION POTENTIAL: Will not occur

CONDITIONS TO AVOID: Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

INCOMPATIBLE PRODUCTS: Keep away from strong oxidizers.

MATERIALS TO AVOID: Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

HAZARDOUS POLYMERIZATION: Has not been reported

OTHER PHYSICAL AND CHEMICAL PROPERTIES: If uninhibited, gasoline will cause rusting of copper and alloys containing copper.

SECTION 11 ⊛ TOXICOLOGICAL INFORMATION

GASOLINE

Aspiration of gasoline into the lungs will cause chemical pneumonia. Liquid, mist, or vapors can cause eye, skin and respiratory tract irritation and CNS depression. Mild eye irritation may result from contact with liquid, mist, and/or vapors. Liquid may penetrate skin to cause central nervous system depression. Vapor penetration can also cause systematic effects. Skin irritation or more serious disorders may occur upon prolonged and repeated contact due to skin defatting. Irritation of the mouth, throat, and gastrointestinal tract leading to nausea, vomiting, diarrhea and restlessness. CNS Depression similar to that caused by vapor inhalation. Exposure can cause irritation to the nose, throat, and lungs and signs of CNS depression (dizziness, drowsiness, loss of coordination, coma and death), depending on the concentration/duration of exposure. Long-term exposure to unleaded gasoline has also produced kidney damage in laboratory animals. The exact relationship between these results and possible human effects is not known. Persons with pre-existing skin disorders, impaired liver or kidney function, or CNS and chronic respiratory diseases should avoid exposure to this material. This material may contain benzene at concentrations above 0.1%. Benzene is considered to be a known human carcinogen by OSHA, IARC and NTP.

Toxicity

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	Not Available	$LD_{50(dermal)}$	Rabbit	Not Available	$LC_{50(inh)}$	Rat (5 minutes)	300 g/M^3

RTECS #: LX3300000

TOLUENE

The most common effect of overexposure to toluene is irritation of the mucous membranes, skin and central nervous system depression (headaches, lassitude, light-headedness, incoordination, fatigue, decreased reaction time, etc.). Unlike closely related compound benzene, toluene does not appear to be toxic to the bone marrow. No synergistic effects data available. For the skin, prolonged and repeated exposure can caused defatting and dermatitis.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	636 mg/kg	$LD_{50(dermal)}$	Rabbit	14.1 mL/kg	$LC_{50(inh)}$	Rat (4 hours)	49 g/M^3

Specific organ toxicity, single exposure: No data available	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY				
IARC	Inadequate evidence in animals	Inadequate evidence in humans	Group 3: not classifiable as a human carcinogen	
NTP	Not Listed			
California (Prop 65): Listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:**A4-Not Classifiable As Human Carcinogen	**OSHA:** Not Listed	
MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS				
Respiratory or Skin sensitization: No data available		Germ cell mutagenicity: Genotoxicity in vitro-rat: Liver and DNA damage		
Reproductive toxicity: Have been shown in male/female rats		Teratogenicity: Developmental-rat: Fetotoxicity, stunted fetus. Suspected human reproductive toxicity.		
Skin Corrosion/irritation: Skin-rabbit: irritation over 24 hours		Serious eye damage, irritation -rabbit: No data available		
Synergistic effects: No data available		Aspiration hazard: No data available		
RTECS #: XS5250000				

XYLENE

Xylene vapor may cause irritation of the eyes, nose, and throat. At high concentrations, xylene vapor may cause severe breathing difficulties which may be delayed in onset. At high concentrations, it may also cause dizziness, staggering, drowsiness, and unconsciousness. In addition, breathing high concentrations may cause loss of appetite, nausea, vomiting, and abdominal pain. Liquid xylene may be irritating to the eyes and skin. Exposure to high concentrations of xylene vapor may cause reversible damage to the kidneys and liver. Repeated or prolonged exposure to xylene may cause a skin rash. Repeated exposure of the eyes to high concentrations of xylene vapor may cause reversible eye damage.

