

Commonwealth Of Pennsylvania
Department of Environmental Protection
Southcentral Regional Office
September 15, 2017

Subject: Sunoco Pipeline LP/Cornwall Station/Mariner East
Addendum Memo
West Cornwall Township, Lebanon County
Permit No. 38-03062

To: William Weaver *WAW 9/15/17*
Regional Manager
Air Quality Program

Thru: Thomas Hanlon, Chief *TH 9/15/17*
East Permitting Section
Air Quality Program

From: Darrell Hartline *DH 9/15/17*
East Permitting Section
Air Quality Program

Comment Period

A copy of the proposed permit was submitted to Mr. Jed Werner, Sunoco Logistics Manager – Air Permitting.

Mr. Werner provided the following comments, via email with an attachment, on June 16, 2017:

Page 1 identifies Matthew Gordon as the responsible official. The responsible official for the Cornwall Pump Station is Mark Martin, Operations Supervisor.

Response: The requested change has been made.

Section C Condition #009 visible emissions are to be measured using either a Department approved device or trained opacity observers. Similar to issued SOOP's for other Pump Stations, Sunoco Pipeline requests condition #009 (b). state "Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

Response: The requested change has been made.

Section C Condition #010 (b) (5) requires investigation of any observed problems and a first attempt of repair within 15 days and notification to DEP if the repair is not complete within 30 days. Sunoco Pipeline requests removal of this condition.

Response: The Department believes it is appropriate to retain this condition.

Section C Condition #014 requires the maintenance of a log for all fugitive monitoring, visible emissions and odors, including those that deviate from the conditions found in the permit. The method used to determine non-compliance is sight, sound and smell. This log is a monthly sight, sound, and smell log.

Response: I called Mr. Werner and he indicated to me he made a mistake. He was referencing Condition #012 instead of Condition #014. He also indicated Condition #012 as written is acceptable and no change is requested. On June 27, 2017 Mr. Werner sent, via email, a message indicating the condition is acceptable as written.

Notice of the Department's intent to issue the permit was published in the Pennsylvania Bulletin on June 3, 2017. DEP received public comments on the revised draft permit. Copies of these comment items, a list of commenters, and DEP's Comment and Response Document, are included as attachments to his memo.

Revisions to Draft Permit:

As part of finalizing this permit, DEP is formalizing its determination that the air emissions expected from the West Cornwall Station, including both stack and fugitive emissions are of minor significance with regard to causing air pollution, and will not, on their own merits, prevent or interfere with the attainment or maintenance of an ambient air quality standard. A condition will be placed in the operating permit to this effect. DEP makes this determination because the post-control emissions from the site:

- 1.) do not meet the criteria for needing an air quality permit and
- 2.) do not exceed the criteria for a de minimis emission increase under 25 Pa. Code Section 127.449.
- 3.) are much smaller than the emissions from many other legally operating sources in the Commonwealth.
- 4.) have not been shown to cause any environmental problems during normal operation.

Lebanon County is currently designated as attainment for the 2008 ozone NAAQS. Also, since Lebanon County is located within the Ozone Transport Region, it is treated as moderate nonattainment for emission offset purposes. The current certified 2016 ozone design value for Lebanon County marginally exceeds the 2015 ozone NAAQS. With regard to particulate pollution, Lebanon County is currently designated as moderate nonattainment for the 2012 annual PM_{2.5} NAAQS. As a minor source with post-control emissions below air permit thresholds, the Sunoco West Cornwall facility is not expected to meaningfully affect local or regional compliance with ambient air quality standards.

The following condition will be placed in Section C of the permit, *"The potential fugitive plus stack emissions from this facility, after appropriate control as prescribed in this permit, have been estimated as follows: 0.06 tpy of NO_x, 0.24 tpy of CO, 0.76 tpy of VOCs, 0.01 tpy of Methane and 108 tpy of GHGs. The Department has determined these emissions remaining after*

appropriate control are of minor significance with regard to causing air pollution, and will not prevent or interfere with the attainment or maintenance of an ambient air quality standard.”

On August 3, 2017, via email, Sunoco provided responses to DEP questions about the application. Sunoco's email is attached for reference.

On August 9, 2017, via email, Sunoco updated the Permit Contact Person.

On August 18, 2017, via email, Sunoco provided some additional responses to DEP questions about the application. Sunoco's email is attached for reference.

The following additional changes are being made to the permit:

1. Cover Sheet – updated the responsible official and permit contact person.
2. Section C, Condition 009(b) – replaced “*certified in EPA Method 9*” with “*qualified.*”
3. Section C, Condition 011 – the condition was revised for clarity to read as follows: “*The permittee shall calculate the total emissions of VOCs for the entire facility on a 12-month rolling sum basis.*”
4. Section C, Condition 015(c) – revised the telephone reports to the DEP Reading District Office.

Conclusions and Recommendations

I recommend Permit No. 38-03062 be issued.

Attachments

cc: Permits\Reading District\SC Region 38-03062, B3

Table of Contents for Attachments to DEP's Sunoco West Cornwall Addendum 2 Memo

Item	Description	Page # (top right)
A	List of public commenters on revised draft permit	1
B	Written comments on revised draft permit	2
C	DEP Comment and Response Document	18
D	6/16/17 email from Sunoco with comments on the revised draft permit	24
E	6/27/17 email from Sunoco regarding monitoring	26
F	8/3/17 email from Sunoco responding to DEP questions	27
G	8/9/17 email from Sunoco updating contact information	37
H	8/18/17 email from Sunoco clarifying answers to DEP questions	39
I	Issued Air Quality Operating Permit No. 38-03062	43



Public Commenters
Regarding Revised Draft Air Quality Operating Permit No. 38-03062
for the Sunoco Pipeline LP facility
in West Cornwall Township, Lebanon County

Commenter #	Last Name	First Name(s)	Middle Initial	Honorific	Title	Position	Organization	Address 1	Address 2	Date on Letter	Date Received by DEP
1	Brennan	Anne			Ms.			1609 Rodman St.	Philadelphia, PA 19146	6/1/2017	6/1/2017
2	Salahub	Elise	K		Ms.			2375 Oak St.	Lebanon, PA 17042	7/3/2017	7/3/2017
3	Au	Thomas		Mr.	Esq.	Conservation Chair, Governor Pinchot Group	Pennsylvania Sierra Club	1528 Dogwood Drive	Harrisburg, PA 17110	7/3/2017	7/3/2017
4	Bishop	Pam		Ms.			Concerned Citizens of Lebanon County	PO Box 275, 503 First Street	Mt. Gretna, PA 17064		
5	Lorenzen	Douglas		Mr.			Concerned Citizens of Lebanon County	PO Box 275, 503 First Street	Mt. Gretna, PA 17064		
6	Pinca	Ann		Ms.				2154 Cloverfield Drive	Lebanon, PA 17046		

From: Anne Brennan/Robert Waller [<mailto:redshaleab@yahoo.com>]
Sent: Thursday, June 01, 2017 6:56 PM
To: Hanlon, Thomas <thanlon@pa.gov>
Subject: Re: Sunoco Pipeline LP, Cornwall Station, Revised Draft Air Quality Operating Permit No. 38-03062, West Cornwall Township, Lebanon County

Mr Hanlon,

Very impressive. Very long, confusing, massive, one could say HUGE document. The fact remains that I, as well as many citizens of the State of Pennsylvania, still most strenuously object to the building of this pipeline.

The DEP is supposed to protect the citizens of our state from environmental harm caused by exactly such an industry as Sunoco. While it is true that they have a lot of money, many lobbyists, and have clearly bought many of our legislators, they still should not be allowed to pollute our air and water with impunity. And, the DEP is supposed to be our bulwark against such harm.

From this astonishingly, mind-numbingly convoluted draft, it appears to me that the DEP is in fact an enabler to Sunoco. Offering no resistance, but encouraging them to build a pipeline that will pollute our air and water, causing harm to our people. This pipeline WILL leak, they all do, if not immediately, over time. The leaks will cause health problems for all of us, not only those who already have compromised pulmonary health.

The fracking and gas drilling which feeds this pipeline has already caused water and air pollution in the Marcellus Shale region.

I urge you to do your job. Protect the environment! Protect us!

A. Brennan
1609 Rodman St.
Philadelphia, PA 19146

From: "Hanlon, Thomas" <thanlon@pa.gov>
To:
Sent: Thursday, June 1, 2017 3:44 PM
Subject: Sunoco Pipeline LP, Cornwall Station, Revised Draft Air Quality Operating Permit No. 38-03062, West Cornwall Township, Lebanon County

Our records indicate that you have commented to DEP regarding issues related to draft Air Quality Operating Permit No. 38-03062 for the Sunoco Pipeline, LP, Cornwall Station, in West Cornwall Township, Lebanon County.

After considering the public comments received regarding this matter, DEP is proposing for public comment a revised draft of the permit. For your convenience, DEP has posted the materials relevant to this action on the internet. These documents can be accessed by navigating to DEP's website at www.dep.pa.gov, and clicking the following links: Regional Resources, Southcentral Regional Office, Community Information, Sunoco Pipeline Pump Station. The newly posted material is DEP's supplemental review document, which includes the revised draft operating permit, and an evaluation of the public comments received on the draft operating permit.

If you do not have a web access, you may schedule review of the documents described above at our Southcentral Regional Office by contacting Tim Fuller of DEP at 717-705-4732. In the alternative, if you would like paper copies of the documents, please contact Dawne Wilkes of DEP at 717-705-4702, and copies will be provided subject to applicable fees. If you have any technical difficulties accessing the documents posted on DEP's website, please click the "Contact Us" link at the bottom of the web page.

Sincerely,

Thomas J. Hanlon
East Permitting Section Chief
Air Quality Program

From: salahub@comcast.net [mailto:salahub@comcast.net]

Sent: Monday, July 03, 2017 1:17 PM

To: Hanlon, Thomas <thanlon@pa.gov>

Subject: public comment on sunoco cornwall pump station permit 38-03062

Dear Mr Hanlon

Thank you for providing your email address. Please find attached my comments on the Cornwall Pump Station.

Thanks again for your thorough review and consideration of public comments.

Ellie Salahub

(Elise Kucirka Salahub)

717.507.7201

2375 Oak St
Lebanon PA 17042
03 July 2017

Thomas Hanlon
Air Quality Permitting Chief
PA Department of Environmental Protection
Southcentral Regional Office
909 Elmerton Avenue
Harrisburg PA 17110-8200

RE: Sunoco Pipeline LP, Proposed Cornwall Pump Station
Draft Operating Permit No. 38-03062
West Cornwall Township, Lebanon County, PA

Dear Mr Hanlon

First and foremost, the recent Pennsylvania Supreme Court decision, dated 20 June 2017, in the case of Pennsylvania Environmental Defense Foundation versus Commonwealth of Pennsylvania, and Governor of Pennsylvania, Tom Wolf, in his Official Capacity as Governor, has empowered the words of Article 1, Section 27 to inform and radically alter the Department of Environmental Protection's (DEP) permitting of all fossil fuel and industrial development.

Article 1, Section 27 of the Pennsylvania Constitution states:

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Referencing *Payne II*, this recent decision goes on to state:

There can be no question that the Amendment itself declares and creates a public trust of public natural resources for the benefit of all the people (including future generations as yet unborn) and that the Commonwealth is made the trustee of said resources, commanded to conserve and maintain them. No implementing legislation is needed to enunciate these broad purposes and establish these relationships; the [A]mendment does so by its own *ipse dixit*.

"Accordingly, we re-affirm our prior pronouncements that the public trust provisions of Section 27 are self-executing."

This decision gives the Department of Environmental Protection a clear mandate to effectuate their Mission Statement:

The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment.

And their Statement of Values:

Protection – We are responsible for the protection of the air, land and water of the Commonwealth...

Pollution Prevention – We promote the goal of zero discharge through pollution prevention...

This Supreme Court decision and the Department of Environmental Protection's agency in fulfilling these constitutional protections are the critical underpinnings in the denial or approval of industry permit applications, and specifically, the draft Air Quality Operation Permit No. 38-03062 for the Sunoco Pipeline, LP, Cornwall Station in West Cornwall Township, Lebanon County, and all other Sunoco pump stations for the Mariner East pipelines.

Since DEP is charged with environmental protection, this court decision rightly defines DEP's sole clients as the environment and citizens of Pennsylvania. The current modus operandi of DEP granting client status to industries is now clearly at odds with our Constitution. Industry permits are not a right, but a privilege that cannot sacrifice and place at risk our right to breathe clean air, drink pure water, and have healthy soil.

There are many issues and concerns with this draft air quality permit. DEP's 2016 Annual Ambient Air Monitoring Network plan inadequately monitors only for Ozone and PM_{2.5} in Lebanon County. DEP cannot protect our air quality when 6 of 8 criteria pollutants are not being monitored and increased emissions from the Cornwall Pump Station are considered de minimis in the permit. This places the public at risk from unmonitored criteria pollutants and hazardous air pollutants (HAPs) which are not monitored, but are a component of emissions from all Sunoco pump stations. Sunoco, in its permit application, lists emission factors of 33 HAPs from natural gas combustion that include many carcinogens.

"HAPs, also known as air toxics, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive diseases, or birth defects. The most common HAPs in natural gas systems are nhexane, the BTEX compounds (benzene, toluene, ethylbenzene, and xylenes), and hydrogen sulfide... They are also a byproduct of fuel combustion and may be components in various chemical additives.¹

Sunoco's permit indicates atmospheric fugitive emissions from pump seal leaks. It is unreasonable to accept this as the only source of potential fugitive emissions. This is an unacceptable situation because there is no complete monitoring system in place to detect and quantify all emissions. Sunoco's emission calculations are based on 98% efficiency of the 10 MMBTU/hr John Zink ZTOP on the enclosed flare. Unless, DEP has ascertained independent

reproducible empirical field data confirming this efficiency, DEP cannot guarantee our air quality and therefore needs to deny this permit.

