COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
March 2, 2018
484-250-5920

SUBJECT: Plan Approval Review Memo
SPMT (Sunoco Partners Marketing & Terminals, L.P.)
Marcus Hook Borough, Delaware County
Application No. 23-0119I
APS: 959147, Auth: 1213698

To: James D. Rebarchak
Regional Manager
Air Quality

From: George A Eckert
Permit Reviewer
Air Quality

Through: Janine Tulloch-Reid, PE
Chief, Facilities Permitting Section
Air Quality

Sunoco Partners Marketing & Terminals, L.P. (SPMT), located at: 100 Green Street, Marcus Hook, PA 19061 (Marcus Hook Borough, Delaware County) has submitted a plan approval application to:

- Install one (1) new air assisted cold flare, equipped with high and low-pressure flare tips primarily for emergency depressurization events;
- Install the necessary piping for the cryogenic ethane process and other piping components;
- Install one (1) new wet surface air cooling (WSAC) system.

The following systems/sources will also be installed but are not considered to be point sources for air emissions:
- Install and operate two (2) new 600,000-barrel cryogenic ethane storage tanks;
- Install one (1) new closed-loop refrigeration system (utilizing propane);
- Install one (1) new open-loop refrigeration system for the final chilling of ethane;
- Install one (1) new dehydration system; and
- Install one (1) demethanizer rectifier.

SPMT has requested the initial plan approval be issued for 30 months due to the long lead time involved with the construction of the cryogenic tanks. The Department accepts this request and recommends issuing this plan approval for 30 months to allow for the construction phase to be completed.

This project will take place at an existing Title V facility and no additional sources or control devices will be installed or modified as part of this project.

SPMT – SIC 4226 (Special Warehousing – petroleum and chemical bulk stations) is a bulk chemical storage and fractionation facility. The facility is currently operating under the following plan approvals (numbers 23-0119D and 23-0119E) and a Title V Permit (number 23-00119). SPMT in Marcus Hook is a major PSD and NSR facility.

Administrative/Notifications

Application Received:	December 15, 2017
GIF:	Submitted with application
Compliance Review Form:	Submitted with the application.
Site Location:	100 Green Street, Marcus Hook, PA 19061
Coordination involvement:	None Required
Plan Approval Fee:	$1700.00
Municipal notification:	Township and county notifications (and proof of receipt) received with the application.
Administratively Complete:	January 24, 2018

Coordination

This project is not in coordination with any other Department programs.

Process Description

SPMT is proposing to add process equipment to receive approximately 70,000 barrels per day (bpd) of ethane by installing equipment to upgrade the ethane to meet the applicable specifications; chill, and store the ethane; and ultimately transfer the product off-site.

Only ethane feedstock is planned to be sent to the proposed equipment associated with this project. While other equipment associated with past projects process, chill, and store ethane, the ME-2X project involves a specific process design for the planned ethane feedstock. The project will additionally utilize available capacity of existing utilities at the site, including: electricity, steam, West Warm Flare header system, amine treatment, water, instrument air, nitrogen, and natural gas.

Ethane product storage tanks. These two 600,000-barrel tanks will be double-walled and employ a boil-off gas management system, consisting of a series of compressors which allow the cryogenic liquids to auto-refrigerate and remain a liquid. The ethane will be stored at approximately 1.0 psig and negative 130°F. These tanks will have operational and maintenance connections to the low-pressure ME-2X flare.

Amine Treatment/Dehydration System. The ethane feedstock is expected to contain carbon dioxide (CO2) at varying concentrations up to 1000 ppm. This amine treatment will consist of a contactor and a flash drum to remove the excess CO2. Lean amine for the contactor and rich amine regeneration will be provided from excess capacity of the existing amine regeneration process (no modifications will be made to the existing amine regeneration process for this project). Feedstock with CO2 concentrations greater than 100 ppm will be treated to remove the excess CO2, while lesser concentrated feedstock may bypass the treatment system and be routed to the dehydrator system.

The existing amine regeneration system will require an incremental increase of steam.

Water entrained in the ethane feedstock will be removed using a new molecular sieve desiccant dehydration system. Periodically, super-heated dry ethane will be used to regenerate the desiccant beds of the removed water. This dehydration system will have a regenerator vaporizer to preheat the ethane using steam, thus causing another incremental increase in steam demand for this project.