TOXICITY								
Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	4.3 g/kg	$LD_{50(dermal)}$	Rabbit	1,700 mg/kg	$LC_{50(inh)}$	Rat (4 hours)	5,000 ppm
Specific organ toxicity, single exposure: No data available				Specific organ toxicity, repeated exposure: No data available				

CARCINOGENICITY				
IARC	Inadequate evidence in animals	Inadequate evidence in humans	Group 3: not classifiable as a human carcinogen	
NTP	Suspect Carcinogen			
California (Prop 65): Not Listed as carcinogen	**NIOSH:** Occupational Carcinogen	**ACGIH:**A4-Not Classifiable As Human Carcinogen	**OSHA:** Not Listed	
MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS				
Respiratory or Skin sensitization: No data available		Germ cell mutagenicity: No data available		
Reproductive toxicity: No data available		Teratogenicity: No data available		
Skin Corrosion/irritation: Skin-rabbit: irritation over 24 hours		Serious eye damage, irritation-rabbit: mild eye irritation		
Synergistic effects: No data available		Aspiration hazard: No data available		
RTECS #: ZE2100000				

HEXANE

May cause respiratory tract irritation. Exposure produces central nervous system depression. Inhalation of vapors may cause drowsiness and dizziness. Chronic exposure may cause liver damage. Adverse reproductive effects have been reported in animals. Laboratory experiments have resulted in mutagenic effects.

TOXICITY								
Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	15.8 g/kg	$LD_{50(dermal)}$	Rabbit	No Data	$LC_{50(inh)}$	Rat (4 hours)	48,000 ppm

Specific organ toxicity, single exposure: May cause drowsiness or dizziness	Specific organ toxicity, repeated exposure: may cause damage to organs from repeated or prolonged exposure. May cause nervous system damage.

CARCINOGENICITY

Testicular tumors shown in rats.

IARC	Not Listed
NTP	Not Listed

California (Prop 65): Not listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS

Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: overexposure may cause reproductive disorders based on lab animals. May damage fertility in humans.	Teratogenicity: No data available
Skin Corrosion/irritation: No data available	Serious eye damage, irritation -rabbit: mild eye irritation
Synergistic effects: No data available	Aspiration hazard: May be fatal if swallowed and enters airway.

RTECS #: MN9275000

BENZENE

Acute inhalation effects may cause respiratory tract irritation drowsiness, unconsciousness, and central nervous system depression. Potential symptoms of overexposure by inhalation are dizziness, headache, vomiting, visual disturbances, staggering gait, hilarity, fatigue, and other symptoms of CNS depression.

Chronic exposures may cause bone marrow abnormalities with damage to blood forming tissues. May cause anemia and other blood cell abnormalities. Chronic exposure to benzene has been associated with an increased incidence of leukemia and multiple myeloma (tumor composed of cells of the type normally found in the bone marrow). This substance has caused adverse reproductive and fetal effects in laboratory animals.

Toxicity

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	930 mg/kg	$LD_{50(dermal)}$	Rabbit	9.4 ml/kg	$LC_{50(inh)}$	Mouse (4 hours)	9,980 ppm

Specific organ toxicity, single exposure: May cause drowsiness or dizziness	Specific organ toxicity, repeated exposure: may cause damage to organs from repeated or prolonged exposure. May cause nervous system damage.

CARCINOGENICITY

IARC	Sufficient evidence in animals	Sufficient evidence in humans	Group 1: classifiable as a human carcinogen
NTP	Carcinogen		

California (Prop 65): Listed as carcinogen	**NIOSH:** Potential Occupational Carcinogen	**ACGIH:** A1 - Confirmed human carcinogen	**OSHA:** Select Carcinogen

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS

Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: lab testing shows mutagenic effects (in vivo). Genotoxicity in humans (in vivo) lymphocyte. Genotoxic damage shown in mice.