According to the "American Lung Association State of the Air 2016" report, Lebanon County is failing in 3 categories: ozone, amount of high fine-particle pollution days, and the fine-particle pollution annual average. Harrisburg-York-Lebanon PA is listed as number 9 in the "Top 10 U.S. Cities Most Polluted by Year-Round Particle Pollution (Annual PM_{2.5}.) Of particular concern is the fact Lebanon County is on DEP's list of counties to be reclassified in 2017 as a non-attainment area for Ozone 8-Hour levels.

According to the U.S. Environmental Protection Agency,

[G]round level or "bad" ozone is created by chemical reactions between nitrogen oxides (NO_x) and volatile organic compounds (VOC) in the presence of sunlight. Breathing ozone can trigger a variety of health problems, particularly for children, the elderly, and people of all ages who have lung diseases such as asthma [and COPD.] Ground level ozone can also have harmful effects on sensitive vegetation and ecosystems.

VOC and NO_x emissions (ozone precursors) are in Sunoco's permit calculations, but are alarmingly missing from DEP's air monitoring parameters for Lebanon County. We cannot assume our air quality is being protected when under Section G of the Draft Permit, no emission restrictions are listed. Ground level ozone pollution is not only a health risk, but is also harming our environment. Sunoco's pump station emissions will exacerbate these harms, especially since Lebanon County is a non-attainment area for this criteria pollutant.

Another concern is DEP's granting of a Natural Minor (State Only) permit. The natural gas industry, in toto, has the very real potential to cause greater environmental and human harms than any other industry in Pennsylvania's history and should be required to obtain Title V permits. Compartmentalizing the industry and the

permitting process circumvent the aggregate and cumulative impacts and harms. Each emission-permissive, state only, individual permit gives the illusion of safety and enforced regulations. According to the Pipeline Infrastructure Task Force Report:

Pennsylvania already has more than 12,000 miles of large-diameter oil and gas pipelines in the ground, but now,... the miles of natural gas gathering lines alone will at least quadruple by 2030. The foot print of just that expansion is larger than the cumulative area impacted by all other Marcellus gas infrastructure combined, and could exceed 300,000 acres, or 1 per cent of the state's land area. The movement of natural gas will also require compressor stations, estimated to number in the hundreds, to be built along the anticipated pipeline miles. All told, this pipeline infrastructure build-out will impact communities and the environment in every county in Pennsylvania.

The Sunoco Mariner East pipelines are especially risky because their product, natural gas liquids (NGLs), carries hazardous and flammable products. Without the additive, mercaptan, property

owners and the public will have no easy, discernible way to detect leaks. Sunoco's air permit applications cannot be reviewed without considering that Sunoco tops the list of reported hazardous liquids incidents nationally. From 2008–2016, Sunoco self reported 258 hazardous liquids incidents to the Pipeline Hazardous Materials and Safety Administration. Sunoco has had more reported incidents in the past 10 years than any of the nation's almost 2000 operators. This is critically important because each component permit is contributing to the overall harms and impacts of the project in toto.

Another concern is the non-aggregation of Sunoco's pump stations and related infrastructure, block valves. Sunoco has stated these facilities should not be aggregated because "both locations could fully function even if the other is non-functional. Sunoco stated "[t]he Rexmont Road Block Valve is an independently operated valve for isolating a section of pipeline for safety, environmental, or maintenance purposes, whereas the purpose of the Cornwall Pump Station is to maintain pipeline system pressure during the transmission of NGLs." This is obviously a specious argument. In order for Sunoco to meet permit requirements, both facilities are, in fact, necessary. Sunoco has also made much of their physical distance from each other, first reporting 6.0 miles and then 6.2 miles. This is another tactic to avoid aggregation. It is not reasonable to assume a difference of 0.2 miles is significant. Atmospheric pollution is dynamic and certainly not bound by infinitesimal physical distances. An aggregation determination under New Source Review using the two-part test that considers whether an air contamination source or combination of sources are located on one or more contiguous or adjacent properties and operated under common control is fundamentally flawed. The criteria terms, "contiguous" and "adjacent" are inappropriate when considering atmospheric pollution. And "common control" is irrelevant when Pennsylvania and communities are being targeted by so many pipeline and natural gas companies.

Climate change and global warming cannot be ignored in assessing these permits. In the "Calculation Worksheet" of the permit, Sunoco lists the Global Warming Potential (GWP) Emission Factor (EF) of methane based on a time period of 100 years as 25. Methane has a significantly shorter atmospheric lifespan, approximately a decade, and absorbs more energy than carbon dioxide which gives it a more accurate GWP₁₀ of 86. This needs to be corrected and should be required by DEP for all permits.

Unfortunately for the citizens of Pennsylvania, former Governors, Corbett and Rendell, and the legislature decided to ignore recommendations from the "Governor's Marcellus Shale Advisory Commission" to create a health registry prior to unconventional natural gas development.

9.2.37 The Department of Health should work in partnership with the Commonwealth's graduate schools of public health and other appropriate medical institutions to better protect and enhance the public health interests of citizens, such as through the establishment of the population-based health registry and curriculum development.

9.2.39 The Department of Health should routinely evaluate and assess Marcellus Shale-related environmental data, such as air, water, solid waste, and fish and other food

samples, that is collected from a variety of entities, such as PA DEP, US EPA, the US Geologic Survey, water works or treatment facilities, industry and academic partners.

The public and our environment are now unwilling “guinea pigs” in this latest iteration of fossil fuel development. We are being exposed to increased, unmonitored, inadequately regulated carcinogens, neurotoxins, biosphere pollutants, etc. Medical research has emerged on the health impacts of unconventional Marcellus shale development. Please read the following articles: <https://www.ncbi.nlm.nih.gov/pubmed/27561132>

<https://www.ncbi.nlm.nih.gov/pubmed/27428612>

<https://www.ncbi.nlm.nih.gov/pubmed/26426945>

<https://www.ncbi.nlm.nih.gov/pubmed/25856050>

We know Lebanon County’s air is failing health standards. Sunoco’s Mariner East pipelines, pump stations, block valves, and the proposed Atlantic Sunrise Pipeline are realistically going to further compromise our air. DEP is underfunded, understaffed and unable to protect the public from profiteering industries that have a record of polluting and destroying our natural resources. Our Department of Environmental Protection cannot be a complicit partner in worsening our air quality by approving this and all other pump station permits without violating our constitutional right to clean air. Please deny these permits.

Respectfully submitted

Elise Kucirka Salahub

¹Air Quality Issues in Natural Gas Systems Richard K. Lattanzio Analyst in Environmental Policy, March 4, 2013, Congressional Research Service 7-5700 www.crs.gov R42833

Pollutants Air pollutants associated with natural gas systems include, most prominently, methane and VOCs—of which the crude oil and natural gas sector is one of the highest-emitting industrial sectors in the United States—as well as NO_x, SO₂, PM, and various forms of HAPs. • Methane. Methane—the principal component of natural gas—is both a precursor to ground-level ozone formation (i.e., “smog”) and a potent GHG, albeit with a shorter climate-affecting time horizon than CO₂. Every process in natural gas systems has the potential to emit methane. EPA’s Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014 (released April 15, 2016) estimates 2014 methane emissions from “Natural Gas Systems” to be 7,045 gigagrams (Gg) (equivalent to 365.8 billion standard cubic feet [bscf], or 1.3% of the industry’s marketed production that year). In 2014, natural gas systems represented nearly 25% of the total methane emissions from all domestic sources and accounted for approximately 2.5% of all GHG emissions in the United States. Natural gas systems are currently the largest contributor to U.S. anthropogenic (i.e., manmade) methane emissions. Because of methane’s effects on climate, EPA has found that it, along with five other well-mixed GHGs, endangers public health and welfare within the meaning of the CAA. • VOCs—a ground-level ozone (O₃) precursor. The oil and natural gas sector is currently one of the largest sources of VOC emissions in the United States, accounting for approximately 18% of VOC emissions nationwide (and representing almost 40% of VOC emissions

released by industrial source categories). VOCs—in the form of various hydrocarbons—are emitted throughout a wide range of natural gas operations and equipment. The interaction between VOCs and NO_x in the atmosphere contributes to the formation of ozone (i.e., smog). Ozone exposure is linked to several respiratory ailments.

- NO_x—an O₃ precursor. Significant amounts of NO_x are emitted at natural gas sites through the combustion of natural gas and other fossil fuels (e.g., diesel). This combustion occurs during several activities, including (1) the flaring of natural gas during drilling and well completions, (2) the combustion of natural gas to drive the compressors that move the product through the system, and (3) the combustion of fuels in engines, drills, heaters, boilers, and other production, construction, and transportation equipment. In addition to its contribution to ozone formation, NO_x exposure is linked to several other respiratory ailments.
- Hazardous Air Pollutants (HAPs). HAPs, also known as air toxics, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive diseases, or birth defects. Of the HAPs emitted from natural gas systems, VOCs are the largest group and typically evaporate easily into the air. The most common HAPs in natural gas systems are n-hexane, the BTEX compounds (benzene, toluene, ethylbenzene, and xylenes), and H₂S. HAPs are found primarily in natural gas itself and are emitted from equipment leaks and from various processing, compressing, transmission, distribution, or storage operations. They are also a byproduct of fuel combustion and may be components in various chemical additives.
- Further, CO is emitted from combustion processes in stationary and mobile sources. CO exposure is linked to several respiratory ailments. SO₂ is emitted from crude oil and natural gas production and processing operations that handle and treat sulfur-rich, or “sour,” gas. SO₂ exposure is linked to several respiratory ailments. PM may occur from dust or soil entering the air during well-pad construction, traffic on access roads, and fuel exhaust from drilling machinery, vehicles, and other engines. PM exposure is linked to several respiratory and cardiovascular ailments.

National Emission Standards for Hazardous Air Pollutants Section 112 of the CAA requires EPA to promulgate National Emissions Standards for Hazardous Air Pollutants (NESHAPs). NESHAPs are applicable to both new and existing sources of HAPs, and there are NESHAPs for both “major” sources and “area” sources of HAPs. The aim is to develop technology-based standards that require emission levels met by the best existing facilities (commonly referred to as maximum achievable control technology, or MACT, standards). The pollutants of concern in natural gas systems are, most prominently, the BTEX compounds, carbonyl sulfide, and n-hexane. EPA promulgated NESHAPs for both the “Crude Oil and Natural Gas Production” and the “Natural Gas Transmission and Storage” sectors in 1999. These standards contain provisions for both major sources and area sources of HAPs and include storage vessels with flash emissions (major sources only), equipment leaks (major sources only), and dehydrators (major and area sources). The air standards promulgated on August 16, 2012, revise the existing NESHAPs to establish MACT standards for “small” dehydrators (which were unregulated under the initial NESHAPs), strengthen the leak detection and repair requirements, and retain the existing NESHAPs for storage vessels.

From: Thomas Y. Au [<mailto:thomxau@gmail.com>]
Sent: Monday, July 03, 2017 2:21 PM
To: Hanlon, Thomas <thanlon@pa.gov>
Cc: Pam Bishop <pambishop503@gmail.com>; Ann Finca <akp58@comcast.net>
Subject: Comments on Sunoco Cornwall Pump Station

Dear Mr. Hanlon,
Attached is our joint comments on the Sunoco Cornwall Pump Station, Permit No. 38-03062

--
Thomas Au
717-234-7445
thomxau@gmail.com

July 3, 2017

Sent via email to: thanlon@pa.gov

Thomas J. Hanlon
East Permitting Section Chief
Air Quality Program
DEP Southcentral Region
909 Elmerton Ave.
Harrisburg, PA 17110-8200

Dear Mr. Hanlon,

On June 3, 2017, DEP published a notice in the Pennsylvania Bulletin regarding the Sunoco Cornwall pump station, which noted that new information on the draft Air Quality Operating Permit, No. 38-03062, for the Sunoco Pipeline, LP was available at the Regional Office. We have reviewed the documents available in the regional office file. On behalf of the Governor Pinchot Group of the Sierra Club, Concerned Citizens of Lebanon County, and Lebanon Pipeline Awareness, we are submitting the following comments.

This facility should be subject to a stack test.

The emissions levels on which this permit would be based have not been verified. Sunoco has identified ways in which this pumping station generate emissions, and in particular, emissions of VOCs:

- 1) pump seal leaks directed to flares, and
- 2) fugitive leaks directly to atmosphere.

Sunoco estimates each pumping station would emit 24.7 tons per year of VOCs before controls. By using flares to combust some of the VOCs, Sunoco has reported the potential to emit ("PTE") for each pumping station will not exceed 0.25 tons per year of VOCs.

We are very concerned that emissions have been underestimated in this permit applications. Potential To Emit, by definition, only includes control technology that provides enforceable limitations or effects. Sunoco's PTE calculation has not been verified and there is thus no reason to believe it can be enforced.

Sunoco's emissions calculations were originally based on its assertion the 10 MMBTU/hr John Zink ZTOP enclosed flares which it has installed as control technology operate at 99.9% destruction/removal efficiency for all operating scenarios that Sunoco identified in the application. However, Sunoco has submitted no evidence in application for the claimed 99.9% efficiency, much less the 98% efficiency claimed in the addendum. The efficiency assumptions asserted are unsupported.

Sunoco has provided no evidence in the files which demonstrates the efficiency of the flares as they are being used to control emissions. The disparity between testing and actual use scenarios becomes orders of magnitude more egregious when looking at controlling emissions from pump seal leaks. Under typical circumstances, emissions will come from the constant leaking of the product lubricated pump seals. Pump seal leaks, a consequence of operating the pump per manufacturer's

specifications, will be directed to the flares to burn off. Sunoco suggests that the shroud system will be designed to capture 100% of the pump seal lubrication emissions, but provides no support for this assumption. The emissions directed to the flare from leaking pump seals are, of course, a much lesser volume than the emissions from pigging operations at any given time. Cumulatively over the course of a year, leaks from pump seals represent a large source of emissions sent through the flares - 262,800 scf per year of gas leaked through pump seals. There is no evidence that the flares have been built to handle the constant trickle of VOCs from pump seals, which will amount to approximately 0.01% of the flare capacity, or in terms of a turndown ratio, a 10,000:1. The efficiency of the flares in this constant, low-flow scenario is untested and unknown, and certainly cannot be discerned. Ultimately though, the purported 98% efficiency as it pertains to pump seal leak emissions is as unsupported and unverifiable as 99.9% efficiency.