Demethanizer/refrigeration system. After the CO2 and moisture have been removed, the ethane will be cooled using a refrigeration system consisting of a closed-loop propane system followed by an open-loop ethane system, to remove methane from the ethane feedstock. This demethanizer serves to remove any methane that was not previously removed prior to shipment and that could create an off-spec ethane product.

Any methane and other hydrocarbons that are separated out will be routed to the fuel gas system at the facility.

Compressed, cooled, and condensed propane will be used to cool the ethane. The ethane vapors will similarly be compressed and cooled for storage in existing tanks (Source IDs 101 or 117) or in one of the tanks in this project.

Fugitive emissions are expected from the components in propane service and will reported emissions under LDAR.

Product Loading. Ethane will be off-loaded using the existing Marine Vessel Loading (Source 115) that takes place at Docks 1A and 2A. This Marine Vessel Loading has a vapor recovery line to return the ethane back to the storage vessel. This loading process will not be modified.

LDAR components. These components will be found in the amine treatment and the refrigeration system. Engineering estimated counts of the LDAR component do not account for any ethane and methane as these are not classified as VOCs (it is expected that the ethane feed will contain greater than or equal to 94% ethane). These fugitive components will follow the current guidelines found in Source 103 of the Title V Operating Permit.

Cold Flare. This flare will be an air-assisted high pressure smokeless flare for the cryogenic liquids, having a design flow of 77,120 scfm, a height of 195 feet, and a diameter of 1.67 feet. Flow to this air-assisted flare will include: pilot, purge, and sweep gases; as well as operation/maintenance flows, and emergency situations.

The cold flare will be equipped with high-pressure and low-pressure flare tips to be used for flaring cryogenic streams that do not contain water.

Continuous flow of purge (natural gas) and pilot (natural gas) gases will be introduced directly into the flare stack as these are necessary to ensure safe and reliable operation of the flare. Sweep gas (natural gas) will be introduced into the flare header to prevent explosive conditions within the piping.

Additionally, operational and/or maintenance material from the processes associated with this project will be sent to the flare. Operational flows can occur on regular, routine, or continuous basis, while maintenance flows occur at various intervals depending on maintenance and operational schedules and the conditions of the equipment.

The flare is being designed for flaring streams that are less than -20°F.

Emergency connections. A purpose of the flare is to provide safe and reliable control and destruction of gases during emergency situations and this has been considered in the flare design. These releases are not reasonably predicted and are not part of the normal operation, therefore flow rates and emissions are not included in the flare's PTE.

Total continuous flow to the flare (high and low pressure tips) from the pilot, purge and sweep are projected to be as follows:

Table 1
ME-2X Cold Flare flows

Parameter	ME-2X cold flare flow (scfh)
HP Pilot	500
HP Purge	261
HP Sweep	8,400
LP Pilot	500
LP Purge	24
LP Sweep	1,500
Total	11,185

Wet Surface Air Cooler (WSAC) System. This system is designed to process 21,000 gallons per minute of cooling water for the ethane and propane refrigeration systems. This WSAC system will have high-efficiency drift eliminators (maximum drift of 0.0005%) to reduce particulate emissions and the cooling water will be a mixture of potable water and low-pressure steam condensate. This WSAC system is essentially a cooling tower that has been taken locally to a source. This evaporative cooling system is similar to an air-cooled fin-fan type heat exchange system, where the VOCs from the process will not accumulate in the unit's water basin. Due to the high volatility and low water solubility of ethane and propane, these process fluids are directly transferred to the air if a leak should occur.

EXISTING UNMODIFIED SOURCES

Boilers. Steam from the three existing auxiliary boilers will be required for the dehydration regeneration vaporizer (part of the dehydration system) (2,941 lbs/hr), the amine stripper tower reboiler (part of the amine treatment) (706 lbs/hr), and steam tracing (9,500 lbs/hr). The total steam demand for this project has been calculated to be 13,147 lbs/hr. Facility-wide steam demand and allowable emissions from these boilers remains below that of the rated capacity and permitted emission limits. Each boiler is capable of producing 267,000 lbs steam/hour, for an aggregate production from all three (3) boilers of 801,000 lbs/hr. Steam demand is as follows:

Table 2
Steam Demand by process/project (lbs/hr)

Base facility demand and 23-0119	210,000
Plan approval 23-0119A	62,000
Plan Approval 23-0119B	53,000
Plan Approval 23-0119C	0
Plan Approval 23-0119D	17,000
Plan Approval 23-0119E	238,700
Plan Approval 23-0119F	0
Plan Approval 23-0119G	0
Plan Approval 23-0119H	0
RFD 6484 (Methanol Removal Project)	2,292
Plan Approval 23-0119I	13,147
Facility Total	596,139

West Warm Flare (or the Ethylene Complex Flare if the Warm West Flare is not yet operational).