Reproductive toxicity: inhalation toxicity in mouse, including embryonic and fetal effects including death	Teratogenicity: Rat inhalation include effects include stunted fetus and death Mouse inhalation include effects include cytological changes and abnormalities to blood and lymphatic system.
Skin Corrosion/irritation: will cause skin irritation	Serious eye damage, irritation -rabbit: mild eye irritation
Synergistic effects: damage to bone marrow	Aspiration hazard: May be fatal if swallowed and enters airway.
RTECS #: CY1400000	

TRIMETHYL BENZENE

Acute inhalation effects respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. May cause drowsiness, unconsciousness, and central nervous system depression. Vapors may cause dizziness or suffocation. Prolonged or repeated skin contact may cause dermatitis. May cause anemia and other blood cell abnormalities. Prolonged exposure may produce a narcotic effect. Prolonged or repeated exposure may cause nausea, dizziness, and headache.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	8.97 g/kg	$LD_{50(dermal)}$	Rabbit	No Data	$LC_{50(inh)}$	Rat (4 hours)	No Data

Specific organ toxicity, single exposure: No data available	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY

IARC	Not Listed		
NTP	Not Listed		
California (Prop 65): Not Listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS

Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: test performed on rats showed negative results
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: No data available	Serious eye damage, irritation -rabbit: mild eye irritation
Synergistic effects: No data available	Aspiration hazard: May be fatal if swallowed and enters airway.
RTECS #: DC3220000	

1,2,4 TRIMETHYL BENZENE

Acute inhalation effects respiratory tract irritation. The toxicological properties of this substance have not been fully investigated. May cause drowsiness, unconsciousness, and central nervous system depression. Vapors may cause dizziness or suffocation. Prolonged or repeated skin contact may cause dermatitis. May cause anemia and other blood cell abnormalities. Prolonged exposure may produce a narcotic effect. Prolonged or repeated exposure may cause nausea, dizziness, and headache.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	5.0 g/kg	$LD_{50(dermal)}$	Rabbit	No Data	$LC_{50(inh)}$	Rat (4 hours)	18 g/M^3

Specific organ toxicity, single exposure: No data available	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY			
IARC	Not Listed		
NTP	Not Listed		
California (Prop 65): Not Listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS	
Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: test performed on rats showed negative results
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: No data available	Serious eye damage, irritation -rabbit: mild eye irritation
Synergistic effects: No data available	Aspiration hazard: May be fatal if swallowed and enters airway.
RTECS #: DC3325000	

CUMENE

Cumene may cause irritation of the skin and eyes. It may also cause dizziness, drowsiness, slight incoordination, and unconsciousness. At very high concentrations, it may cause narcotic symptoms. Prolonged or repeated exposure to Cumene may cause skin rash.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	1.4 g/kg	$LD_{50(dermal)}$	Rabbit	No Data	$LC_{50(inh)}$	Rat (4 hours)	39 g/M^3

Specific organ toxicity, single exposure: May cause respiratory irritation	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY			
IARC	Not Listed		
NTP	Not Listed		
California (Prop 65): Listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS	
Respiratory or Skin sensitization: Testing showed no sensitization	Germ cell mutagenicity: test performed on rats showed negative results
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: Testing showed no irritation	Serious eye damage, irritation-Testing showed no irritation
Synergistic effects: No data available	Aspiration hazard: May be fatal if swallowed and enters airway.
RTECS #: GR8575000	

CYCLOHEXANE

May cause respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness. Prolonged or repeated skin contact may cause defatting and dermatitis.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	5 g/kg	$LD_{50(dermal)}$	Rabbit	>180 g/kg	$LC_{50(inh)}$	Rat (4 hours)	>9,500 ppm

Specific organ toxicity, single exposure: May cause drowsiness or dizziness	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY			
IARC	Not Listed		
NTP	Not Listed		
California (Prop 65): Not Listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS	
Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: Testing showed no irritation	Serious eye damage, irritation-rabbit: mild eye irritation
Synergistic effects: No data available	Aspiration hazard: May be fatal if swallowed and enters airway.
RTECS #: GU6300000	