Without any relevant testing to demonstrate how the flares would function in actual operating conditions, it would be irresponsible and unlawful for the Department to issue an operating permit at this time. By the same rationale, the pumping stations should not be operating while Sunoco awaits the issuance of these permits.

Stack testing is needed. The Cornwall pumping station is already in operation, as are other pumping stations along the pipeline, based on having been exempted from Plan Approvals through the RFD process. That means VOCs and other pollutants are already being emitted from these stations in unverified quantities based on inaccurate claims of flare efficiency. To protect the health and welfare of those living near the pumping stations, it is critical that regular stack tests be conducted so communities can be aware of actual emission levels. Even though the pumping stations have the same flares, efficiency can vary based on a number of factors, including how the flares were installed, configured and maintained. This is especially true in light of the absence of information provided by Sunoco regarding flare efficiency under normal operating scenarios. We do not understand why state test language has been deleted from this permit.

A Stringent Leak Detection and Repair Program Should be Required.

As DEP has noted, this facility has the potential to emit VOCs and methane. At a minimum, the operator should be subject to leak detect and repair requirements for fugitive emissions of these pollutants. On Feb. 6, 2017, DEP announced a comment period for General Permit 5, which included a LDAR requirement for fugitive emission components for natural gas facilities. Sunoco should be subject to the same requirements.

The requirement states:

SECTION K. FUGITIVE EMISSIONS COMPONENTS

1. Compliance Requirements

- (a) No later than 30 days after an emission source commences operation, and at least monthly thereafter, the owner or operator of a facility shall conduct an AVO inspection.
- (b) No later than 60 days after initial startup, and quarterly thereafter, the owner or operator shall conduct an LDAR program using either an OGI camera, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, or other leak detection methods approved by the Division of Source Testing and Monitoring.

(i) The owner or operator may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate DEP Regional Office.

(ii) Any fugitive emissions components that are difficult to monitor or unsafe to monitor must be identified in the monitoring plan described in Condition 3(a).

(c) The detection devices must be operated and maintained in accordance with manufacturer-recommended procedures, as required by the test method, or a Department-approved method.

(d) A leak is defined as:

(i) Any positive indication, whether audible, visual, or odorous, determined during an AVO inspection;

(ii) Any visible emissions detected by an OGI camera; or

(iii) A concentration of 500 ppm or greater detected by an instrument reading.

(e) Any leak detected using an OGI camera, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, or other leak detection methods approved by the Division of Source Testing and Monitoring must be quantified using a high flow sampler or another method approved by the Department.

(f) For quarterly inspections using a gas leak detector in accordance with 40 CFR Part 60, Appendix A-7, Method 21, the owner or operator may choose to adjust the detection instrument readings to account for the background organic concentration level as determined according to the procedures in Section 8.3.2.

(g) Any leak detected from a fugitive emission component shall be repaired by the owner or operator of the facility as expeditiously as practicable. A first attempt at repair must be attempted within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:

(i) The owner or operator must purchase parts, in which case the repair must be completed no later than 10 calendar days after the receipt of the purchased parts; or

(ii) The repair or replacement is technically infeasible without a vent blowdown or process shutdown or would be unsafe to repair during operation of the unit, in which case the repair or replacement must occur at the earliest of the next scheduled or unscheduled blowdown, or within 2 years.

(h) Once a fugitive emission component has been repaired or replaced, the owner or operator must resurvey the component as soon as practicable, but no later than 30 calendar days after the leak is repaired.

(i) For repairs that cannot be made during the monitoring survey when the leak is initially found, either a digital photograph must be taken of the component or the component must be tagged for identification purposes.

(ii) A leak is considered repaired if:

(A) There are no detectable emissions consistent with Section 8.3.2 of 40 CFR Part 60, Appendix A-7, Method 21;

(B) A leak concentration of less than 500 ppm is detected when the gas leak detector probe inlet is placed at the surface of the component;

(C) There is no visible leak image when using an OGI camera; or

(D) There is no bubbling at the leak interface using a soap solution bubble test specified in Section 8.3.3 of 40 CFR Part 60, Appendix A-7, Method 21.

Since ethane, butane, and propane are odorless and colorless, the detection of fugitive leaks with sophisticated detection equipment is even more important at this facility. On Apr 20, 2017, State Impact PA reported that - Sunoco's Mariner East 1 natural gas liquids pipeline leaked about 20 barrels of ethane and propane near Morgantown, Berks County, on April 1. When de-pressurized by a leak, these natural gas liquids can become a gas, which is released to the atmosphere.

The Cornwall facility cannot be considered in isolation.

We take issue with this statement in PA DEP's "Addendum Memo" of May 12, 2017, on page 2: "There is no interdependence between operation of the [Rexmont Road] Block Valve and the Cornwall Station. As a result the Department has determined that no emissions need to be aggregated with those of the Cornwall Station." We believe that the Mariner East 1 pump stations and related facilities (i.e., the entire pipeline) should be aggregated, rather than having each pump station evaluated as a single source of pollution. Sunoco submitted its air permit application as a single package (to obtain approval of its RFD) while DEP treated for permitting purposes the pump stations as 18 different sites. The area covered by this project is one strip of land, 100 feet wide by 300 miles long (6 square miles). If the application had been submitted as a site that measured 2 miles wide by 3 miles long (6 square miles), with all the same appurtenances and air equipment, it would have been considered as one facility or 18 interrelated facilities. Viewed from above, the construction of Mariner East 2 and 2X is being constructed, operated and maintained as one continuous facility. The air pollution emission from this pipeline operation will affect all of Pennsylvania and it is not confined to a particular area. Not only has DEP erred in not aggregating emissions from Mariner East 1 facilities, but DEP also has incorrectly not aggregated the emissions from Mariner East 2 and 2X with Mariner East 1 facilities.

Conclusion

Article 1 § 27 of the Pennsylvania Constitution imposes on the Commonwealth a fiduciary responsibility to conserve and maintain Pennsylvania's public natural resources for the benefit of all the people—including generations yet to come. The Commonwealth has a duty to prohibit the degradation, diminution, and depletion of our public natural resources, whether these harms might result from direct state action or from the actions of private parties. Since Sunoco's potential pollution can harm corpus of the trust, clean air, the commonwealth must exercise its duty as the trustee and ensure any recommendations for disposition of the proceeds "give all of the beneficiaries due regard for their respective interests in light of the purposes of the trust." Pennsylvania Environmental Defense Foundation vs. Commonwealth, PA Sup. Ct. (June, 2017) (Slip opinion [J-35-2016] at 32).

We strongly urges the Department not to issue these air permits at the present time. The Department should take a hard look at Sunoco's applications to ensure that this project does not cause air pollution.

Respectfully submitted,

Thomas Y. Au
Conservation Chair
Governor Pinchot Group, Pennsylvania Sierra Club

Pam Bishop
Doug Lorenzen
Concerned Citizens of Lebanon County

Ann Pinca
President
Lebanon Pipeline Awareness

**Responses to Public Comments
Regarding Revised Draft Air Quality Operating Permit No. 38-03062
for the Sunoco Pipeline LP facility
in West Cornwall Township, Lebanon County**

#	Comment	Commenter #	Response	Change to Permit?
1	Very impressive. Very long, confusing, massive, one could say HUGE document.	1	DEP concurs that the documentation related to the draft permit was lengthy-- 883 pages long, including over 500 pages of public comment documents.	No
2	The fact remains that I, as well as many citizens of the State of Pennsylvania, still most strenuously object to the building of this pipeline.	1	DEP is aware that some persons continue to oppose the project.	No
3	The DEP is supposed to protect the citizens of our state from environmental harm caused by exactly such an industry as Sunoco. While it is true that they have a lot of money, many lobbyists, and have clearly bought many of our legislators, they still should not be allowed to pollute our air and water with impunity. And, the DEP is supposed to be our bulwark against such harm.	1	DEP is required by law to review operating permit applications such as this one in accordance with established laws and regulations. DEP takes seriously its obligations to do this.	No
4	From this astonishingly, mind-numbingly convoluted draft, it appears to me that the DEP is in fact an enabler to Sunoco. Offering no resistance, but encouraging them to build a pipeline that will pollute our air and water, causing harm to our people.	1	See the response to Comment 3 (DEP responsibility).	No
5	This pipeline WILL leak, they all do, if not immediately, over time. The leaks will cause health problems for all of us, not only those who already have compromised pulmonary health.	1	This comment concerns the Sunoco pipeline(s), whereas the permit action under consideration is for an air quality permit for the new NGL pump station.	No
6	The fracking and gas drilling which feeds this pipeline has already caused water and air pollution in the Marcellus Shale region.	1	This comment concerns other Marcellus Shale sites, whereas the permit action under consideration is for an air quality permit for a new NGL pump station that is not directly related to those sites.	No
7	I urge you to do your job. Protect the environment! Protect us!	1	See the response to Comment 3 (DEP responsibility).	No
8	First and foremost, the recent Pennsylvania Supreme Court decision, dated 20 June 2017, in the case of Pennsylvania Environmental Defense Foundation versus Commonwealth of Pennsylvania, and Governor of Pennsylvania, Tom Wolf, in his Official Capacity as Governor, has empowered the words of Article 1, Section 27 to inform and radically alter the Department of Environmental Protection's (DEP) permitting of all fossil fuel and industrial development.	2	DEP believes that its approach to permitting the Sunoco West Cornwall pump station is appropriate under the standard articulated in Pennsylvania Environmental Defense Foundation versus Commonwealth of Pennsylvania.	No
9	[With regard to Article 1, Section 27 of the Pennsylvania Constitution, and] Referencing <i>Payne II</i> , this recent decision goes on to state: "There can be no question that the Amendment itself declares and creates a public trust of public natural resources for the benefit of all the people (including future generations as yet unborn) and that the Commonwealth is made the trustee of said resources, commanded to conserve and maintain them. No implementing legislation is needed to enunciate these broad purposes and establish these relationships; the [Amendment] does so by its own ipse dixit. Accordingly, we re-affirm our prior pronouncements that the public trust provisions of Section 27 are self-executing."	2	See the response to Comment 2 (EDF case).	No
10	This decision gives the Department of Environmental Protection a clear mandate to effectuate their Mission Statement and Statement of Values.	2	See the response to Comment 2 (EDF case).	No
11	This Supreme Court decision and the Department of Environmental Protection's agency in fulfilling these constitutional protections are the critical underpinnings in the denial or approval of industry permit applications, and specifically, the draft Air Quality Operation Permit No. 38-03062 for the Sunoco Pipeline, LP, Cornwall Station in West Cornwall Township, Lebanon County, and all other Sunoco pump stations for the Mariner East pipelines.	2	See the response to Comment 2 (EDF case).	No
12	Since DEP is charged with environmental protection, this court decision rightly defines DEP's sole clients as the environment and citizens of Pennsylvania. The current modus operandi of DEP granting client status to industries is now clearly at odds with our Constitution. Industry permits are not a right, but a privilege that cannot sacrifice and place at risk our right to breathe clean air, drink pure water, and have healthy soil.	2	See the response to Comment 2 (EDF case).	No
13	There are many issues and concerns with this draft air quality permit.	2	See specific items below.	See below