For safety reasons, the ME-2X amine treatment system will include an operational and an emergency connection to the West Warm (or existing) Flare, while the dehydration system will include an operational connection to the West Warm (or existing) Flare. This will require additional sweep gas flow (natural gas) to the West Warm (or existing) Flare. The expected ME-2X flow to the West Warm (or existing) Flare is as follows:

Table 3
ME-2X flow to the West Warm (or existing) flare

Flow Type	Flow Quantity (lbs/yr) and composition		
	Ethane	Propane	Natural Gas
Emergency	0	0	0
Operational	183,600	9,663	0
Sweep	0	0	210,795

Fugitive Emissions

This project includes the installation of new piping equipment and associated valves and flanges. These components will be subject to 40 CFR 60, Subpart VVa and their PTE is based on methodologies found in the US EPA's protocol for Equipment Leaks Emission Estimates, EPA-453/95-017 (emission factors from Table 2-1) and the Potential CO2e emissions are taken from Table 2-4 of the same document. These have been estimated as listed in table 4, below:

LDAR components are found in the amine treatment system and the refrigeration system.

Table 4
Potential VOC Emissions from fugitive leaks

Project Unit	Component Type	Component Count	Control Eff. (%)[1]	Emission Factor (kg/hr/count)**	VOC Emissions (TPY)[2]
Refrigeration System Components***	Gas Valves	875	97	0.00597	1.50
	Light Liquid Valves	605	97	0.00403	0.70
	Pump Seals (Light Liquid)	3	85	0.0199	0.09
	Compressor Seals (gas)	8	85	0.228	2.62
	Pressure Relief Valves (gas)	30	97	0.104	0.90
	Flanges/Connectors	4,234	97	0.00183	2.24
	Sampling Connections	9	97	0.015	0.04
Amine Treatment System Components*	Heavy Liquid Valves	438	0	0.00023	0.19
	Pump Seals (Heavy Liquid)	3	0	0.00862	0.05
	Pressure Relief Valves	5	97	0.104	0.03
	Flanges/Connectors	1,017	97	0.00183	0.10
	Sampling Connections	4	97	0.015	0.003
Total VOC Fugitive Emissions					8.46

* Amine consists of 80% water and 20% Diethanolamine (DEA), which is a VOC.
** Emission factors derived from available data from EPA 453/R-95-017, Table 2-1.
*** Refrigeration system will contain 99% VOCs.

Table 5
Potential CO2e Emissions from fugitive leaks that are in natural gas service

Project Unit	Component type	Component Count	Methane GWP	Emission Factor (kg/hr/count)	CO2e emissions (TPY)[2]
NG Components – all gas service	Valves	2,002	25	0.0045	2174.8
	Others	132	25	0.0088	280.4
	Flanges	4,323	25	0.00039	407
	Open-ended Lines	3	25	0.002	1.4
Total					2863.6

[1] GWP – Global Warming Potential from Table A-1 to Subpart A of Part 98
[2] Emission factors derived from available data from EPA 453/R-95-017, Table 2-4.

New Source Review (NSR)

This project is being defined as the installation of:

- one (1) new air assisted cold flare, equipped with high and low-pressure flare tips primarily for emergency depressurization events;
- necessary piping for the cryogenic ethane process:
- one (1) new wet surface air cooling (WSAC) system (fugitive emissions).
- two (2) new 600,000-barrel cryogenic ethane storage tanks;
- one (1) new closed-loop refrigeration system (fugitive emissions);
- one (1) new open-loop refrigeration system for the final chilling of ethane;
- one (1) new amine contactor (fugitive emissions); and
- one (1) demethanizer rectifier.

Each plan approval application at a major facility is required, in accordance with 25 Pa. Code §§ 127.203a and 127.203(b)(1), to perform a significant emission increase and a significant net emission increase analysis for NSR pollutants. As the above are considered to be new units, the formula is the PTE minus any baseline emissions.

In accordance with 25 Pa. Code § 127.201(f), this facility is subject to the requirements for facilities located in severe nonattainment areas for NOx and VOC emissions. Delaware County is considered to be in nonattainment PM2.5.

The significance threshold for VOC and NOx emissions is 25 tons each and for PM2.5 the significance threshold is 10 tons.

Baseline Actual Emissions (BAE)

As these are all new sources, there are no baseline emissions, therefore the BAE equals zero.

5-Calendar Year Applicability Determination – 25 Pa. Code §§ 127.203a and 203(b)(1). These regulations instruct how to calculate the baseline actual emissions (BAE) and future Potential Emissions (PTE) from each new source at an existing major facility.

This step only looks at the increases due to each source in the project along with any contemporaneous changes. This cannot be less than zero. If the increase coupled with the contemporaneous changes are zero or negative, then zero is entered.

In this step, each new or modified source in the project is looked at to see if the PTE minus the BAE exceeds the significance threshold of 25 and 10 tons of NOx/VOC and PM2.5, respectively, per year.

In conjunction with 25 Pa. Code § 127.203a, the requirements found in 25 Pa. Code §§ 127.203(b) and (b)(1) are applicable for major sources located in this county for determining if the aggregated emissions exceed 25 TPY for NOx or VOC. This is as follows: Increases and decreases in emissions from the project are aggregated with other increases in net emissions occurring over a consecutive five (5) calendar year period, including the year in which the project was constructed.

PTE

COLD FLARE

Emissions from pilot, purge, and sweep gases flows, as stated earlier, will be 100% natural gas and continual flow for 8,760 hours per year, which consist mostly of methane and ethane - both of which are not classified as a VOC. VOC emissions from the pilot and purge gases are calculated using the VOC content based on composition data and assuming a destruction efficiency of 98%. The use of 98% reduction is discussed in more detail under the BAT section of this review.

FUGITIVE (LDAR)

The fugitive VOC emissions from these components are calculated based on 8,760 hrs/yr, along with the emission factors from EPA's protocol for Equipment Leaks Emission Estimates, EPA-453/95-017 and the appropriate control efficiencies when following an approved LDAR program.

WET SURFACE AIR COOLER (WSAC) SYSTEM

Fugitive emissions are calculated based on 8,760 hrs/yr and the appropriate emission factors for cooling towers.

INCREMENTAL WEST WARM FLARE

Emissions use anticipated flow based on 8,760 hrs/yr. As this flare is an existing, unmodified source, only the incremental increase in emissions shall be counted toward NSR applicability.

Table 6
New Sources
PTE (tpy)

Source	VOC	NOx	CO	PM	Pm10	PM2.5	SO2	H2SO4	Lead	CO2e
LDAR	8.46	0	0	0	0	0	0	0	0	2,864
Cold Flare	1.99	4.85	22.11	0	0	0	0.03	0	0	9,600
WSAC System	0	0	0	0.28	0.21	0.001	0	0	0	0
West Warm Flare	0.12	0.31	1.40	0	0	0	0.001	0	0	599
Totals	10.57	5.16	23.51	0.28	0.21	0.001	0.031	0	0	13,063

Table 7
5 Calendar Year Look Back Period (TPY)
25 Pa. Code § 127.203(b)(1)(i)[1]

Project Number	Name	Date	NOx	VOC
RFD 5865	Diesel Tanks and Pumps	8-29-2016	1.56	-
23-0119G	Crude Storage Plan Approval	9-28-2016	0	-
RFD 5918	Propane rail car offloading	9-26-2016	0.0004	-
RFD 5944	Portable Flare Metering	9-26-2016	0.0002	-
De Minimis	Mobile Thermal Oxidizer	10-3-2016	0	-
De Minimis	Crude Pump	11-4-2016	0	-
RFD 6484	Methanol Recovery Project	8-17-2017	0	-
23-0119H	Warm West Flare	11-2-2017	7.16	0.00
23-0119I	ME-2X	12-15-2017	5.16	10.57
Total			13.88	10.57
NSR threshold			25.0	25.0
NSR review required (Y/N)			No	No

[1] In accordance with 25 Pa. Code § 127.205(3), an earlier NSR applicability determination for NOx and VOCs was performed in plan approval number 23-0119E (issued on 4-4-2016) and 23-0119H (received on 11-2-2017 and not yet issued), respectively. This results in the 5-calendar year look-back period being shortened to those dates.

As Seen in Table 7, above, the 5-calendar year look-back increase of NOx and VOC emissions is less than the significant emission threshold of 25 tons. Since the NOx and VOC emission increases did not trigger NSR during the 5-calendar year look-back, an analysis following 25 Pa. Code § 127.203(b)(1)(ii) must be performed for each pollutant (Table 8, below).

10-Year Applicability Determination (25 Pa. Code 127.203(b)(1)(ii)).

Table 8
Facility Emissions occurring within ten (10) years of a complete application (tpy)

	Project Name	Date	NOx (TPY)	VOC
23-0001AA	12-3 Cooling Tower	Oct 28, 2009	-	-
23-0001AD	CO Controls (Source 113)	May 17, 2012	-	-
ERC Application	Shutdown of Delaware Sources	Nov 5, 2012	(29.29)	-
23-0119	Cryogenic Ethane/Propane Tanks	Feb 5, 2013	-	-
23-0119A	Deethanizer	Sep 5, 2013	-	-
23-0119B	Natural Gasoline	Jan 30, 2014	-	-
23-0119C	Cooling Tower	Nov 19, 2014	-	-
23-0119D	Cryogenic ethane, propane, butane tanks	Feb 26, 2015	-	-
RFD 5236	New Spheres	Aug 13, 2015	-	-
RFD 5340	Tank 609 VP Update	Oct 1, 2015	-	-
De Minimus	607/611 Tanks Bridge	Jan 13, 2016	-	-
23-0119E	Depropanizer / Debutanizer	Apr 1, 2016	-	-
RFD 5597	15-2B Cooling Tower Expansion	Apr 11, 2016	0	-
23-0119F	Tanks Update (not linked to 23-0119B)	Aug 16, 2016	0	-
RFD 5865	Diesel Pumps and Tanks	Aug 19, 2016	1.56	-
23-0119G	237/358 Crude Tanks Increase	Sept 28, 2016	0	-
RFD 5918	Propane Railcar Offloading	Sep 26, 2016	0.0004	-
RFD 5944	Portable Flare	Sep 26, 2016	0.0002	-
De Minimus	Mobile thermal oxidizer	Oct 3, 2016	0	-
De Minimus	Crude Pump	Nov 14, 2016	0	-
RFD 6484	Methanol Removal Project	Aug 17, 2017	0	-
23-0119H	West Warm Flare Project	July 7, 2017	7.16	-
23-0119I	ME-2X	Dec 15,2017	5.16	10.57
	TOTAL		(15.41)	10.57
	NSR Threshold		25	25
	NSR review required (Y/N)		N	N

* Note that the 10-year look back period for NOx and VOC increases has been reduced to the time of the most recent resetting for NSR pollutants. This took place with the issuance of plan approval number 23-0119H for VOC emissions and with 23-0119E for NOx emissions.

As Seen in Table 8, above, the 10- year look-back increase of NOx and VOC emissions is less than the significant emission threshold of 25 tons, therefore this project is not subject to the special permit requirements found in 25 Pa. Code § 127.203.

NSR Analysis for PM2.5 and its precursors are performed on the project only, as there is no look-back period for PM2.5.

Table 9
NSR analysis for PM2.5 and its precursors (SO2 and NOx)

	SO2 (tpy)	NOx (tpy)	PM2.5 (tpy)
ME-2X project	0.03	5.16	0.001
Significance threshold	40	40	10
NSR Review Required (Y/N)	N	N	N

As the PM2.5 and precursor emissions are below the significance thresholds, this project does not trigger NSR for PM2.5 or its precursors.

LAER is not triggered for this project.

Prevention of Significant Deterioration (PSD) – 40 CFR § 52.21

This project is being defined as the installation of:

- one (1) new air assisted cold flare, equipped with high and low-pressure flare tips primarily for emergency depressurization events;
- necessary piping for the cryogenic ethane process;
- one (1) new wet surface air cooling (WSAC) system.
- two (2) new 600,000-barrel cryogenic ethane storage tanks;
- one (1) new closed-loop refrigeration system;
- one (1) new open-loop refrigeration system for the final chilling of ethane;
- one (1) new amine contactor; and
- one (1) demethanizer rectifier.

SPMT is a major PSD facility. According to the regulations governing PSD, if a facility is major for any of the PSD pollutants, then an applicability analysis must be performed for all PSD pollutants, including GHGs and ozone.

STEP 1 – Significant Emission Increase

This compares the emissions after the change to the emission prior to the change. If this value is greater than the significance threshold per PSD pollutant, it is classified as a significant emission increase (Step 1). This number can never be less than zero. If the result is zero or less, then zero should be entered. The calculations for the PSD pollutants are demonstrated in Table 10, below.

Table 10
PSD Emission for the project
Emission units in TPY

Project	NO2	SO2	CO	PM	PM10	H2SO4	Lead	CO2e*
ME-2X	5.16	0.03	23.51	0.28	0.21	0	0	13,063
PSD Significance Threshold	40	40	100	25	15	7	0.6	75,000
Triggers PSD (Y/N)	N	N	N	N	N	N	N	N

* For consistency between pollutants, CO2e emissions have been converted to short tons.

For each PSD pollutant, Table 10 shows that the project emissions are less than the respective significant emission threshold.

It is noted here that the US EPA has stated, “Practically speaking, if the project itself is not significant there is no need to conduct a netting analysis (Step 2)”.

Best Available Technology (BAT) Determination

BAT is a pollutant specific determination and each plan approval application is required to demonstrate that the emissions from the new source will be the minimum attainable through the use of a BAT analysis. In accordance with the Department’s definition of BAT, SPMT has conducted such an analysis and researched the following databases: EPA’s NSR website, RBLC database, technical books and articles, vendor information, and various state and federal regulations and documents.

The installation of the sources in this project consist of point sources as well as fugitive sources of air emissions.

The two (2) cryogenic storage tanks will be double-walled construction and will employ a boil-off gas management system, consisting of a series of compressors allowing the cryogenic liquids to auto-refrigerate and remain a liquid. There will be no air emissions from these sources.

Fugitive sources. The EPA has stated that it is unreasonable to expect that relatively small quantities of VOC emissions, caused by leaking valves at outside storage tanks could be captured and vented to a stack. The only

reasonable control technology for fugitive emissions is an approved leak detection and repair program. SPMT will follow the LDAR program under 40 CFR 60, Subpart VVa. The new sources will be permitted under Source 103 in the Title V permit.

Cold Flare. Besides the processing of pilot, purge and sweep gases, this flare will safely process gasses from operation, maintenance, and emergency situations from the project. As this flare will operate on natural gas (which contains traces of C4 compounds and heavier), the facility cannot demonstrate a 99% destruction as that level of DRE can only be guaranteed when all of the gases to the flare are C3 and below. Therefore the use of a 98% DRE is appropriate.

Wet Surface Air Cooler System (WSACS). The RBLC database indicates that the control of particulates from this source shall be the utilization of a drift eliminator having a maximum total drift of 0.0005% of the circulating water flow rate. This WSACS until will be installed with drift eliminators meeting that standard.

Federal Regulations

40 CFR 60, Subpart OOOO (Standards for Crude Oil and Natural Gas Production, Transmission and Distribution). This regulation is mainly for the regulation of oil and natural gas production, except that 40 CFR § 60.5365(f) applies to onshore natural gas processing plant (See definition in 40 CFR § 60.5430) sites unless they are subject to and are controlled according to 40 CFR 60, Subpart VVa. No sources in this project are specifically subject to this regulation; however, the facility where this project is located is subject to VVa and therefore this project is exempt from this subpart.

CAM (40 CFR, Part 64). CAM does not apply to this project as the flare is not classified as a pollution specific emission unit (as defined in 40 CFR, Part 64).

Emission Reduction Credits (ERCs)

ERCs are not required for this project.

Stack characteristics

There are no stacks associated with this project.

Testing

Testing is required for this cold flare to ensure that the requirements of 40 CFR § 60.18 are being met.

Monitoring, recordkeeping, and implementation

In accordance with the requirements of 40 CFR § 60.18, sufficient monitoring and recordkeeping is required to be retained for a minimum of five (5) years.

Public Participation – Public notices were sent/published as follows:

- Company was notified by email on March 5, 2018;
- EPA notified via email on March 5, 2018;
- Notice in the PA Bulletin on March 3, 2018; and
- Newspaper notice published in the Delaware County Daily Times on December 20, 21, and 22, 2018.

Comments were received from the company, public, USEPA on xx yy, 2018 via email/letter and are addressed below. Or No comments were received from the USEPA, the permittee, or the public.

1. COMMENT –.

RESPONSE –

2. COMMENT–

RESPONSE –

3. COMMENT–

RESPONSE –

Recommendation

I recommend issuance of a plan approval for the installation of the above sources pertaining to the ME-2X project.