ETHYL BENZENE

Exposure to ethyl benzene may cause irritation of the skin and mucous membranes. It may also cause transient eye irritation at concentrations of 200 ppm. Breathing very high levels can cause dizziness and throat and eye irritation. Breathing lower levels has resulted in hearing effects and kidney damage in animals.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	3.5 g/kg	$LD_{50(dermal)}$	Rabbit	17.8 mL/kg	$LC_{50(inh)}$	Rat (4 hours)	55 g/M^3

Specific organ toxicity, single exposure: No data available	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY			
IARC	Sufficient evidence in animals	Inadequate evidence in humans	Group 2B: Possibly carcinogenic to humans
NTP	Not Listed		
California (Prop 65): Listed as carcinogen	**NIOSH:** Occupational Carcinogen	**ACGIH:**A4-Not Classifiable As Human Carcinogen	**OSHA:** Possible Select Carcinogen

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS	
Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: No data available	Serious eye damage, irritation-rabbit: No data available
Synergistic effects: No data available	Aspiration hazard: No data available
RTECS #: DA0700000	

NAPHTHALENE

Inhalation may cause respiratory tract irritation. Hemolytic anemia (destruction of red blood cells) is the primary health concern for humans exposed to naphthalene for either short or long periods of time. Other effects may include nausea, profuse perspiration, vomiting, kidney damage and liver damage. Chronic exposure may cause lung damage.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	490 mg/kg	$LD_{50(dermal)}$	Rabbit	>20 g/kg	$LC_{50(inh)}$	Rat (1 hour)	No Data

Specific organ toxicity, single exposure: No data available	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY			
IARC	Sufficient evidence in animals	Inadequate evidence in humans	Group 2B: Possibly carcinogenic to humans
NTP	Listed as reasonably anticipated to be a human carcinogen		
California (Prop 65): Listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS	
Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: Testing showed no irritation	Serious eye damage, irritation-rabbit: mild eye irritation
Synergistic effects: No data available	Aspiration hazard: No data available
RTECS #: QJ0525000	

STYRENE

Styrene can cause eye and upper respiratory irritation at concentrations of over 100 ppm; when concentrations reach over 350 ppm, irritation is strong and neurological impairment is observed. Central nervous system depression (tiredness, headache and dizziness) has been observed at concentrations between 200-700 ppm.

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
$LD_{50(oral)}$	Rat	2.65 g/kg	$LD_{50(dermal)}$	Rabbit	No Data	$LC_{50(inh)}$	Rat (1 hour)	11.8 g/M^3

Specific organ toxicity, single exposure: No data available	Specific organ toxicity, repeated exposure: No data available

CARCINOGENICITY			
IARC	Sufficient evidence in animals	Inadequate evidence in humans	Group 2B: Possibly carcinogenic to humans
NTP	Listed as reasonably anticipated to be a human carcinogen		
California (Prop 65): Listed as carcinogen	**NIOSH:** Not Listed	**ACGIH:** Not Listed	**OSHA:** Not Listed

MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS	
Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: Lab experiments have shown mutagenic effects.
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: Testing showed no irritation	Serious eye damage, irritation-rabbit: mild eye irritation
Synergistic effects: No data available	Aspiration hazard: No data available
RTECS #: WL3675000	

SECTION 12 ❋ ECOLOGICAL INFORMATION

GASOLINE

TOXICITY

Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	----------	No Data	EC_{50}	----------	No Data
EC_{50}	----------	No Data	EC_{50}	Microtox	11.5 mg/L 48 Hours

PERSISTENCE AND DEGRADABILITY

Readily biodegradable in the environment. The presence of ethanol in this product may impede the biodegradation of benzene, toluene, ethyl benzene and xylene in groundwater, resulting in elongated plumes of these constituents.