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#	Comment	Commenter #	Response	Change to Permit?
14	DEP's 2016 Annual Ambient Air Monitoring Network plan inadequately monitors only for Ozone and PM2.5 in Lebanon County. DEP cannot protect our air quality when 6 of 8 criteria pollutants are not being monitored and increased emissions from the Cornwall Pump Station are considered de minimis in the permit.	2	The air emissions from this facility were determined by DEP to be de minimis, and as such are not expected to result in any measurable health or environmental issues. This conclusion is not affected by the presence or absence of ambient monitors. Nevertheless, in response to this comment, DEP is formalizing its determination that the air emissions expected from the West Cornwall Station, including both stack and fugitive emissions are of minor significance with regard to causing air pollution, and will not, on their own merits, prevent or interfere with the attainment or maintenance of an ambient air quality standard. A condition will be placed in the operating permit to this effect. See the addendum memo accompanying this C&R document for more details.	No
15	This places the public at risk from unmonitored criteria pollutants and hazardous air pollutants (HAPs) which are not monitored, but are a component of emissions from all Sunoco pump stations. Sunoco, in its permit application, lists emission factors of 33 HAPs from natural gas combustion that include many carcinogens.	2	See the response to Comment 14 (West Cornwall facility significance).	No
16	HAPs, also known as air toxics, are those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive diseases, or birth defects. The most common HAPs in natural gas systems are hexane, the BTEX compounds (benzene, toluene, ethylbenzene, and xylenes), and hydrogen sulfide. They are also a byproduct of fuel combustion and may be components in various chemical additives.	2	See the response to Comment 14 (West Cornwall facility significance).	No
17	Sunoco's permit indicates atmospheric fugitive emissions from pump seal leaks. It is unreasonable to accept this as the only source of potential fugitive emissions.	2	Most of the pump seal emissions are designed to be controlled by the flare, and hence are not fugitive. Sunoco has estimated a minor amount of fugitive emissions (0.12 tons per year) from all equipment components at the station. See also the response to Comment 14 (West Cornwall facility significance).	No
18	This is an unacceptable situation because there is no complete monitoring system in place to detect and quantify all emissions.	2	The flare operational status will be continually instrumentally monitored. The facility will be monitored weekly for visible emissions, fugitive emissions and malodors, with the option to decrease to monthly after six months.	No
19	Sunoco's emission calculations are based on 98% efficiency of the 10 MMBTU/hr John Zink ZTOP on the enclosed flare. Unless, DEP has ascertained independent reproducible empirical field data confirming this efficiency, DEP cannot guarantee our air quality and therefore needs to deny this permit.	2	Sunoco conducted a test of a similar John Zink Flare system at the Sunoco No. 2 Tank Farm located in Delaware County on 4/26/15 to verify destruction removal efficiency (DRE). Results of the test demonstrated a 99.996% average DRE of the flare. In the case of West Cornwall, DEP accepted the manufacturer's guaranteed design destruction and removal efficiency of 98%. DEP believes that this approach to estimating emissions from the West Cornwall station is both reasonable and environmentally conservative.	No
20	According to the "American Lung Association State of the Air 2016" report, Lebanon County is failing in 3 categories: ozone, amount of high fine-particle pollution days, and the fine-particle pollution annual average. Harrisburg, York-Lebanon PA is listed as number 9 in the "Top 10 U.S. Cities Most Polluted by Year-Round Particle Pollution (Annual PM2.5)"	2	Lebanon County, PA is currently designated as attainment for the 2008 ozone NAAQS. Also, since Lebanon County is located within the Ozone Transport Region, it is treated as moderate nonattainment for emission offset purposes. The current certified 2016 ozone design value for Lebanon County marginally exceeds the 2015 ozone NAAQS. With regard to particulate pollution, Lebanon County is currently designated as moderate nonattainment for the 2012 annual PM2.5 NAAQS.	No
21	Of particular concern is the fact Lebanon County is on DEP's list of counties to be reclassified in 2017 as a non-attainment area for Ozone 8-Hour levels.	2	See the response to Comment 20 (attainment status).	No
22	According to the U.S. Environmental Protection Agency, [Ground level or "bad" ozone is created by chemical reactions between nitrogen oxides (NOx) and volatile organic compounds (VOC) in the presence of sunlight. Breathing ozone can trigger a variety of health problems, particularly for children, the elderly, and people of all ages who have lung diseases such as asthma [and COPD]. Ground level ozone can also have harmful effects on sensitive vegetation and ecosystems.]	2	DEP concurs that ambient ozone is regulated due to health and environmental concerns.	No
23	VOC and NOx emissions (ozone precursors) are in Sunoco's permit calculations, but are alarmingly missing from DEP's air monitoring parameters for Lebanon County.	2	DEP's ambient monitors in Lebanon County are not a subject of the Sunoco West Cornwall air permit application.	No
24	Permit, no emission restrictions are listed.	2	Emission restrictions are found in Section C and E of the permit.	No
25	Ground level ozone pollution is not only a health risk, but is also harming our environment.	2	See the response to Comment 22 (ozone concerns).	No

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26	Sunoco's pump station emissions will exacerbate these harms, especially since Lebanon County is a non-attainment area for this criteria pollutant.	2	See the response to Comment 14 (West Cornwall facility significance).	No
27	Another concern is DEP's granting of a Natural Minor (State Only) permit. The natural gas industry, in toto, has the very real potential to cause greater environmental and human harms than any other industry in Pennsylvania's history and should be required to obtain Title V permits.	2	The Sunoco West Cornwall facility does not meet the definition of a Title V facility, and is appropriately regulated as a state-only permit facility.	No
28	Comparmentalizing the industry and the permitting process circumvent the aggregate and cumulative impacts and harms.	2	DEP believes that it is contrary to law and to recent court decisions, to aggregate, for air permitting purposes, this pump station with other pump stations or facilities on, or connected with the Mariner East pipeline. This facility is neither contiguous with nor adjacent to the other pump stations. Furthermore, the aggregation of this facility with the other pump stations would not meet the common sense notion of a plant. See the response to Comment 3 (DEP responsibility).	No
29	Each emission-permissive, state only, individual permit gives the illusion of safety and enforced regulations.	2	See the response to Comment 3 (DEP responsibility).	No
30	According to the Pipeline Infrastructure Task Force Report, Pennsylvania already has more than 12,000 miles of large-diameter oil and gas pipelines in the ground, but now... the miles of natural gas gathering lines alone will at least quadruple by 2030. The foot print of just that expansion is larger than the cumulative area impacted by all other Marcellus gas infrastructure combined, and could exceed 300,000 acres, or 1 per cent of the state's land area. The movement of natural gas will also require compressor stations, estimated to number in the hundreds, to be built along the anticipated pipeline miles. All told, this pipeline infrastructure build-out will impact communities and the environment in every county in Pennsylvania.	2	This comment addresses regional issues which are beyond the scope of the West Cornwall permit application under review.	No
31	The Sunoco Mariner East pipelines are especially risky because their product, natural gas liquids (NGLs), carries hazardous and flammable products. Without the additive, mercaptan, property owners and the public will have no easy, discernible way to detect leaks.	2	See the responses to Comments 5 (scope of application) and 18 (monitoring).	No
32	Sunoco's air permit applications cannot be reviewed without considering that Sunoco tops the list of reported hazardous liquids incidents nationally. From 2008-2016, Sunoco self reported 258 hazardous liquids incidents to the Pipeline Hazardous Materials and Safety Administration. Sunoco has had more reported incidents in the past 10 years than any of the nation's almost 2000 operators.	2	See the response to Comment 5 (scope of application).	No
33	This is critically important because each component permit is contributing to the overall harms and impacts of the project in toto.	2	See the response to Comment 28 (aggregation).	No
34	Another concern is the non-aggregation of Sunoco's pump stations and related infrastructure, block valves. Sunoco has stated these facilities should not be aggregated because "both locations could fully function even if the other is non-functional. Sunoco stated "[t]he Rexmont Road Block Valve is an independently operated valve for isolating a section of pipeline for safety, environmental, or maintenance purposes, whereas the purpose of the Cornwall Pump Station is to maintain pipeline system pressure during the transmission of NGLs." This is obviously a specious argument. In order for Sunoco to meet permit requirements, both facilities are, in fact, necessary.	2	See the response to Comment 28 (aggregation).	No
35	Sunoco has also made much of their physical distance from each other, first reporting 6.0 miles and then 6.2 miles. This is another tactic to avoid aggregation. It is not reasonable to assume a difference of 0.2 miles is significant.	2	See the response to Comment 28 (aggregation).	No
36	Atmospheric pollution is dynamic and certainly not bound by infinitesimal physical distances.	2	See the responses to Comment 14 (West Cornwall facility significance) and 28 (aggregation).	No

Responses to Public Comments
Regarding Revised Draft Air Quality Operating Permit No. 38-03062
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#	Comment	Commenter #	Response	Change to Permit?
37	An aggregation determination under New Source Review using the two-part test that considers whether an air contamination source or combination of sources are located on one or more contiguous or adjacent properties and operated under common control is fundamentally flawed. The criteria terms, "contiguous" and "adjacent" are inappropriate when considering atmospheric pollution. And "common control" is irrelevant when Pennsylvania and communities are being targeted by so many pipeline and natural gas companies.	2	The commenter appears to be asking DEP to determine that certain regulatory requirements are inappropriate or irrelevant. DEP declines to do this.	No
38	Climate change and global warming cannot be ignored in assessing these permits. In the "Calculation Worksheet" of the permit, Sunoco lists the Global Warming Potential (GWP) Emission Factor (EF) of methane based on a time period of 100 years as 25. Methane has a significantly shorter atmospheric lifespan, approximately a decade, and absorbs more energy than carbon dioxide which gives it a more accurate GWP-10 of 86. This needs to be corrected and should be required by DEP for all permits.	2	DEP appropriately used the default global warming potential from the EPA State Inventory Tool for methane, which is 25 with a default time scale of 100 years. DEP is aware that if a different time scale is used, the GWP would be different. Nevertheless, even if the commenter's value of 86 were used, it would not change DEP's conclusion about the permit in this case, because effect of the greenhouse gases potentially released by this facility would still be less than many other facilities with DEP air permits, and would not trigger any additional regulatory requirements.	No
39	Unfortunately for the citizens of Pennsylvania, former Governors Corbett and Rendell, and the legislature decided to ignore recommendations from the "Governor's Marcellus State Advisory Commission" to create a health registry prior to unconventional natural gas development.	2	This comment addresses regional issues which are beyond the scope of the West Cornwall permit application under review.	No
40	We know Lebanon County's air is failing health standards.	2	See the response to Comment 20 (attainment status).	No
41	Sunoco's Mariner East pipelines, pump stations, block valves, and the proposed Atlantic Sunrise Pipeline are realistically going to further compromise our air.	2	See the responses to Comments 5 (scope of application) and 14 (West Cornwall facility significance).	No
42	DEP is underfunded, understaffed and unable to protect the public from profiteering industries that have a record of polluting and destroying our natural resources.	2	See the response to Comment 3 (DEP responsibility).	No
43	Our Department of Environmental Protection cannot be a complicit partner in worsening our air quality by approving this and all other pump station permits without violating our constitutional right to clean air. Please deny these permits.	2	See the response to Comment 3 (DEP responsibility).	No
44	This facility should be subject to a stack test. The emissions levels on which this permit would be based have not been verified. Sunoco has identified ways in which this pumping station generate emissions, and in particular, emissions of VOCs: 1) pump seal leaks directed to flares, and 2) fugitive leaks directly to atmosphere.	3-6	See the response to Comment 19 (stack testing).	No
45	Sunoco estimates each pumping station would emit 24.7 tons per year of VOCs before controls. By using flares to combust some of the VOCs, Sunoco has reported the potential to emit ("PTE") for each pumping station will not exceed 0.25 tons per year of VOCs.	3-6	The pumping stations vary slightly in their estimated emissions, due to slightly different equipment at each. Furthermore, Sunoco has updated its emission estimates for the stations. The revised potential VOC emission from the West Cornwall station are 0.76 tons per year.	No
46	We are very concerned that emissions have been underestimated in this permit applications.	3-6	To the contrary, DEP believes that the emissions have been overestimated in order to be environmentally conservative and transparent.	No
47	Potential To Emit, by definition, only includes control technology that provides enforceable limitations or effects. Sunoco's PTE calculation has not been verified and there is thus no reason to believe it can be enforced.	3-6	See the response to Comment 19 (stack testing).	No
48	Sunoco's emissions calculations were originally based on its assertion the 10 MMBTU/hr John Zink ZTOP enclosed flares which it has installed as control technology operate at 99.9% destruction/removal efficiency for all operating scenarios that Sunoco identified in the application.	3-6	See the response to Comment 19 (stack testing).	No
49	However, Sunoco has submitted no evidence in application for the claimed 99.9% efficiency, much less the 98% efficiency claimed in the addendum. The efficiency assumptions asserted are unsupported. Sunoco has provided no evidence in the files which demonstrates the efficiency of the flares as they are being used to control emissions.	3-6	See the response to Comment 19 (stack testing).	No
50	The disparity between testing and actual use scenarios becomes orders of magnitude more egregious when looking at controlling emissions from pump seal leaks. Under typical circumstances, emissions will come from the constant leaking of the product lubricated pump seals. Pump seal leaks, a consequence of operating the pump per manufacturer's specifications, will be directed to the flares to burn off.	3-6	The total VOC emissions being ducted to the flare, including pump seal leaks, are estimated at 24.33 tons. After control by the flare at 98% efficiency, and with consideration of combustion emissions from the pilot gas, the post-control emissions are estimated at 0.62 tons. See also the response to Comment 51 (pump seal emissions).	No

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#	Comment	Commenter #	Response	Change to Permit?
51	Sunoco suggests that the shroud system will be designed to capture 100% of the pump seal lubrication emissions, but provides no support for this assumption.	3-6	In an email dated 8/18/17, Sunoco clarified that "The pump Cornwall Station booster pump contains a dual mechanical seal system, that is, a primary seal with leakage to the flare (controlled leakage) and a secondary seal with leakage to the atmosphere (uncontrolled leakage). Primary Seal Controlled Leakage Rate to the Flare: The seal manufacturer (Flowsolve), provided a maximum leakage rate to the flare that was utilized in both the 2014 State-Only Operating Permit (SOOP) application and the September 2016 Addendum Letter Submittals for pump side primary mechanical seal (30 standard cubic feet per hour (SCFH)). The Flowsolve information is presented in Appendix B, 1-1: Flow Serve Emission Seal Leaks Support Information of the 2014 SOOP submittal [0.5 scfm * 60 = 30 scfh]. Secondary Seal Uncontrolled Leakage Rate to the Atmosphere: In both the 2014 SOOP and the September 2016 Addendum submittals, the motor side secondary seal releases directly to atmosphere as a fugitive emission utilized the USEPA Protocol for Equipment Leak Emission Estimates (EPA 453/R 95 017) calculation methodology to estimate these fugitive (uncontrolled) emissions to atmosphere. . . In summary, Flowsolve provided a maximum leakage rate from the primary seal to the flare (controlled emissions), which was used in both submittals (30 SCFH). Flowsolve provided a leakage rate from the secondary seal to the atmosphere (uncontrolled emissions) [0.01 SCFH] that is equivalent to the USEPA Protocol for Equipment Leak Emission Estimates (5.4E-4 Kg / hr), which was used in both submittals."	No
52	The emissions directed to the flare from leaking pump seals are, of course, a much lesser volume than the emissions from pigging operations at any given time. Cumulatively over the course of a year, leaks from pump seals represent a large source of emissions sent through the flares - 262,800 scf per year of gas leaked through pump seals.	3-6	See the response to Comment 50 (pump seal emission magnitude).	No
53	There is no evidence that the flares have been built to handle the constant trickle of VOCs from pump seals, which will amount to approximately 0.01% of the flare capacity, or in terms of a turndown ratio, a 10,000:1. The efficiency of the flares in this constant, low-flow scenario is untested and unknown, and certainly cannot be discerned. Ultimately though, the purported 98% efficiency as it pertains to pump seal leak emissions is as unsupported and unverifiable as 99.9% efficiency.	3-6	See the response to Comment 50 (pump seal emission magnitude). DEP sees no reason to believe that the flare will be ineffective at combusting the pump seal emissions.	No
54	Without any relevant testing to demonstrate how the flares would function in actual operating conditions, it would be irresponsible and unlawful for the Department to issue an operating permit at this time.	3-6	See the response to Comments 19 (stack testing), an 53 (flare pump seal control).	No
55	By the same rationale, the pumping stations should not be operating while Sunoco awaits the issuance of these permits.	3-6	The West Cornwall station has been operating since 5/7/15. DEP is not aware of any current air compliance issues or problems with the station.	No
56	Stack testing is needed. The Cornwall pumping station is already in operation, as are other pumping stations along the pipeline, based on having been exempted from Plan Approvals through the RFD process. That means VOCs and other pollutants are already being emitted from these stations in unverified quantities based on inaccurate claims of flare efficiency. To protect the health and welfare of those living near the pumping stations, it is critical that regular stack tests be conducted so communities can be aware of actual emission levels.	3-6	See the response to Comment 19 (stack testing).	No
57	Even though the pumping stations have the same flares, efficiency can vary based on a number of factors, including how the flares were installed, configured and maintained. This is especially true in light of the absence of information provided by Sunoco regarding flare efficiency under normal operating scenarios.	3-6	See the response to Comments 19 (stack testing), an 53 (flare pump seal control).	No
58	We do not understand why state test language has been deleted from this permit.	3-6	The original draft permit did not require stack testing, and the revised draft permit does not require stack testing either.	No
59	A Stintuent Leak Detection and Repair Program Should be Required.	3-6	See the response to Comment 18 (monitoring).	No
60	As DEP has noted, this facility has the potential to emit VOCs and methane. At a minimum, the operator should be subject to leak detect and repair requirements for fugitive emissions of these pollutants.	3-6	The revised draft permit requires that "for any observed problems, a first attempt at equipment repair must be made within 15 days of discovery, and DEP must be notified if the final repair is not completed in 30 days."	No