BIOACCUMULATIVE POTENTIAL

Log P_{ow}	2.1 - 6.0	BCF	No Data

MOBILITY IN SOIL					
K_{oc} (Soil/water Partition Coefficient)			No Data		
TOLUENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	Goldfish	13 mg/L 96 Hours	EC_{50}	Water Flea	11.5 mg/L 48 Hours
EC_{50}	Green algae	>433 mg/L 72 Hours	EC_{50}	Microtox	19.7 mg/L 48 Hours
BIOACCUMULATIVE POTENTIAL					
Log P_{ow}		2.65	BCF		8.317
XYLENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	Striped Bass	2 mg/L	LC_{50}	Water Flea	0.6 mg/L 48 Hours
EC_{50}	Green algae	72 mg/L 14 day	EC_{50}	Microtox	8.4 µg/L 48 Hours
Log P_{ow}		2.77-3.15	BCF		No Data
HEXANE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	fathead minnow	2.5 mg/L 96 hours	EC_{50}	Water Flea	3.87 mg/L 48 Hours
EC_{50}	Green algae	12.8 g/L 3 hours	EC_{50}	Microtox	No Data
BIOACCUMULATIVE POTENTIAL					
Log P_{ow}		3.9	BCF		No Data
BENZENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	fathead minnow	15-32 mg/L 96 hours	EC_{50}	Water Flea	10 mg/L 48 Hours
EC_{50}	Green algae	29 mg/L 72 Hours	EC_{50}	Microtox	No Data
BIOACCUMULATIVE POTENTIAL					
Log P_{ow}		1.83	BCF		4.265
1,2,4 TRIMETHYL BENZENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	fathead minnow	7.72 mg/L 96 hours	EC_{50}	Water Flea	6.14 mg/L 48 Hours
EC_{50}	Green algae	No Data	EC_{50}	Microtox	No Data
BIOACCUMULATIVE POTENTIAL					
Log P_{ow}		3.63	BCF		120.2

CUMENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	Rainbow trout	4.8 mg/L 96 Hours	EC_{50}	Water Flea	0.6 mg/L 48 Hours
EC_{50}	Green algae	2.6 mg/L 72 Hours	EC_{50}	Microtox	0.89 mg/L 5 Min
Log P_{ow}				3.55	

CYCLOHEXANE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	fathead minnow	32-93 mg/L 96 hours	EC_{50}	Water Flea	0.6 mg/L 48 Hours
EC_{50}	Green algae	>500 mg/L 72 Hours	EC_{50}	Microtox	85.5 mg/L 5 Min
Log P_{ow}				3.44	

ETHYL BENZENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	Sheepshead minnow	88 mg/L 96 hours	EC_{50}	Water Flea	1.8-2.4 mg/L 48 Hours
EC_{50}	Green algae	4.6 mg/L 72 Hours	EC_{50}	Microtox	9.68 mg/L 30 Min
BIOACCUMULATIVE POTENTIAL					
Log P_{ow}		3.118	BCF		No Data

NAPHTHALENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	fathead minnow	1-6.5 mg/L 96 hours	EC_{50}	Water Flea	2.16 mg/L 48 Hours
EC_{50}	Green algae	0.4 mg/L 96 Hours	EC_{50}	Microtox	0.93 mg/L 30 Min
BIOACCUMULATIVE POTENTIAL					
Log P_{ow}		3.3	BCF		85.1

STYRENE					
TOXICITY					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC_{50}	fathead minnow	4 mg/L 96 hours	EC_{50}	Water Flea	4.7 mg/L 48 Hours
EC_{50}	Green algae	0.72 mg/L 96 Hours	EC_{50}	Microtox	5.4 mg/L 5 Min
Log P_{ow}				2.95	

SECTION 13 * DISPOSAL CONSIDERATIONS

Not Meant To Be All Inclusive - Check Local, State, And Federal Laws And Regulations

Maximize product recovery for reclaim and reuse. Implement waste minimization principles. EPA U.S. Waste Codes: "Ignitable hazardous waste" (D001), unless proven otherwise. Use approved treatment, transporters, and disposal sites in compliance with all laws.

Waste Disposal Method: Should not be released into the environment.

Contaminated Packaging: Dispose of in accordance with local regulations.

US EPA Waste Number: D018 and D001

SECTION 14 ▣ TRANSPORTATION INFORMATION

Not Meant To Be All Inclusive - Check Local, State, And Federal Laws And Regulations

Element	U.S. DOT	IMDG	IATA
UN Number	UN 1203	UN 1203	UN 1203
UN Proper Shipping Name	Gasoline, All Grades	Gasoline, All Grades	Gasoline, All Grades
Hazard Class(es)	3	3	3
Placard/Label			
Environmental Hazard	No	No	No
Packing Group	II	II	II

SECTION 15 ☽ REGULATORY INFORMATION

Agency	Listing Guidance only, consult specific regulations	
OSHA	All ingredients are listed as hazardous under 29 CFR 1910.1200	
CERCLA RQ's (40 CFR Part 102)	Benzene – 10 pounds	
	Cumene - 5,000 pounds	Cyclohexane - 1,000 pounds
	Naphthalene – 100 pounds	Styrene - 1,000 pounds
	Xylene - 100 pounds	Ethyl Benzene - 1,000 pounds
	Toluene - 1,000 pounds	Hexane – 5,000 pounds
TSCA 8(a)	Naphthalene	
TSCA 8(b)	All components are listed or exempted	
SARA (40 CFR Part 355) TPQ's	None of the ingredients are listed	
SARA 302/304/311/312 extremely hazardous substances	None of the ingredients are listed	
SARA 302/304 emergency planning and notification	None of the ingredients are listed	
SARA 302/304/311/312 hazardous chemicals	Gasoline; Xylene; Toluene; n-Hexane; Naphthalene; 1,2,4-Trimethylbenzene; Ethylbenzene; Benzene	
RCRA	Benzene - U019	Hexane - U056
	Naphthalene – U165	
	Xylene - U239	Toluene - U220
State Regulations: Massachusetts, New Jersey, and Pennsylvania	Xylene Toluene, Hexane, Benzene, Ethyl benzene ,1,2,4 Trimethyl Benzene, and Naphthalene	
New York - all listed except 1,2,4 Trimethyl Benzene		
SARA 311/312 SDS distribution - chemical inventory - hazard identification	Gasoline: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Xylene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Toluene: Fire hazard,	

	Immediate (acute) health hazard, Delayed (chronic) health hazard; n-Hexane: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Naphthalene: Fire hazard, Immediate(acute) health hazard, Delayed (chronic) health hazard; 1,2,4-Trimethylbenzene: Fire hazard, Delayed (chronic) health hazard; Ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Benzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard.
EPA Form R Toxic Chemical Release Inventory	Toluene, Xylene, Hexane, 1,2,4 Trimethyl Benzene, Benzene, Ethyl benzene and Naphthalene
Clean Water Act (CWA) 307	Toluene, Benzene, Ethylbenzene and Naphthalene
Clean Water Act (CWA) 311	Xylene, Toluene, Benzene, Ethylbenzene and Naphthalene
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed
Clean Air Act Section 602 Class I Substances	Not Listed
Clean Air Act Section 602 Class II Substances	Not Listed

SECTION 16 ⌘ OTHER INFORMATION

NFPA LABEL

HMIS III LABEL

Personal Protection Index

NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.