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61	On Feb. 6, 2017, DEP announced a comment period for General Permit 5, which included a LDAR requirement for fugitive emission components for natural gas facilities. Sunoco should be subject to the same requirements. [monthly AVO inspections, quarterly instrumental monitoring]	3-6	See the response to Comment 18 (monitoring). DEP believes that the small size and emission potential of this facility do not merit imposition of instrumental LDAR requirements.	No
62	Since ethane, butane, and propane are odorless and colorless, the detection of fugitive leaks with sophisticated detection equipment is even more important at this facility.	3-6	See the response to Comment 61 (instrumental LDAR).	No
63	On Apr. 20, 2017, State Impact PA reported that - Sunoco's Mariner East 1 natural gas liquids pipeline leaked about 20 barrels of ethane and propane near Morgantown, Berks County, on April 1. When de-pressurized by a leak, these natural gas liquids can become a gas, which is released to the atmosphere.	3-6	See the response to Comment 18 (monitoring).	No
64	The Cornwall facility cannot be considered in isolation.	3-6	See the response to Comment 28 (aggregation).	No
65	We take issue with this statement in PA DEP's "Addendum Memo" of May 12, 2017, on page 2: "There is no interdependence between operation of the [Rexmont Road] Block Valve and the Cornwall Station. As a result the Department has determined that no emissions need to be aggregated with those of the Cornwall Station." We believe that the Mariner East 1 pump stations and related facilities (i.e., the entire pipeline) should be aggregated, rather than having each pump station evaluated as a single source of pollution.	3-6	See the response to Comment 28 (aggregation).	No
66	Sunoco submitted its air permit application as a single package (to obtain approval of its RFD) while DEP treated for permitting purposes the pump stations as 18 different sites. The area covered by this project is one strip of land, 100 feet wide by 300 miles long (6 square miles). If the application had been submitted as a site that measured 2 miles wide by 3 miles long (6 square miles), with all the same appurtenances and air equipment, it would have been considered as one facility or 18 interrelated facilities.	3-6	See the response to Comment 28 (aggregation).	No
67	Viewed from above, the construction of Mariner East 2 and 2X is being constructed, operated and maintained as one continuous facility.	3-6	See the response to Comment 28 (aggregation).	No
68	The air pollution emission from this pipeline operation will affect all of Pennsylvania and it is not confined to a particular area.	3-6	See the response to Comment 28 (aggregation).	No
69	Not only has DEP erred in not aggregating emissions from Mariner East 1 facilities, but DEP also has incorrectly not aggregated the emissions from Mariner East 2 and 2X with Mariner East 1 facilities.	3-6	See the response to Comment 28 (aggregation).	No
70	Article 1 § 27 of the Pennsylvania Constitution imposes on the Commonwealth a fiduciary responsibility to conserve and maintain Pennsylvania's public natural resources for the benefit of all the people—including generations yet to come. The Commonwealth has a duty to prohibit the degradation, diminution, and depletion of our public natural resources, whether these harms might result from direct state action or from the actions of private parties.	3-6	See the response to Comment 2 (EDF case).	No
71	Since Sunoco's potential pollution can harm corpus of the trust, clean air, the commonwealth must exercise its duty as the trustee and ensure any recommendations for disposition of the proceeds "give all of the beneficiaries due regard for their respective interests in light of the purposes of the trust." Pennsylvania Environmental Defense Foundation vs. Commonwealth, PA Sup. Ct. (June, 2017) (Slip opinion [J-35-2016] at 32).	3-6	See the response to Comment 2 (EDF case).	No
72	We strongly urge the Department not to issue these air permits at the present time.	3-6	DEP believes that it is appropriate to issue the Sunoco West Cornwall air permit.	No
73	The Department should take a hard look at Sunoco's applications to ensure that this project does not cause air pollution.	3-6	See the response to Comment 3 (DEP responsibility).	No

Hartline, Darrell

From: WERNER, JED A <JED.WERNER@energytransfer.com>
Sent: Friday, June 16, 2017 4:08 PM
To: Hartline, Darrell
Subject: RE: Re-Posting Draft Cornwall Station Permit
Attachments: Comments on the Cornwall Draft Air Permit.docx

Darrell,

Attached please provide our comments to the DRAFT Cornwall Air Permit. These comments are intended to match the conditions to the recently issued Pump Station Operating Permits issued by SERO. The understanding of Sunoco Pipeline is that the permits will all be similar across the state.

Please let me know if you have any questions.

Thank you for your time.

*Jed A. Werner
Manager – Air Permitting
Energy Transfer Partners
525 Fritztown Road
Sinking Spring, PA 19608
610-670-3297 - office
610-858-0802 – cell
Jed.Werner@energytransfer.com*



ENERGY TRANSFER

EVERY day, is a good day!

From: Hartline, Darrell [mailto:dahartline@pa.gov]
Sent: Monday, May 22, 2017 9:26 AM
To: WERNER, JED A <JED.WERNER@energytransfer.com>
Subject: Re-Posting Draft Cornwall Station Permit

Jed,

I have attached the revised draft permit 38-03062 for your review. Please provide any comments by June 22, 2017.

Thanks,
Darrell Hartline

Private and confidential as detailed [here](#). If you cannot access hyperlink, please e-mail sender.

Comments on the Cornwall Draft Air Permit

Page 1 identifies Matthew Gordon as the responsible official. **The responsible official for the Cornwall Pump Station is Mark Martin, Operations Supervisor.**

Section C Condition #009 visible emissions are to be measured using either a Department approved device or trained opacity observers. **Similar to issued SOOP's for other Pump Stations, Sunoco Pipeline requests condition #009 (b). state "Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.**

Section C Condition #010 (b) (5) requires investigation of any observed problems and a first attempt of repair within 15 days and notification to DEP if the repair is not complete within 30 days. **Sunoco Pipeline requests removal of this condition.**

Section C Condition #014 requires the maintenance of a log for all fugitive monitoring, visible emissions and odors, including those that deviate from the conditions found in the permit. **The method used to determine non-compliance is sight, sound and smell. This log is a monthly sigh, sound, and smell log.**

Hartline, Darrell

From: WERNER, JED A <JED.WERNER@energytransfer.com>
Sent: Tuesday, June 27, 2017 2:49 PM
To: Hartline, Darrell
Subject: RE: Re-Posting Draft Cornwall Station Permit

Darrell,

I discussed with Lauren. We are currently conducting weekly monitoring for Eagle and Boot Pump Stations. We will request a change to monthly after 6 months of weekly monitoring from issuance of the permits. We are ok with the condition as stated.

Thanks

Jed

From: Hartline, Darrell [mailto:dahartline@pa.gov]
Sent: Wednesday, June 21, 2017 1:33 PM
To: WERNER, JED A <JED.WERNER@energytransfer.com>
Subject: RE: Re-Posting Draft Cornwall Station Permit

Thanks Jed. I will be out Monday. We can talk on Tuesday.

From: WERNER, JED A [mailto:JED.WERNER@energytransfer.com]
Sent: Wednesday, June 21, 2017 1:29 PM
To: Hartline, Darrell <dahartline@pa.gov>
Subject: Re: Re-Posting Draft Cornwall Station Permit

Darrell

I am out of the country on vacation. I am unavailable to return your phone call. Mark Martin phone number is 610-670-3278. I can contact when i return on Monday

Jed

Sent from my iPhone

On May 22, 2017, at 9:26 AM, Hartline, Darrell <dahartline@pa.gov> wrote:

Jed,

I have attached the revised draft permit 38-03062 for your review. Please provide any comments by June 22, 2017.

Thanks,
Darrell Hartline

Private and confidential as detailed [here](#). If you cannot access hyperlink, please e-mail sender.
Private and confidential as detailed [here](#). If you cannot access hyperlink, please e-mail sender.

Hartline, Darrell

From: WERNER, JED A <JED.WERNER@energytransfer.com>
Sent: Thursday, August 03, 2017 3:35 PM
To: Hartline, Darrell
Cc: Weiler, Jeff
Subject: Fwd: Cornwall Station Comment Responses

Darrell

Here is some information you requested. I will be available to discuss further on Thursday.

Jed

Sent from my iPhone

Begin forwarded message:

From: "Plachy, Valerie" <Valerie.Plachy@tetrattech.com>
Date: August 3, 2017 at 1:42:36 PM EDT
To: "WERNER, JED A" <JED.WERNER@energytransfer.com>
Cc: "Allison, Megan" <Megan.Allison@tetrattech.com>
Subject: RE: Cornwall Station Comment Responses

Hello Jed,

Regarding Item 1:

Tetra Tech developed the emission calculation estimates based upon guidance provided by the PADEP and USEPA. According to the following PADEP and USEPA websites the appropriate / usual period is 100 years:

- "Pennsylvania Greenhouse Gas Inventory 2016"
 - http://secure-web.cisco.com/1GbsQ351F3axbXE0X_dINjP6gKjr8pidIIBJII6AD6Au2BUTjloGNUsl45cxeZw5E8PI6DotJnQI7Xi0F50LXAYIHx-dikjcl77lrQmhS_nb53C8dARTD6SIR8GfqOXQtKYG5ZmGbNGIE6ASeosBXAhteU1s0-bKI-fJOJoxbEuSKzIqaXxhX38yEZI4qlL2dALheOSOdLuZ28Rfc5TQX5rMxeTywUacl6gFkRiLQjR98QRMg-DaqaN_1gBfX80DNJdTxsYIbpAN3XhcGr1tuGKUMgo5E27xhegdElpaT4EOG2mdqUDBWbRx8bvsZI10-7iDdWTT0ICkAAUd6Q4rA/http%3A%2F%2Ffiles.dep.state.pa.us%2FAir%2FAirQuality%2FAQPortalFiles%2FAdvisory%2520Committees%2FCCAC%2FDocs%2FInventory-2016_1-18-17_%28final%29.pdf
 - "The default GWP used by the SIT for CO2 is 1.0, CH4 = 25, and N2O = 298."
 - "The default time scale for the SIT is 100 years."
 - SIT = State Inventory Tool
- 40 CFR, Subpart C, Part 98, Subpart A, Table A-1

- [BLOCKEDcfr\[.\]gov/cgi-bin/text-idx?SID=7cd55ec5ecd5f06bf94c50d3452a94c3&mc=true&node=pt40\[.121\[.198&rgn=div5%20-%20ap40\[.121\[.198 19\[.\]1BLOCKED#ap40.21.98 19.1](https://www.epa.gov/cgi-bin/text-idx?SID=7cd55ec5ecd5f06bf94c50d3452a94c3&mc=true&node=pt40[.121[.198&rgn=div5%20-%20ap40[.121[.198 19[.]1BLOCKED#ap40.21.98 19.1)
 - Need to select the link for “Table A-1 to Subpart A of Part 98 – Global Warming Potentials”
- “Understanding Global Warming Potentials”
 - (https://secure-web.cisco.com/1Q7d1aTUq19UFmGdnHzQKR861mwsZy_-80aMeOlFJVjGie5T89ZA9QpP6zTtT 6uFoUjYNr1fifa oklP mle2LHXEQXWQ2XxrqmsD73gCkdOHX2wryxSsKcoTTHJsglbivcvzcM27s DbTg2IScgQfnX1C0TrLn3CWQL28K8V4uNxpcCUQVfQ9vmlIP6sFoZrUqfiD60smMh5lkdYqr7uZalXYu1bf9icCEqXQ3DI4eRHg-nGFpmjNu7S8NDUudi57RQG2dmhZmLBkoxdL2ucOamCniebdTwNDnZfE PI5r YppOKlHe1wAQlpPvHkrk4mjm3liwKxX8M1AhrHprg/https%3A%2F%2Fwww.epa.gov%2Fghgemissions%2Funderstanding-global-warming-potentials)
 - “The time period usually used for GWPs is 100 years.”
- “Glossary of Climate Change Terms:
 - <https://secure-web.cisco.com/12GiEuS419wKvwwz1K4ErQnDhLC Bbt0Ot73Mz9a5v415dLVwqhZUefh2PXaAdL3n1K8YdsAbeF-Y5Ao2YpYJHxp0RGnHOMf6RfmWdXTiKRisTaedGd7F fBsvWvg2COcfMaRD0QgAcizG8-POzNgU2gEVk8Vi6xnUaJv-FhGv8kqSm c 00e3AI1OY7EuXq3bninUw32fFg8-OnacRB6u2M2 QY0uXe5ZLiYN3RH-97 lqDwmi1i9GsdYlw4aScEDqro1nE1f6m WpN1Tjpl09OCrow6JfB3BeISQtQ3Ojuc izCO8LAoflvUICuNzCzFZm4D-TrTOGkOk2mfgbw/https%3A%2F%2Fwww3.epa.gov%2Fclimatechange%2Fglossary.htm#G>
 - **“Global Warming Potential**
A measure of the total energy that a gas absorbs over a particular period of time (usually 100 years), compared to carbon dioxide.”
- “EPA’s Report on the Environment (ROE)”
 - <https://secure-web.cisco.com/1fq6UqxzmJO1nyppzF9qn0zIFP8Cbg1Mu9fcPShzcOivezUsXW1u8kDb3KbV6Njtf6qOgM4xUahk2hswU1MIOLA-8dixjnliv-fQ-Db-V0WMcEBdEzdJ3HhbFRK-QmTESJmSg lbpd3sdGa1FZlfle2GtPI92s44MDhGSeEgAsEBj7es8ZEOWjtt5vF1gMGaiwbX-iXNbhJTVmlcHQZlBB212q-UGcyzF6BzjvqslSKj2fXF6FVWdegxeWqOeO0PPaWweRYb1t2ltmM 74k3k9hXaPjIMle9MGV5WNkWnQxJiQ zB0XI6Elg DOLI8wOa16jR5m9fv6JYzhHLMMf5w/https%3A%2F%2Fpub.epa.gov%2Froe%2Findicator.cfm%3Fi%3D25>
 - “...uses each gas’s 100-year global warming potential...”
- USEPA “Pollution Prevention Greenhouse Gas (GHG) Calculator Guidance”
 - <https://secure-web.cisco.com/1bmVEZt15sKPDO6IFKv5knijluO5JlpGyiVke2PSE04ftSEwVJmuKphMG4C4lyw7Emiziyu-sV1GkWbjrAAP1S2XXwatyfEAhKN6vddUjKRuFe8bbn9BOtymQcTcLKp8J2MhB8AdKEwF4yNviis3K4i8dS Sk1R7U4iVVbrK7EuvFN3uBBQwIHPQVPYhsijSxaEEGSqh6tY0xpAqhHWGmYuruPi XbBmWMBRpxDqZGOGDM992MtaO8Jxbk-knDfE079FOvzeU63gFODUzRgaHbBgV4JFQbedR4PmCgzfC5v0K89FvedBxvZZeD1vJF31JQKOM-tV6LS sdjHkWzdDAg/https%3A%2F%2Fwww.epa.gov%2Fsites%2Fproduction%2Ffiles%2F2014-12%2Fdocuments%2Fghgcalculatorhelp.pdf>
 - “The Calculator uses 100 years as the timeframe”

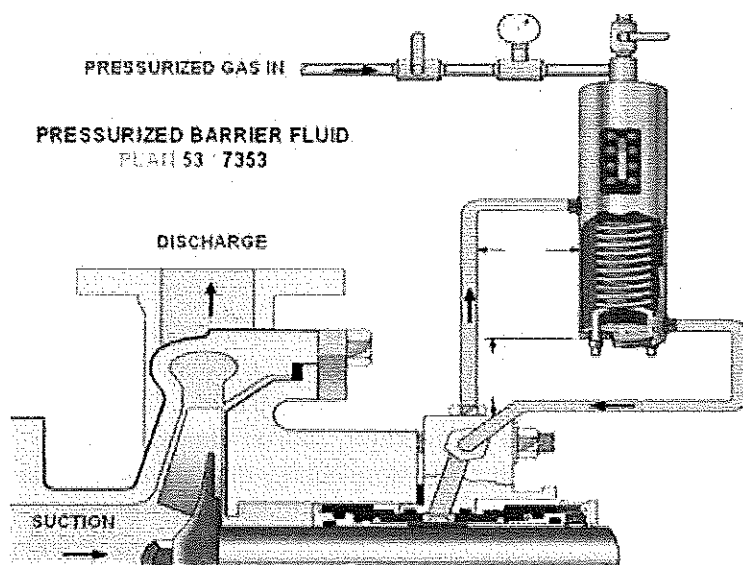
- USEPA “Atmospheric Lifetime and Global Warming Potential Defined”
 - https://secure-web.cisco.com/1xlnl40Qfz4x3sohZo6oanBKTdsctBdM7K6suajNSeOSME0xFkMFbaGo0hwupWwCPSOsbBe5dJN2ldnMekxRVrohUOeWLhQGzuyUWQU3QLQkTxewmAEybSEyXS9ihjkbS5sjF0oirvoVJe8zSs_6XDLzb9L3F5K0yJtBIGXjCYJPR8lxKISm1whgJmWI48UA3ewVI7sKQw6E1o0b0NByt605vZ_OGpYMoivvz-rIAT7zxhJ7xYsIHxksutB3rMahXiGeMRfc-QEGiVdhMn-Pqj4TGuTkgY0jOtcgEsVTKNHLNcNrCgWeN4-bdDd-XTTDFigF8e6cyrMfmSEhdU1T9LA/https%3A%2F%2Fwww.epa.gov%2Fclimateleadership%2Fatmospheric-lifetime-and-global-warming-potential-defined
 - “The Global Warming Potential (GWP) for a gas is a measure of the total energy that a gas absorbs over a particular period of time (usually 100 years), compared to carbon dioxide.”

Therefore, I believe that the 100-year GWP EFs used in the SPLP Requests for Determination (RFD) and State Only Operating Permit (SOOP) applications is appropriate as regulated under 40 CFR Chapter 1, Subpart C, Part 98, Subpart A, Table A-1.

Regarding Item 2:

The mechanical seal pot is used to provide lubricant (known as the barrier fluid) to the surface between the primary and secondary pump seals. This lubricant (typically a nonvolatile fluid) is contained in a seal pot that is typically pressurized with nitrogen thus forcing the barrier fluid into the space between primary and secondary seals and preventing release of the process fluid into the atmosphere. Only in the event a catastrophic primary and secondary seal failure would be release directly to the atmosphere.

However, for operational flexibility, Tetra Tech included the pump seal in the fugitive emission equipment counts (that is, equipment counts assumed that there is no shroud system).



Detailed information on “the shroud system” should be available from the manufacturer. Please let me know if you would like me to obtain this information. However, it should not be necessary to provide manufacturer information to justify the 100 percent (%) capture rate because a pump seal leak was used in the fugitive emissions.

Please let me know if you would like Tetra Tech to research these items further or if you require further clarification from Tetra Tech.

Regards,
Valerie

Valerie J. Plachy, P.E. | Senior Environmental/Chemical Engineer

Direct: 412-829-3610 | Office: 412-829-3610 | Fax: 412-829-3620
Tetra Tech, Inc. | Appalachian Basin Oil & Gas Services
400 Penn Center Boulevard, Suite 200 | Pittsburgh, PA 15235
BLOCKEDtetratech[.]comBLOCKED | valerie.plachy@tetratech.com



Live Green, Work Green, Save Green, Think Green

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From: WERNER, JED A [<mailto:JED.WERNER@energytransfer.com>]

Sent: Wednesday, August 02, 2017 2:44 PM

To: Plachy, Valerie <Valerie.Plachy@tetratech.com>

Subject: Fwd: Cornwall Station Comment Responses

Valerie

Any thoughts or ideas?

Jed

Sent from my iPhone

Begin forwarded message:

From: "Hartline, Darrell" <dahartline@pa.gov>
Date: August 2, 2017 at 1:58:20 PM EDT
To: "WERNER, JED A" <JED.WERNER@energytransfer.com>
Subject: Cornwall Station Comment Responses

Jed,

I need your assistance to respond to the following comments:

1. Climate change and global warming cannot be ignored in assessing these permits. In the "Calculation Worksheet" of the permit, Sunoco lists the Global Warming Potential (GWP) Emission Factor (EF) of methane based on a time period of 100 years as 25. Methane has a significantly shorter atmospheric lifespan, approximately a decade, and absorbs more energy than carbon dioxide which gives it a more accurate GWP10 of 86. This needs to be corrected and should be required by DEP for all permits. Is this comment correct? How should we respond to it?
2. Sunoco suggests that the shroud system will be designed to capture 100% of the pump seal lubrication emissions, but provides no support for this assumption. Please provide reasons why this comment is correct.

Thanks for your help,
Darrell Hartline

Pennsylvania Greenhouse Gas Inventory 2016

Table of Contents

Greenhouse Gas Inventory.....	3
Residential Sector.....	5
Commercial Sector.....	6
Industrial Sector.....	8
Transportation Sector.....	11
Electricity Production Sector.....	12
Agriculture Sector.....	15
Waste Management.....	18
Forestry and Land Use.....	20

List of Tables

Table 1	GHG Emissions by Sector.....	4
Table 2	Residential Sector Fuel Consumption.....	6
Table 3	Commercial Sector Fuel Consumption.....	7
Table 4	Industrial Sector Fuel Consumption.....	8
Table 5	Industrial Sector Process Emissions.....	9
Table 6	Coal Mining-related Process Emissions.....	10
Table 7	Natural Gas Production Process Emissions.....	11
Table 8	Transportation Sector Emissions by Fuel Consumption.....	12
Table 9	Electricity Generation by Fuel Type.....	13
Table 10	Fuel Use for Electricity Generation.....	13
Table 11	Contribution to GHG Emissions, by Fuel Type.....	14
Table 12	Electricity Consumption by Sector.....	15
Table 13	Electricity Generated, Consumed and Exported.....	15
Table 14	Animal Populations Contributing to GHG Emissions.....	16
Table 15	GHG Emissions, by Livestock Type, Enteric Fermentation.....	17
Table 16	EHE Emissions, by Livestock Type, Manure Management.....	17
Table 17	GHG Emissions from the Management of Agricultural Soils.....	18
Table 18	GHG Emissions Associated with Landfilling Operations.....	18
Table 19	GHG Emissions Associated with Waste Combustion.....	19
Table 20	GHG Emissions Associated with Wastewater Treatment.....	19
Table 21	Total GHG Emissions from the Waste Management Sector.....	19
Table 22	GHG Emissions and Reductions from Forestry and Land Use.....	20

List of Figures

Figure 1	GHG Emissions by Sector.....	5
Figure 2	Residential Sector GHG Emissions by Fuel Type.....	6
Figure 3	Commercial Sector GHG Emissions by Fuel Type.....	7
Figure 4	Industrial Sector GHG Emissions by Fuel Type.....	9
Figure 5	Transportation Sector Fuel Use.....	11
Figure 6	Electricity Generation by Type.....	12
Figure 7	GHG Emissions by Fuel Type.....	14

Pennsylvania Greenhouse Gas Inventory

Greenhouse Gas Inventory

Pennsylvania has several sectors which contribute to Greenhouse Gas (GHG) emissions, and each of these sectors has undergone fluctuations since 2000. Changes in the amount and type of fuel consumption, growth and slow-downs in the economy, and duration of severe weather events all have a role in the trends observed in the Commonwealth's GHG emissions.

The following sectors have a GHG emission total associated with them within the Commonwealth: residential, commercial, industrial, transportation, electricity production, agriculture, waste management, forestry, and land use. Data for this inventory were primarily obtained from the EPA State Inventory Tool (SIT). SIT is an interactive spreadsheet model designed to help states develop GHG emissions inventories and provides a streamlined way to update an existing inventory or complete a new inventory.

The SIT consists of 11 estimation modules applying top-down approach to calculate GHG emissions, and one module to synthesize estimates across all modules. The default data are gathered by federal agencies and incorporate reported data from private, state, and local sources covering fossil fuels, electricity consumption, agriculture, forestry, waste management, and industry. As is customary, the units for the GHG emissions are given in million metric tons of carbon dioxide equivalent (MMTCO₂e). A metric ton is equal to 2,204.6 pounds or approximately 1.1 short tons (US tons). The greenhouse gases typically accounted for in the SIT are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Each GHG has a different global warming potential (GWP), which is accounted for when converting emissions to MMTCO₂e. The default GWP used by the SIT for CO₂ is 1.0, CH₄ = 25, and N₂O = 298. The GWP of a GHG will vary depending on the time scale selected. The default time scale for the SIT is 100 years. In order to provide consistency with previous updates and other state inventories using the SIT, the default values were not changed in compiling the inventory.

As shown in Table 1, the total statewide gross GHG emissions for Pennsylvania in 2013, the latest year with complete data available from the SIT, were 305.75 MMTCO₂e. Pennsylvania's Forestry and Land Use sector provides a carbon sink for GHG emissions, absorbing approximately 34.36 MMTCO₂e in 2013, and lowering the Commonwealth's net GHG emission for 2013 to 271.39 MMTCO₂e. Table 1 also shows a relative decrease of 7.01 percent in the gross emission and 11.58 percent in the net emission totals for 2013 relative to 2000.

Also shown in Table 1, the sectors with the largest contribution to the Commonwealth's GHG emissions are the transportation, industrial, and electricity production sectors. The relative change for each of these sectors between 2000 and 2013 was a decrease of 11.50 MMTCO₂e for the transportation sector, an increase of 5.16 MMTCO₂e for the industrial sector, and a decrease of 12.26 MMTCO₂e for the electricity production sector. Together, these three sectors annually account for over 85 percent of Pennsylvania's GHG emissions.

The residential, commercial, and agriculture sectors also experienced declines in GHG emissions during the time period from 2000 to 2013. The residential, commercial, and agriculture sectors

had decreases in GHG emissions of approximately 5.57, 2.45, and 0.26 MMTCO₂e, respectively, during this time period.

GHG emissions from the waste management sector experienced an approximately 3.83 MMTCO₂e increase from 2000 to 2013. During this same period, the GHG emissions sequestered in the forest and land use sector have increased by approximately 12.48 MMTCO₂e.

Table 1 – GHG Emissions by Sector

Sector / Emission Source (MMTCO ₂ e)	2000	2005	2009	2010	2011	2012	2013
Residential	25.93	24.12	20.13	20.45	19.68	17.51	20.36
Commercial	13.02	13.00	10.90	10.63	10.39	9.12	10.57
Industrial	84.72	79.97	70.65	80.44	79.29	80.69	89.88
Combustion of Fossil Fuels	49.08	46.57	35.66	40.67	41.12	42.59	49.59
Industrial Process	16.02	14.26	12.70	18.51	18.65	18.46	18.97
Coal Mining and Abandoned Coal Mines	12.78	9.40	11.53	11.78	9.11	9.10	10.63
Natural Gas and Oil Systems	6.85	9.74	10.76	9.48	10.41	10.54	10.69
Transportation	73.75	74.74	66.50	65.90	63.85	62.86	62.25
Petroleum	71.62	73.03	64.21	63.28	61.01	60.79	60.12
Natural Gas	2.13	1.71	2.30	2.62	2.84	2.07	2.13
Electricity Production (In-state)	116.12	121.56	110.94	117.12	111.92	105.22	103.86
Coal	111.04	112.34	98.23	102.70	94.32	82.93	83.08
Petroleum	3.37	4.19	0.70	0.51	0.40	0.26	0.29
Natural Gas	1.13	4.43	11.48	13.37	16.70	21.57	20.04
N ₂ O	0.55	0.56	0.49	0.51	0.47	0.42	0.42
CH ₄	0.04	0.04	0.04	0.04	0.04	0.03	0.03
Agriculture	7.38	7.19	7.37	7.29	7.31	7.40	7.12
Enteric Fermentation	3.51	3.37	3.46	3.49	3.51	3.52	3.45
Manure Management	1.18	1.26	1.24	1.24	1.25	1.25	1.23
Agricultural Soil Management	2.67	2.55	2.65	2.55	2.54	2.61	2.43
Burning of Agricultural Crop Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Waste Management	7.88	8.51	5.94	11.00	11.27	11.51	11.71
Solid Waste and Combustion	6.23	6.85	4.24	9.28	9.55	9.79	9.99
Wastewater	1.66	1.66	1.70	1.72	1.72	1.73	1.73
Total Statewide Gross Emissions (Prod)	328.81	329.10	292.43	312.84	303.69	294.32	305.75
<i>Increase relative to 2000</i>		0.09%	-11.06%	-4.86%	-7.64%	-10.49%	-7.01%
Forestry and Land Use	-21.88	-34.25	-34.21	-34.11	-34.29	-34.31	-34.36
Total Statewide Net Emissions (Prod. with sinks)	306.93	294.85	258.22	278.73	269.40	260.00	271.39
<i>Increase relative to 2000</i>		-3.93%	-15.87%	-9.19%	-12.23%	-15.29%	-11.58%

Hartline, Darrell

From: SION, LAUREN N <LAUREN.SION@energytransfer.com>
Sent: Wednesday, August 09, 2017 10:42 AM
To: Hartline, Darrell
Subject: RE: Air Quality Permit Responsible Officials

Yes- Mark Martin should also be the Responsible Official there if you do not already have that information.

Thanke,

Lauren Sion
Energy Transfer Partners
Office: (412) 784-3474
Cell: (313) 706-9455

From: Hartline, Darrell [mailto:dahartline@pa.gov]
Sent: Wednesday, August 09, 2017 10:41 AM
To: SION, LAUREN N <LAUREN.SION@energytransfer.com>
Subject: RE: Air Quality Permit Responsible Officials

Thanks Lauren. Will you be the Permit Contact Person for Cornwall?

Thanks,
Darrell Hartline

From: SION, LAUREN N [mailto:LAUREN.SION@energytransfer.com]
Sent: Wednesday, August 09, 2017 10:14 AM
To: Hartline, Darrell <dahartline@pa.gov>
Subject: RE: Air Quality Permit Responsible Officials

Darrell-

I will be the permit contact for all of these facilities:

Lauren Sion
Environmental Specialist
(412) 784-3474

The Responsible Official for Beckersville, Blainsport, and Middletown is Mark Martin:

Mark A. Martin
Operations Supervisor
(610) 670-3278

The Responsible Official for Doylesburg and Mt. Union is Jim Tidd:

James W. Tidd
Operations Supervisor
(724) 630-2462

Please let me know if you need any more information.

Thank you,

Lauren Sion

Energy Transfer Partners

Office: (412) 784-3474

Cell: (313) 706-9455

From: WERNER, JED A

Sent: Wednesday, August 09, 2017 9:46 AM

To: SION, LAUREN N <LAUREN.SION@energytransfer.com>

Cc: O'TOOLE, RONALD J <RONALD.OTOOLE@energytransfer.com>

Subject: Fwd: Air Quality Permit Responsible Officials

Lauren

Can you please provide this information to Darrell

Thanks

Jed

Sent from my iPhone

Begin forwarded message:

From: "Hartline, Darrell" <dahartline@pa.gov>

Date: August 9, 2017 at 9:40:49 AM EDT

To: "WERNER, JED A" <JED.WERNER@energytransfer.com>

Subject: Air Quality Permit Responsible Officials

Jed,

Are the Responsible Officials or Permit Contact Person for Doylestown, Middletown, Mt. Union, Beckersville and Blainsport going to change? If so, please provide their name, job title and telephone number.

Thanks,

Darrell Hartline

Hartline, Darrell

From: WERNER, JED A <JED.WERNER@energytransfer.com>
Sent: Friday, August 18, 2017 4:38 PM
To: Hartline, Darrell
Cc: Weaver, William
Subject: FW: Cornwall Station RTCs Darrell Hartline
Attachments: image001.emz

Darrell,

Below highlighted in red is an amendment to the response to comment 2 clarifying the emission estimates.

Please let me know if you have any further questions

Jed

Response to Comment 1:

Regarding this project, methane is a product of combustion only, that is, methane is not transported in the pipeline.

The emission estimates are based upon guidance provided by the PADEP and USEPA. The GWPs factors were obtained from 40 CFR, Subpart C, Part 98, Subpart A; Table A-1.

The USEPA provides guidance regarding the use of GWPs on their website (https://secure-web.cisco.com/1BQI6ZG7zkuBgzl2-5LAzUBO80biM6rEz8ZeLuEx5-oAwloBE6r7dnicQuV0XgdLgflL9_9gjdmgSyYGlaV_O86AFUIC-BBYn431uj8FNqeDUuFr0zz8p3KDKif1NhYyclTV3r4v68F0B7GFclieuRC0xLzYYBxN9pu9EXvjyVwE3yytWlhp0I8JE2Z3umVwllr-cPSImwZv9aaalc4_S-zcw0PdXWvmfNdFafXGxs7oLV8r1aB1Aun8rNyQIEs1wOO83ENC-89n8CDH-RA-jQn_IKOkakOnC6j-njKwo4TQEAzpo2hnRdZO-gi0nEpdya5XoXchWlNr8bqVJJKZ5zQ/https%3A%2F%2Fwww.epa.gov%2Fghgmissions%2Funderstanding-global-warming-potentials). USEPA states:

“The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO₂). The larger the GWP, the more that a given gas warms the Earth compared to CO₂ over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure, which allows analysts to add up emissions estimates of different gases (e.g., to compile a national GHG inventory), and allows policymakers to compare emissions reduction opportunities across sectors and gases.”

Because the GWPs were developed as a common unit of time, the calculations must be performed on the same basis for all pollutants assessed, that is, the typically accepted time period of 100 years. More information is available on the USEPA's website that describes USEPA's rationale GWP value selection.

Currently and at the time of submission, the methane GWP₁₀₀ reflects the value cited in the regulation (the final rule was published on December 11, 2014, and became effective on January 1, 2015).

The CO₂ equivalents (CO₂e) using a uniformed GWP₂₀ (methane GWP of 86) were estimated for the project; this resulted in an insignificant CO₂e increase of a 0.2 ton per year (tpy), that is, 107.60 tpy in the addendum submittal GWP₁₀₀ and 107.80 tpy in the GWP₂₀ estimate.

Comment #2

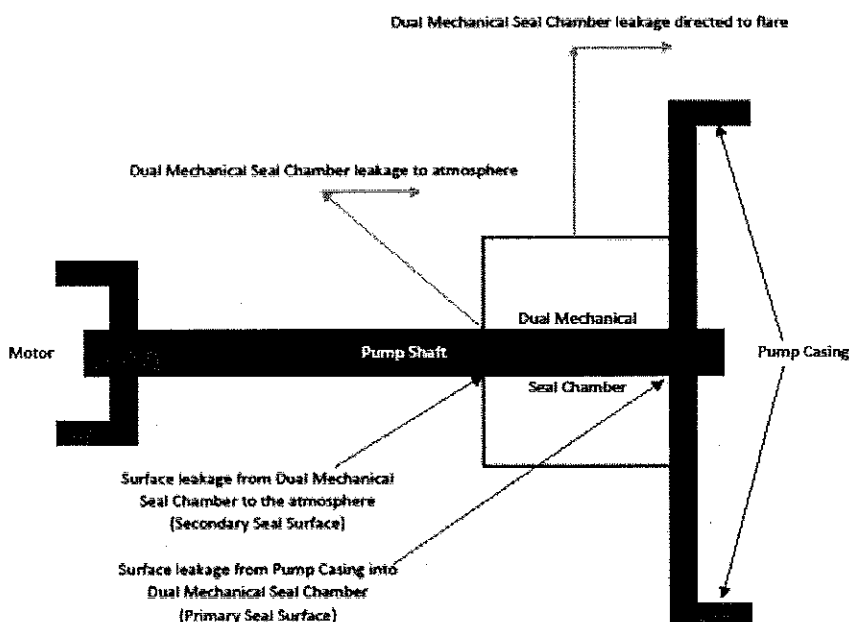
Sunoco suggests that the shroud system will be designed to capture 100% of the pump seal lubrication emissions, but provides no support for this assumption.

[Please verify from the application that Sunoco's claim is true that they did not include 100% capture. Please also locate if possible what spot in the application that the Commenter was referring to in this comment.]

It appears the commenter was referring to the addendum, page 9 of 32, for the pump seal leakage rate.

Response to Comment 2:

The following picture simplistic diagram of a dual mechanical seal system is being provided to assist in the understanding of the release estimates that were calculated associated with the Cornwall Station pump:



The pump Cornwall Station booster pump contains a dual mechanical seal system, that is, a primary seal with leakage to the flare (controlled leakage) and a secondary seal with leakage to the atmosphere (uncontrolled leakage).

Primary Seal Controlled Leakage Rate to the Flare:

The seal manufacturer (Flowserve), provided a maximum leakage rate to the flare that was utilized in both the 2014 State-Only Operating Permit (SOOP) application and the September 2016 Addendum Letter submittals for pump side primary mechanical seal (30 standard cubic feet per hour (SCFH)). The Flowserve information is presented in Appendix B; 1-1: Flow Serve Emission Seal Leaks Support Information of the 2014 SOOP submittal.

Secondary Seal Uncontrolled Leakage Rate to the Atmosphere:

In both the 2014 SOOP and the September 2016 Addendum submittals, the motor side secondary seal releases directly to atmosphere as a fugitive emission utilized the USEPA Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017) calculation methodology to estimate these fugitive (uncontrolled) emissions to atmosphere.

Flowserve uncontrolled leakage rate:

- Item b: "expected leakage to atmospheric side..."
 - ii: "Under normal seal chamber pressure operations conditions:...Leakage would be approximately **0.01 SCFH.**"

USEPA Protocol for Equipment Leak Emission Estimates (Document number: EPA-453/R-95-017)
uncontrolled leakage rate:

- 2014 SOOP and September 2016 Addendum submittals: **(5.4E-4 kilograms per hour (kg / hr))**
 The following **demonstrates of the equivalency** for the **Flowserve** uncontrolled leakage rate to atmosphere (0.01 SCFH) **and the USEPA Protocol uncontrolled fugitive leakage rate to atmosphere** (5.4E-4 kg / hr):

Convert kg / hr to SCFH:

$$(5.4E-4 \text{ kg / hr}) * (1 \text{ lb} / 0.454 \text{ kg}) * (379.5 \text{ SCF} / \text{lb-mole}) * (1 \text{ lb-mole} / 44.10 \text{ lb}) = \mathbf{0.01 \text{ SCFH}}$$

In summary, Flowserve provided a maximum leakage rate from the primary seal to the flare (controlled emissions), which was used in both submittals (30 SCFH). Flowserve provided a leakage rate from the secondary seal to the atmosphere (uncontrolled emissions) that is equivalent to the USEPA Protocol for Equipment Leak Emission Estimates (5.4E-4 kg / hr), which was used in both submittals.

Please let me know if you have any additional questions



Jed A. Werner
 Air Permitting Manager,
 Environmental Department
 Energy Transfer Partners

O: 610.670.3297
 C: 610.858.0802

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

STATE ONLY OPERATING PERMIT

Issue Date: September 15, 2017

Effective Date: October 1, 2017

Expiration Date: September 30, 2022

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

State Only Permit No: 38-03062

Federal Tax Id - Plant Code: 23-3102656-5

Owner Information

Name: SUNOCO PIPELINE LP
Mailing Address: 525 FRITZTOWN RD
SINKING SPRING, PA 19608-1509

Plant Information

Plant: SUNOCO PIPELINE LP/CORNWALL
Location: 38 Lebanon County 38925 West Cornwall Township
SIC Code: 4619 Trans. & Utilities - Pipelines, Nec

Responsible Official

Name: MARK A MARTIN
Title: OPERATIONS SUPERVISOR
Phone (610) 670 - 3278

Permit Contact Person

Name: LAUREN SION
Title: ENVIRONMENTAL SPECIALIST
Phone: (412) 784 - 3474

[Signature]

William R. Weaver

WILLIAM R. WEAVER, SOUTH CENTRAL REGION AIR PROGRAM MANAGER

**SECTION A. Table of Contents****Section A. Facility/Source Identification**

Table of Contents
Site Inventory List

Section B. General State Only Requirements

- #001 Definitions.
- #002 Operating Permit Duration.
- #003 Permit Renewal.
- #004 Operating Permit Fees under Subchapter I.
- #005 Transfer of Operating Permits.
- #006 Inspection and Entry.
- #007 Compliance Requirements.
- #008 Need to Halt or Reduce Activity Not a Defense.
- #009 Duty to Provide Information.
- #010 Revising an Operating Permit for Cause.
- #011 Operating Permit Modifications
- #012 Severability Clause.
- #013 De Minimis Emission Increases.
- #014 Operational Flexibility.
- #015 Reactivation
- #016 Health Risk-based Emission Standards and Operating Practice Requirements.
- #017 Circumvention.
- #018 Reporting Requirements.
- #019 Sampling, Testing and Monitoring Procedures.
- #020 Recordkeeping.
- #021 Property Rights.
- #022 Alternative Operating Scenarios.

Section C. Site Level State Only Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

Section D. Source Level State Only Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements
- D-VI: Work Practice Standards
- D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

Section E. Source Group Restrictions

- E-I: Restrictions
- E-II: Testing Requirements
- E-III: Monitoring Requirements

**SECTION A. Table of Contents**

- E-IV: Recordkeeping Requirements
- E-V: Reporting Requirements
- E-VI: Work Practice Standards
- E-VII: Additional Requirements

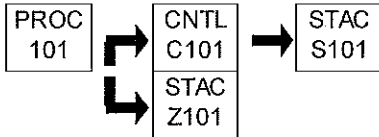
Section F. Alternative Operating Scenario(s)

- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements
- F-IV: Recordkeeping Requirements
- F-V: Reporting Requirements
- F-VI: Work Practice Standards
- F-VII: Additional Requirements

Section G. Emission Restriction Summary**Section H. Miscellaneous**

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
101	PUMP STATION SEAL LEAKS		
103	MAINTENANCE OPERATIONS		
C101	ENCLOSED FLARE		
S101	ENCLOSED FLARE STACK		
Z101	FUGITIVE EMISSIONS		

PERMIT MAPS

**SECTION B. General State Only Requirements****#001 [25 Pa. Code § 121.1]****Definitions.**

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and in 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.446]**Operating Permit Duration.**

- (a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.
- (b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)&(c)]**Permit Renewal.**

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
- (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
 - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]**Operating Permit Fees under Subchapter I.**

- (a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):
- (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
 - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension,

**SECTION B. General State Only Requirements**

modification, revision, renewal, and re-issuance of each operating permit or part thereof.

(b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).

(1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.

(2) Three hundred dollars for applications filed during the 2000-2004 calendar years.

(3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.

(c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund".

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]**Transfer of Operating Permits.**

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]**Inspection and Entry.**

(a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#007 [25 Pa. Code §§ 127.441 & 127.444]**Compliance Requirements.**

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes

SECTION B. General State Only Requirements

a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]**Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for the permittee in an enforcement action that it was necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#009 [25 Pa. Code §§ 127.442(a) & 127.461]**Duty to Provide Information.**

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]**Revising an Operating Permit for Cause.**

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.
- (2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.
- (4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450 & 127.462]**Operating Permit Modifications**

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and

SECTION B. General State Only Requirements

significant operating permit modifications, under this permit, as outlined below:

(b) **Administrative Amendments.** The permittee shall make administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) **Minor Operating Permit Modifications.** The permittee shall make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

#012 [25 Pa. Code § 127.441]**Severability Clause.**

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#013 [25 Pa. Code § 127.449]**De Minimis Emission Increases.**

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

(b) The Department may disapprove or condition de minimis emission increases at any time.

(c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

SECTION B. General State Only Requirements

- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
 - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
 - (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
 - (4) Space heaters which heat by direct heat transfer.
 - (5) Laboratory equipment used exclusively for chemical or physical analysis.
 - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.
 - (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
 - (3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#014 [25 Pa. Code § 127.3]**Operational Flexibility.**

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)

**SECTION B. General State Only Requirements**

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

#015 [25 Pa. Code § 127.11]**Reactivation**

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#016 [25 Pa. Code § 127.36]**Health Risk-based Emission Standards and Operating Practice Requirements.**

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]**Circumvention.**

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#018 [25 Pa. Code §§ 127.402(d) & 127.442]**Reporting Requirements.**

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

**SECTION B. General State Only Requirements**

records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

#019 [25 Pa. Code §§ 127.441(c) & 135.5]**Sampling, Testing and Monitoring Procedures.**

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

#020 [25 Pa. Code §§ 127.441(c) and 135.5]**Recordkeeping.**

(a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

#021 [25 Pa. Code § 127.441(a)]**Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privileges.

#022 [25 Pa. Code § 127.447]**Alternative Operating Scenarios.**

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

002 [25 Pa. Code §123.1]**Prohibition of certain fugitive emissions**

No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (a) construction or demolition of buildings or structures;
- (b) grading, paving and maintenance of roads and streets;
- (c) use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets;
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations, as specified in 25 Pa. Code § 129.14;
- (g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
- (h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
- (i) sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (1) the emissions are of minor significance with respect to causing air pollution; and
 - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

003 [25 Pa. Code §123.2]**Fugitive particulate matter**

The permittee shall not allow the emission of fugitive particulate matter into the outdoor atmosphere from a source specified in Section C, Condition #002, if the emissions are visible at the point the emissions pass outside the person's property.

004 [25 Pa. Code §123.31]**Limitations**

The permittee shall not allow the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

005 [25 Pa. Code §123.41]**Limitations**

The permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one hour.

**SECTION C. Site Level Requirements**

(b) Equal to or greater than 60% at any time.

006 [25 Pa. Code §123.42]**Exceptions**

The emission limitation of 25 Pa. Code Section 123.41, shall not apply when:

- (a) The presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) The emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) The emission results from sources specified in Section C, Condition #002, subsections (a) - (i).

007 [25 Pa. Code §129.14]**Open burning operations**

(a) The permittee shall not conduct open burning of materials in such a manner that:

- (1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
- (2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
- (3) The emissions interfere with the reasonable enjoyment of life and property.
- (4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
- (5) The emissions cause damage to vegetation or property.
- (6) The emissions are or may be deleterious to human or animal health.

(b) Exceptions. The requirements of Subsection (a) do not apply where the open burning operations result from:

- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public official.
- (2) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) A fire set solely for recreational or ceremonial purposes.
- (5) A fire set solely for cooking food.

(c) This permit does not constitute authorization to burn solid waste pursuant to section 610 (3) of the Solid Waste Management Act 35 P.S. Section 6018.610 (3), or any other provision of the Solid Waste Management Act.

II. TESTING REQUIREMENTS.**# 008 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

**SECTION C. Site Level Requirements**

(a). If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b). Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

III. MONITORING REQUIREMENTS.**# 009 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (a) A device approved by the Department and maintained to provide accurate opacity measurements.
- (b) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any device(s) approved by the Department.

010 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The permittee shall monitor the facility weekly for the following:

- (1) odors which may be objectionable (as per 25 Pa. Code §123.31);
- (2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
- (3) fugitive emissions (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive emissions, and visible emissions that are caused or may be caused by operations at the site shall:

- (1) be investigated;
- (2) be reported to the facility management, or individual(s) designated by the permittee;
- (3) have appropriate corrective action taken (for emissions that originate on-site); and
- (4) be recorded in a permanent written log.
- (5) for any observed problems, a first attempt at equipment repair must be made within 15 days of discovery, and DEP must be notified if the final repair is not completed in 30 days.

(c) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.

(d) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification, complaints, monitoring results, and/or Department findings.

011 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall calculate the total emissions of VOCs for the entire facility on a 12-month rolling sum basis.

IV. RECORDKEEPING REQUIREMENTS.**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (a) date, time, and location of the incident(s);

SECTION C. Site Level Requirements

- (b) the cause of the event; and
 (c) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.

013 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall compile and record the total emissions of VOCs for the entire facility on a 12-month rolling sum basis.

014 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

- (a). De minimus increases without notification to the Department.
 (b). De minimus increases with notification to the Department, via letter.
 (c). Increases resulting from a Request for Determination (RFD) to the Department.
 (d). Increases resulting from the issuance of a plan approval and subsequent operating permit.

V. REPORTING REQUIREMENTS.**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall report malfunctions to the Department which result in, or may possibly result in, the emission of air contaminants in excess of the limitations specified in this permit, or regulation contained in 25 Pa. Code Article III.

Malfunctions shall be reported as follows:

- (a) Any malfunction which poses an imminent danger to the public health, safety, welfare, and environment, shall be immediately reported to the Department by telephone. The telephone report of such malfunctions shall occur no later than two (2) hours after the incident. The permittee shall submit a written report of instances of such malfunctions to the Department within three (3) days of the telephone report.
- (b) Unless otherwise required by this permit, any other malfunction that is not subject to the reporting requirement of subsection (a) above, shall be reported to the Department, in writing, within five (5) days of malfunction discovery.
- (c) Telephone reports can be made to the Reading District Office at (610) 916-0100 during normal business hours or to the Department's Emergency Hotline (866) 825-0208 at any time.
- (d) Written reports of malfunctions shall describe, at a minimum, the following:
- (1). The malfunction(s).
 - (2). The emission(s).
 - (3). The duration.
 - (4). Any corrective action taken.

016 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR Part 68.]

- (a). If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 C.F.R. Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b). The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 C.F.R. Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 C.F.R. § 68.130 is present in a process in more than the threshold quantity at a facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:
- (1). The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i). Three years after the date on which a regulated substance is first listed under 40 C.F.R. § 68.130; or,

**SECTION C. Site Level Requirements**

(ii). The date on which a regulated substance is first present above a threshold quantity in a process.

(2). The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 C.F.R. § 68.190.

(3). The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 C.F.R. Part 68, including a checklist addressing the required elements of a complete RMP.

(c). As used in this permit condition, the term "process" shall be as defined in 40 C.F.R. § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d). If this facility is subject to 40 C.F.R. Part 68, as part of the certification required under this permit, the permittee shall:

(1). Submit a compliance schedule for satisfying the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. § 68.10(a); or,

(2). Certify that this facility is in compliance with all requirements of 40 C.F.R. Part 68 including the registration and submission of the RMP.

(e). If this facility is subject to 40 C.F.R. Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 C.F.R. § 68.200.

(f). When this facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 C.F.R. Part 68, appropriate enforcement action will be taken by the Department if the permittee fails to register and submit the RMP or a revised plan pursuant to 40 C.F.R. Part 68.

017 [25 Pa. Code §135.3]**Reporting**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

If the permittee has been previously advised by the Department to submit a source report, the permittee shall submit by March 1, of each year, a source report for the preceding calendar year. The report shall include information from all previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported, including those sources listed in the Miscellaneous Section of this permit.

The permittee may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

VI. WORK PRACTICE REQUIREMENTS.**# 018 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne from any source specified in Section C, Condition #002(a) -(i). These actions shall include, but are not limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.

(b) Application of asphalt, oil, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces, which may give rise to airborne dusts.

(c) Paving and maintenance of roadways.

(d) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

**SECTION C. Site Level Requirements****# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A, of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

020 [25 Pa. Code §127.444]**Compliance requirements.**

The permittee shall operate and maintain all sources and any air cleaning devices identified in this operating permit in accordance with the manufacturers' recommendations/specifications, as well as in a manner consistent with good operating practices.

VII. ADDITIONAL REQUIREMENTS.**# 021 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Nothing herein shall be construed to supersede, amend, or authorize violation of the provisions of any valid and applicable local law, ordinance, or regulation, or any court order, provided that said local law, ordinance, or regulation, or court order is not preempted by the Air Pollution Control Act, Act of January 8, 1960, P.L. 2119 (1959), as amended, 35 P.S. §4001 et seq., and the rules and regulations promulgated thereunder. It is the applicant's responsibility, separate and apart from the application process, to obtain any authorizations, permits, approvals, or licenses that the applicant might need in order to perform the construction permitted by this plan approval, including access, ownership, or lease of the subject parcel or parcels of property. The Department incurs no enforcement obligations with respect to this condition.

022 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The potential fugitive plus stack emissions from this facility, after appropriate control as prescribed in this permit, have been estimated as follows: 0.06 tpy of NO_x, 0.24 tpy of CO, 0.76 tpy of VOCs, 0.01 tpy of Methane and 108 tpy of GHGs. The Department has determined these emissions remaining after appropriate control are of minor significance with regard to causing air pollution, and will not prevent or interfere with the attainment or maintenance of an ambient air quality standard.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: PUMP STATION SEAL LEAKS

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GRP 01

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 103 Source Name: MAINTENANCE OPERATIONS

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GRP 01

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION E. Source Group Restrictions.**

Group Name: GRP 01

Group Description: Pump Station & Maintenance

Sources included in this group

ID	Name
101	PUMP STATION SEAL LEAKS
103	MAINTENANCE OPERATIONS

I. RESTRICTIONS.**Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The enclosed flare shall be operated with no visible emissions and no visible flame.

Fuel Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall burn only propane, butane, ethane or a mixture of these in the enclosed flare.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The enclosed flare pilot light shall burn propane gas.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

When the enclosed flare is not operational, the permittee shall record the downtime and the associated emissions.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain detailed records of all maintenance performed on the enclosed flare. The permittee shall retain these records for a minimum of five (5) years and shall make them available to the department upon its request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain a system to notify the operator immediately when the enclosed flare is not operational.

SECTION E. Source Group Restrictions.**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.



SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.



SECTION H. Miscellaneous.



***** End of Report *****