Acronym List

°F=degrees Fahrenheit	°C=degrees Celsius	ACGIH= American Conference of Industrial Hygienists
APR=Air Purifying Respirator	BCF= Bioconcentration Factor	BuAc=Butyl Acetate
CANUTEC= Canadian Transport Emergency Centre	CAS=Chemical Abstract Service	CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act
CHEMTREC= Chemical Transportation Emergency Center	CNS=Central Nervous System	CWA=Clean Water Act
DOT=Department of Transportation	EC50= Effective Concentration Fifty	EPA=Environmental Protection Agency
g/Kg=Grams per Kilogram	g/M^3=Grams per Cubic Meter	GHS=Global Harmonization System
H_2O=Water	HAP=Hazardous Air Pollutants	HMIS= Hazardous Materials Identification System
IARC= International Agency for Research on Cancer	IATA= International Air Transport Association	IMDG= International Maritime Dangerous Goods
LC_{50}=Lethal Concentration Fifty	LD_{50}=Lethal Dose Fifty	LEL=Lower Explosive Limit
Log P_{ow} =Octanol/water partition coefficient	mg/Kg=Milligrams per Kilogram	mg/L=Milligrams per Liter

mL/Kg=Milliliters per Kilogram	mm HG=millimeters of mercury	NFPA=National Fire Protection Association
NIOSH= National Institute for Occupational Safety and Health	NTP=National Toxicology Program	OSHA=Occupational Safety and Health Administration
PEL=Permissible Exposure Limit	ppm=Parts per Million	RCRA=Resource Conservation and Recovery Act
RQ=Reportable Quantities	RTECS=Registry of Toxic Effects of Chemical Substances	SARA= Superfund Amendments and Reauthorization Act
SDS=Safety Data Sheet	SETIQ= Emergency Transportation System for the Chemical Industry; Mexico	STEL=Short Term Exposure Limit
TLV=Threshold Limit Value	TPQ=Threshold Planning Quantity	TSCA=Toxic Substance and Control Act
TWA=Time Weighted Average	UEL=Upper Explosive Limit	VOC=Volatile Organic Compounds

SDS REVISIONS: Updated Sections 1 and 3 regarding product names and ingredients.

SDS CREATION DATE: 11/01/13 **REVISION #1:** 03/04/20

DISCLAIMER

The information in this SDS was obtained from sources which we believe are reliable. **HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS ACCURACY.** Some conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. **FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.** All product measurements such as flash point, *etc.* are considered approximate values. All data provided by Explorer Pipeline Company. This SDS was prepared and is to be used only for this product.

SDS DEVELOPER: Cass Willard

Cass Willard, CIH

DATE: 03/04/20

Safety Data Sheet

Material Name: Diesel Fuel, All Types

SDS No. 9909
US GHS

Synonyms: Ultra Low Sulfur Diesel; Low Sulfur Diesel; No. 2 Diesel; Motor Vehicle Diesel Fuel; Non-Road Diesel Fuel; Locomotive/Marine Diesel Fuel

* * * Section 1 - Product and Company Identification * * *

Manufacturer Information

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS
Emergency # 800-424-9300 CHEMTREC
www.hess.com (Environment, Health, Safety Internet Website)

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Flammable Liquids - Category 3
Skin Corrosion/Irritation – Category 2
Germ Cell Mutagenicity – Category 2
Carcinogenicity - Category 2
Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)
Aspiration Hazard – Category 1
Hazardous to the Aquatic Environment, Acute Hazard – Category 3

GHS LABEL ELEMENTS

Symbol(s)

Signal Word

DANGER

Hazard Statements

Flammable liquid and vapor.
Causes skin irritation.
Suspected of causing genetic defects.
Suspected of causing cancer.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.
Harmful to aquatic life.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking
Keep container tightly closed.
Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands and forearms thoroughly after handling.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing fume/mist/vapours/spray.

Response
In case of fire: Use water spray, fog or foam to extinguish.
IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting.
IF exposed or concerned: Get medical advice/attention.

Storage
Store in a well-ventilated place. Keep cool.
Keep container tightly closed.
Store locked up.

Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
68476-34-6	Fuels, diesel, no. 2	100
91-20-3	Naphthalene	<0.1

A complex mixture of hydrocarbons with carbon numbers in the range C9 and higher.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes
In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin
Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

First Aid: Ingestion
DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

*** Section 7 - Handling and Storage ***

Handling Procedures

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

Incompatibilities

Keep away from strong oxidizers.

*** Section 8 - Exposure Controls / Personal Protection ***

Component Exposure Limits

Fuels, diesel, no. 2 (68476-34-6)

ACGIH: 100 mg/m3 TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel)
Skin - potential significant contribution to overall exposure by the cutaneous route (listed under Diesel fuel)

Naphthalene (91-20-3)

ACGIH:	10 ppm TWA
	15 ppm STEL
	Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA:	10 ppm TWA; 50 mg/m3 TWA
NIOSH:	10 ppm TWA; 50 mg/m3 TWA
	15 ppm STEL; 75 mg/m3 STEL

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Clear, straw-yellow.	**Odor:**	Mild, petroleum distillate odor
Physical State:	Liquid	**pH:**	ND
Vapor Pressure:	0.009 psia @ 70 °F (21 °C)	**Vapor Density:**	>1.0
Boiling Point:	320 to 690 °F (160 to 366 °C)	**Melting Point:**	ND
Solubility (H2O):	Negligible	**Specific Gravity:**	0.83-0.876 @ 60°F (16°C)
Evaporation Rate:	Slow; varies with conditions	**VOC:**	ND
Percent Volatile:	100%	**Octanol/H2O Coeff.:**	ND
Flash Point:	>125 °F (>52 °C) minimum	**Flash Point Method:**	PMCC
Upper Flammability Limit (UFL):	7.5	**Lower Flammability Limit (LFL):**	0.6
Burning Rate:	ND	**Auto Ignition:**	494°F (257°C)

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Naphthalene (91-20-3)

Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild irritation.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This material has been positive in a mutagenicity study.

Carcinogenicity

A: General Product Information

Suspected of causing cancer.

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

B: Component Carcinogenicity

Fuels, diesel, no. 2 (68476-34-6)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Diesel fuel)

Naphthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen
NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)
IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Fuels, diesel, no. 2 (68476-34-6)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	35 mg/L [flow-through]	

Naphthalene (91-20-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	5.74-6.44 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	1.6 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	0.91-2.82 mg/L [static]	
96 Hr LC50 Pimephales promelas	1.99 mg/L [static]	

96 Hr LC50 Lepomis macrochirus	31.0265 mg/L [static]
72 Hr EC50 Skeletonema costatum	0.4 mg/L
48 Hr LC50 Daphnia magna	2.16 mg/L
48 Hr EC50 Daphnia magna	1.96 mg/L [Flow through]
48 Hr EC50 Daphnia magna	1.09 - 3.4 mg/L [Static]

Persistence/Degradability
No information available.

Bioaccumulation
No information available.

Mobility in Soil
No information available.

* * * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging
Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 14 - Transportation Information * * *

DOT Information
Shipping Name: Diesel Fuel
NA #: 1993 **Hazard Class:** 3 **Packing Group:** III
Placard:

* * * Section 15 - Regulatory Information * * *

Regulatory Information

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Naphthalene (91-20-3)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

SARA Section 311/312 – Hazard Classes

Acute Health	Chronic Health	Fire	Sudden Release of Pressure	Reactive
X	X	X	--	--

SARA SECTION 313 - SUPPLIER NOTIFICATION

This product may contain listed chemicals below the de minimis levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right- To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Fuels, diesel, no. 2	68476-34-6	No	No	No	Yes	No	No
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Fuels, diesel, no. 2	68476-34-6	Yes	DSL	EINECS
Naphthalene	91-20-3	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

NFPA® Hazard Rating

Health	1
Fire	2
Reactivity	0

HMIS® Hazard Rating

Health	1*	Slight
Fire	2	Moderate
Physical	0	Minimal
		*Chronic

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Literature References

None

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet