#### TCEQ AIR QUALITY PERMIT NUMBER 56508, PSDTX1444M1, and GHGPSDTX191

APPLICATION BY	§	BEFORE THE
SUNOCO PARTNERS MARKETING &	§	
TERMINALS L.P.	§	TEXAS COMMISSION ON
SUNOCO PARTNERS NEDERLAND	§	TEAAS COMMISSION ON
TERMINAL	§	
NEDERLAND, JEFFERSON COUNTY	§	ENVIRONMENTAL QUALITY

## EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the commission or TCEQ) files this Response to Public Comment (Response) on the New Source Review Authorization application and Executive Director's preliminary decision.

As required by Title 30 Texas Administrative Code (TAC) § 55.156, before an application is approved, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk received timely comments from the following persons: Hilton Kelley on behalf of himself and Community In-Power and Development Association Incorporation (CIDA Inc.). This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at <u>www.tceq.texas.gov</u>.

#### BACKGROUND

## **Description of Facility**

Sunoco Partners Marketing & Terminals L.P. (Applicant) has applied to the TCEQ for a modification of New Source Review (NSR) Permits 56508 under Texas Clean Air Act (TCAA) § 382.0518, Prevention of Significant Deterioration Permit PSDTX1444M1, and the new authorization of Greenhouse Gas Permit GHGPSDTX191. Sunoco Partners Marketing & Terminals L.P.'s Nederland Terminal is comprised of a marine loading facility and two tank farms. The site is currently authorized by NSR Permit 56508. Sunoco Partners Marketing & Terminals L.P. proposes to construct marine loading docks, increase product throughput, and make several updates to calculations and authorized activities at the site.

This permit will authorize the applicant to modify the Sunoco Partners Nederland Terminal. The facility is located at 2300 North Twin City Hwy, Nederland, Jefferson County. Contaminants authorized under this permit include carbon monoxide (CO), greenhouse gases (GHG), hazardous air pollutants (HAPs), hydrogen sulfide ( $H_2S$ ), nitrogen oxides ( $NO_x$ ), volatile organic compounds (VOC), particulate matter (PM) including particulate matter with diameters of 10 microns or less ( $PM_{10}$ ) and 2.5 microns or less ( $PM_{2.5}$ ) and sulfur dioxide (SO<sub>2</sub>).

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## Procedural Background

Before work is begun on the modification of an existing facility that may emit air contaminants, the person planning the modification must obtain a permit amendment from the commission. This permit application is for a permit amendment of Air Quality Permit Numbers 56508 and PSDTX1444, and the new authorization of GHGPSDTX191.

The 56508 permit applications were received on February 19, 2019 and declared administratively complete on March 04, 2019. The Notice of Receipt and Intent to Obtain an Air Quality Permit (first public notice) for this permit application was published in English on March 09, 2019 in the *The Port Arthur News* and in Spanish on March 10, 2019 in *El Perico*. The Notice of Application and Preliminary Decision for an Air Quality Permit (second public notice) was published on April 05, 2020, in English in the *Beaumont Enterprise* and in Spanish in the *El Perico*. The public comment period ended on May 05, 2020. Because this application was received after September 1, 2015, it is subject to the procedural requirements of and rules implementing Senate Bill 709 (84th Legislature, 2015).

## COMMENTS AND RESPONSES

## Comment 1: Air Quality/ Health and Cumulative Effects

Commenters are concerned about the effect of the emissions from the proposed project on the air quality and the environment. Commenters expressed concern regarding the potential adverse health effects of people in close proximity to the project, particularly sensitive populations such as the elderly, children, and people with existing medical conditions. Commenters expressed concern regarding potential health effects and symptoms such as cancer, respiratory problems, skin afflictions, and hypertension.

(Hilton Kelley on behalf of himself and CIDA, Inc.)

**Response 1:** The Executive Director is required to review permit applications to ensure they will be protective of human health and the environment. For this type of air permit application, potential impacts to human health and welfare or the environment are determined by modeling predicted concentrations from the site and comparing them to the appropriate state and federal standards. Specific health-based standards employed in evaluating the potential emission include the National Ambient Air Quality Standards (NAAQS), TCEQ standards contained 30 Texas Administrative Code (TAC), and the Effects Screening Levels (ESLs). The NAAQS and ESLs are set following empirical research cumulated by state, federal and third-party studies. Further explanations of the application's emissions review are expanded upon below.

The U.S. Environmental Protection Agency (EPA) created and periodically reviews the NAAQS based on current health studies. The NAAQS, as defined in the 40 Code of

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Federal Regulations (CFR) § 50.2, includes two subdivisions, primary and secondary standards. Primary standards are those the EPA Administrator determines are necessary, within an adequate margin of safety, to protect public health, including sensitive members of the population such as children, the elderly, and those individuals with preexisting health conditions. Secondary NAAQS standards are those the Administrator determines are necessary to protect public welfare and the environment, including animals such as birds and livestock, crops, vegetation, visibility, and buildings, from any known or anticipated adverse effects associated with the presence of a contaminant in the ambient air.

The EPA has set NAAQS for criteria pollutants: CO, lead (Pb),  $NO_x$ ,  $O_3$ ,  $SO_2$ ,  $PM_{10}$ , and  $PM_{2.5}$ . Of the criteria pollutants, the site is expected to emit: CO,  $NO_x$ ,  $O_3$ ,  $SO_2$ ,  $PM_{10}$ , and  $PM_{2.5}$ .

ESLs are constituent-specific screening levels used in TCEQ's effects evaluation. These guidelines are derived by the TCEQ's Toxicology Division and based on a constituent's potential to cause adverse health effects, odor nuisances, and effects on vegetation. Health-based screening level are set a level lower than what would be expected to cause adverse health effects; therefore, are set to protect the general public including sensitive populations. Adverse health or welfare effects are not expected to occur if the air concentration of a constituent is below its ESL. If an air concentration of a constituent is below its warranted. Generally, maximum concentrations predicted to occur at a sensitive receptor which are at or below the ESL would not be expected to cause adverse effects.

The EPA has documented a listing of emission factors and emission calculation methodologies that can be used to calculate the estimated emissions from many sources, including such sources that are in this permit. These emission factors and emission calculation methodologies are incorporated throughout industries in Texas and have been used to estimate the emissions for this proposed project. Alternatively, applicants may rely on manufacturer specifications and TCEQ guidance to calculate emissions. The TCEQ ensures the conservative nature of these calculations by evaluating each emission point at the maximum operating conditions on both an hourly and an annual basis. The resulting emission rates are used as one of the inputs to an EPA-approved air dispersion modeling program that determines the predicted emission concentration for each air contaminant at locations surrounding the plant.

The likelihood of whether adverse health effects caused by emissions from the plant could occur in members of the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions was determined by comparing the facility's predicted air dispersion computer modeling concentrations to the relevant state and federal standards and ESLs. TCEQ staff used modeling results to verify that predicted ground level concentrations from the proposed facility are not Executive Director's Response to Public Comment Sunoco Partners Marketing & Terminals L.P., Permit No. 56508, PSDTX1444M1, and GHGPSDTX191 Page 4 of 15

likely to adversely impact off-property receptors. The overall evaluation process provides a conservative prediction that is protective of the public.

## <u>NAAQS</u>

For these specific permit applications, the applicant used the EPA-approved AERMOD (Version 18081) air dispersion modeling program to provide a reasonable worst-case representation of potential impacts from the proposed emissions on the surrounding area. The evaluation incorporated all emissions as represented in the permit application. The modeling procedures, methodology, predictions, and results were reviewed by the TCEQ's Air Dispersion Modeling Team (ADMT) and determined to be acceptable. The ADMT review was conducted following the procedures outlined in TCEQ Publication APDG6232, Air Quality Modeling Guidelines. The air dispersion analysis first compared the predicted maximum ground level concentrations (GLC<sub>max</sub>) from the proposed emissions for NO<sub>2</sub>, CO and PM<sub>10</sub> to their respective de minimis levels. Concentrations below the EPA determined de minimis level are considered to not pose a risk to the health and welfare of the surrounding area, and do not require further NAAQS analysis. Table 1 presents the results of the modeling for the GLC<sub>max</sub> for the pollutants compared to the de minimis levels.

Pollutant	Averaging Time	$GLC_{max}$ (µg/m <sup>3</sup> )	De Minimis (µg/m³)
NO <sub>2</sub>	1-hr	4.9	7.5
NO <sub>2</sub>	Annual	0.3	1
СО	1-hr	232	2000
CO	8-hr	130	500
PM <sub>10</sub>	24-hr	1	5

Table 1. Modeling Results for De Minimis Review

The justification for selecting the EPA's interim 1-hr NO<sub>2</sub> De Minimis level was based on the assumptions underlying EPA's development of the 1-hr NO<sub>2</sub> De Minimis level. As explained in EPA guidance memoranda<sup>1</sup>, the EPA believes it is reasonable as an interim approach to use a de minimis level that represents 4% of the 1-hr NO<sub>2</sub> NAAQS. The pollutants below the de minimis level should not cause or contribute to a violation of the NAAQS and are protective of human health and the environment.

1 Available at:

http://www.tceq.texas.gov/assets/public/permitting/air/memos/guidance\_1hr\_no2naaqs.pdf

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The Applicant did not compare project emissions to the de minims levels for  $PM_{2.5}$  and  $SO_2$ . Rather, the applicant conducted a full NAAQS analysis for  $PM_{2.5}$  and  $SO_2$  to demonstrate no adverse effects would occur. Results of the NAAQS analysis are presented in Table 2 and 3 below. The total concertation was determined by adding the  $GLC_{max}$  to the appropriate background concentration. Background concentrations are obtained from ambient air monitors across the state and are added to the modeled concentrations (both on-property and off-property sources) to account for sources not explicitly modeled. The ambient air monitors were selected to ensure that they are representative of the proposed site. The total concentration was then compared to the NAAQS to ensure that the concentration is below the standard.

Table 2.7	Total	Concentrations	for Minor	NSR NAA(	QS (Concentrations >	> De Minimis)
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Pollutan t	Averagin g Time	GLCmax (µg/m³)	Backgroun d (µg/m³)	Total Conc. = [Background + GLCmax] (µg/m <sup>3</sup> )	Standar d (µg/m³)
PM <sub>2.5</sub>	24-hr	6.6	22	28.6	35
PM <sub>2.5</sub>	Annual	1.3	8.9	10.2	12

The  $GLC_{max}$  are the maximum predicted concentrations associated with one year of meteorological data.

A full PM<sub>2.5</sub> NAAQS analysis was completed, and modeling results indicated the total concentration would not result in an exceedance of the NAAQS as demonstrated in Table 2. The emissions of the pollutant are not expected to contribute to violation of the NAAQS and are considered protective of human health and the environment.

Pollutan t	Averagin g Time	GLCmax (µg/m³)	Background (µg/m³)	Total Conc. = [Background + GLCmax] (µg/m <sup>3</sup> )	Standard (µg/m³)
SO <sub>2</sub>	1-hr	145	36	181	196
SO <sub>2</sub>	3-hr	188	62	250	1300
SO <sub>2</sub>	24-hr	90.96	14	104.96	365
SO <sub>2</sub>	Annual	18.79	1.2	19.99	80

Table 3. Total Concentrations for PSD NAAQS (Concentrations > De Minimis)

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The 1-hr  $SO_2 GLC_{max}$  is the maximum five-year average of the 99<sup>th</sup> percentile of the annual distribution of predicted daily maximum 1-hr concentrations determined for each receptor. The 3-hr and 24-hr  $SO_2 GLC_{max}$  are the maximum high, second high (H2H) predicted concentrations across five years of meteorological data. The annual  $SO_2$  GLC<sub>max</sub> is the maximum predicted concentration over five years of meteorological data.

A full SO<sub>2</sub> NAAQS analysis was completed and modeling results indicated the total concentration would not result in an exceedance of the NAAQS as demonstrated in Table 3. The pollutant is not expected to contribute to violation of the NAAQS and is considered protective of human health and the environment.

# Property Line Analysis (30 TAC Chapter 112)

Because this application has sulfur emissions, the Applicant conducted a state property line analysis to demonstrate compliance with TCEQ rules for net ground-level concentrations for SO<sub>2</sub>, hydrogen sulfide (H<sub>2</sub>S), and sulfuric acid (H<sub>2</sub>SO<sub>4</sub>), as applicable. This analysis demonstrated that resulting air concentrations will not exceed the applicable state standard.

In summary, based on the Executive Director's staff review, it is not expected that existing health conditions will worsen, or that there will be adverse health effects on the general public, sensitive subgroups, or the public welfare and the environment as a result of proposed emission rates associated with this project.

Pollutant	Averaging Time	$GLC_{max}$ ( $\mu g/m^3$ )	Standard (µg/m³)
$SO_2$	1-hr	200	817
H <sub>2</sub> S	1-hr	107	108 (If property is residential, recreational, business, or commercial)
$H_2S$	1-hr	131	162 (If property is not residential, recreational, business, or commercial)

Table 4. Site-wide Modeling Results for State Property Line

# <u>PSD Increment Analysis</u>

The PSD program limits the extent to which air quality may be allowed to deteriorate in areas where pollutant concentrations are below the NAAQS (attainment areas). Increases in pollutant concentration over a baseline concentration are limited to

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certain increments, which depend on an area's classification (Class I, Class II, or Class III). Increment values are specified at 40 CFR § 52.21(c). The project site is located in a Class II area. The increment analysis included all emissions from the project site as well as emissions from off-property sources located near the site for which emissions data were available. The results of the increment analysis, presented below in Table 5, indicate that proposed emissions will not cause or contribute to an exceedance of any PSD increment.

The applicant did not evaluate project emissions to compare with the de minimis levels. Instead, the applicant conducted a full increment analysis.

Pollutant	Averaging Time	GLCmax (µg/m³)	Increment (µg/m³)
SO <sub>2</sub>	3-hr	188	512
SO <sub>2</sub>	24-hr	90.96	91
SO <sub>2</sub>	Annual	18.79	20

Table 5. Results for PSD Increment Analysis

The  $GLC_{max}$  for the 3-hr and 24-hr  $SO_2$  is the maximum H2H predicted concentration across five years of meteorological data. For annual  $SO_2$ , the  $GLC_{max}$  represents the maximum predicted concentration over five years of meteorological data.

The applicant performed an Additional Impacts Analysis as part of the PSD AQA. The applicant conducted a growth analysis and determined that population will not significantly increase as a result of the proposed project. The applicant conducted a soils and vegetation analysis and determined that all evaluated criteria pollutant concentrations are below their respective secondary NAAQS. The applicant meets the Class II visibility analysis requirement by complying with the opacity requirements of 30 TAC Chapter 111. The Additional Impacts Analyses are reasonable and possible adverse impacts from this project are not expected.

The ADMT evaluated predicted concentrations from the proposed project to determine if emissions could adversely affect a Class I area. The nearest Class I area, Breton Wilderness Area, is located approximately 500 km from the proposed site.

The predicted concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, and SO<sub>2</sub> for all averaging times, are all less than de minimis levels at a distance of 17 km from the proposed sources in the direction the Breton Wilderness Class I area. The Breton Wilderness Class I area is an additional 483 km from the location where the predicted concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, and SO<sub>2</sub> for all averaging times are less than de minimis. Therefore, emissions

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from the proposed project are not expected to adversely affect the Breton Wilderness Class I area.

## Pre-Application Analysis/Air Quality Monitored

The Applicant evaluated project emissions to SO<sub>2</sub> monitoring data to satisfy the requirements for the pre-application air quality analysis.

Background concentration for  $SO_2$  were obtained from the EPA AIRS monitor 4824560009 located at 1086 Vermont Ave., Beaumont, Jefferson County. The 3-year average (2016-2018) of the 99<sup>th</sup> percentile of the annual distribution of the daily maximum 1-hr concentration was used for the  $SO_2$  1-hr value ( $36\mu g/m^2$ ). The second highest 3-hr concentration from 2018 was used for the  $SO_2$  24-hr value ( $14\mu g/m^2$ ). The annual average concentration form 2018 was used for the  $SO_2$  annual value ( $1.2\mu g/m^2$ ). The use of this monitor is reasonable based on the proximity of the monitor to the project site (approximately 6 kilometers [km] the northwest). These background concentrations were also used as part of the NAAQS analysis.

Since the project has a net emission increase of 100 ton per year (tpy) or more of volatile organic compounds or nitrogen oxides, the applicant evaluated ambient  $O_3$  monitoring data to satisfy requirements in 40 CFR 52.21(i)(5)(i)(f).

A background concentration for  $O_3$  was obtained from the EPA AIRS monitor 482451035 located at 1800 North 18<sup>th</sup> Street, Nederland, Jefferson County. A 3-year average (2016-2018) of the annual fourth highest daily maximum 8-hr concentrations was used in the analysis (65 ppb). The use of this monitor is reasonable based on the proximity of the monitor to the project site (approximately 1.2 km to the southwest).

## Secondary PM<sub>2.5</sub> and Ozone(O<sub>3</sub>) Analysis

As part of the required major NSR air quality analysis, the Applicant performed an O<sub>3</sub> analysis as well as an analysis of impacts due to gaseous emissions that form PM<sub>2.5</sub> after being released into the atmosphere, also known as secondary PM<sub>2.5</sub> formation.

The Applicant performed an  $O_3$  analysis as part of the PSD Air Quality Analysis (AQA). The Applicant evaluated project emissions of  $O_3$  precursor emission (NO<sub>x</sub> and VOC). For the project NO<sub>x</sub> and VOC emissions, the Applicant provided an analysis based on a Tier 1 demonstration approach consistent with the EPA's Guideline on Air Quality Models (GAQM) and Modeled Emission Rates for Precursors (MERPs). MERPS use technically credible air quality modeling to relate precursor emissions and peak secondary pollutants impacts from a source. Using data associate with the worst-case hypothetical source, the Applicant estimated an 8-hr  $O_3$  concentration of 0.40 ppb. When the estimates of ozone concentrations form the project emissions are added together, the results are less than the De Minimis level. Executive Director's Response to Public Comment Sunoco Partners Marketing & Terminals L.P., Permit No. 56508, PSDTX1444M1, and GHGPSDTX191 Page 9 of 15

Table 6. Ozone Analysis				
Pollutant	Averaging Time	GLCmax (ppb)	De Minimis (ppb)	
$O_3$	8-hr	0.40	1	

To evaluate secondary  $PM_{2.5}$  impacts, the Applicant provided an analysis based on a Tier 1 demonstration approach consistent with the EPA's GAQM. Specially, the Applicant used the MERPs Tier 1 demonstration tool developed by the EPA. Using data associated with the worst-case hypothetical source, the Applicant estimated 24-hr and annual secondary  $PM_{2.5}$  concentrations of 1.99 µg/m<sup>3</sup> and 0.07 µg/m<sup>3</sup>, respectively. When these estimates are added to the  $GLC_{max}$  listed in Table 2 above, the results are less than the NAAQS.

## Effects Screening Levels

ESLs are specific guideline concentrations used in TCEQ's evaluation of certain pollutants. These guidelines are derived by the TCEQ's Toxicology Division and are based on a pollutant's potential to cause adverse health effects, odor nuisances, and effects on vegetation. Health-based ESLs are set below levels reported to produce adverse health effects, and are set to protect the general public, including sensitive subgroups such as children, the elderly, or people with existing respiratory conditions. The TCEQ's Toxicology Division specifically considers the possibility of cumulative and aggregate exposure when developing the ESL values that are used in air permitting, creating an additional margin of safety that accounts for potential cumulative and aggregate impacts. Adverse health or welfare effects are not expected to occur if the air concentration of a pollutant is below its respective ESL. If an air concentration of a pollutant is adverse effect will occur, but rather that further evaluation is warranted.

The Applicant conducted a health effects analysis using the Modeling and Effects Review Applicability (MERA) guidance. The MERA is a tool to evaluate impacts of noncriteria pollutants. It is a step-by-step process, evaluated on a chemical species by chemical species basis, in which the potential health effects are evaluated against the ESL for the chemical species. The initial steps are simple and conservative, and as the review progresses through the process, the steps require more detail and result in a more refined (less conservative) analysis. If the contaminant meets the criteria of a step, the review of human health and welfare effects for that chemical species is complete and is said to "fall out" of the MERA process at that step because it is protective of human health and welfare. Fuel oil pollutants satisfy the MERA criteria and therefore are not expected to cause adverse health effects. Crude oil (with less than 1-percent benzene), natural gas condensates, petroleum, and hydrotreated light naphtha were further evaluated. Executive Director's Response to Public Comment Sunoco Partners Marketing & Terminals L.P., Permit No. 56508, PSDTX1444M1, and GHGPSDTX191 Page 10 of 15

Pollutant & CAS#	Averaging Time	$GLC_{max}$ ( $\mu g/m^3$ )	10% ESL (μg/m <sup>3</sup> )
crude oil, < 1% benzene NA [Crude Oil]	Annual	34	35
natural gas condensates, petroleum 64741-47-5 [Condensate]	Annual	34	35
naphtha [petroleum], hydrotreated light 64742-49-0 [Naphtha]	Annual	34	35
fuel oils, generic NA [Fuel Oils]	1-hr	382	100
fuel oils, generic NA [Fuel Oils]	Annual	34	10

Table 7. Minor NSR Production Project-Related Modeling Results for Health Effects

For Table 7, the applicant modeled the project emission increases associated with both planned MSS activities and routine operations concurrently and compared the modeling results with 10% of the corresponding ESL. This is conservative. The evaluation of 1-hr and annual fuel oils was completed using Step 6 of the MERA guidance document. The ratio inequality determine that fuel oils maximum ground concentration was lesser than the proposed emissions and therefore, no further evaluation was required.

The applicant performed project modeling to determine the current project's exceedances. The following pollutants did not meet the criteria of the MERA guidance threshold for project modeling and required further analysis. Site-wide modeling was performed and demonstrated that the predicted concentrations will exceed the ESL. Site-wide modeling includes all facilities at the site that emit pollutants being affected in this project.

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Pollutant	CAS#	Averaging	GLC <sub>max</sub>	GLC <sub>max</sub>	GLC <sub>ni</sub>	GLC <sub>ni</sub>	ESL
Tonutunt		Time	$(\mu g/m^3)$	Location	$(\mu g/m^3)$	Location	(µg/m <sup>3</sup> )
crude oil, < 1% benzene [Crude Oil]	NA	1-hr	8677	Property Line	3756	10mS Tank Farm	3500
natural gas condensates, petroleum [Condensate]	64741- 47-5	1-hr	8678	Property Line	3757	10mS Tank Farm	3500
naphtha [petroleum], hydrotreated light [Naphtha] (Routine and MSS)	64742- 49-0	1-hr	10725	Property Line	4141	10mS Tank Farm	3500
naphtha [petroleum], hydrotreated light [Naphtha] (Routine)	64742- 49-0	1-hr	2942	Property Line	1889	10mS Tank Farm	3500

Table 8. Minor NSR Site-wide Modeling Results for Health Effects

Table J. MINOI NON HOULS OF LACCEMENTE INFILMENT LITCES	Table 9. Minor NSR	Hours of Exceedanc	e for Health Effects
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Pollutant	Averaging Time	1 X ESL GLC <sub>ni</sub>	2 X ESL GLC <sub>max</sub>
crude oil, < 1% benzene [Crude Oil]	1-hr	14	6
natural gas condensates, petroleum [Condensate]	1-hr	15	6
naphtha [petroleum], hydrotreated light [Naphtha]	1-hr	37	9

The  $GLC_{max}$  and the  $GLC_{ni}$  locations are listed in Table 8 above. The locations are listed by their approximate distance and direction from the property line of the project site.

The TCEQ Toxicology Division conducted an analysis for each pollutant with a predicted concentration above its ESL identified in Table 9, evaluated potential exposures, and assessed human health risks to the public. The Toxicology Division determined that the described impacts are allowable given the conservative nature of both the ESLs and the emissions estimates.

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The predicted short-term concentrations for crude oil, natural gas condensate and naphtha exceeded their respective short-term ESLs. Therefore, a Tier III MERA analysis was conducted by the TCEQ Toxicology Division to determine whether the modeled impacts and constituents' demonstrated exceedance magnitude (i.e. one-time, two-times, four-times or ten-times the ESL) would be a concern to human health and welfare (e.g. odor and vegetation). The Tier III analysis accounts for both the proposed and existing emissions of the chemical species, the frequency of exceedance, ESLs, surrounding land use, potential for public exposure, conservatism in the modeling approaches, basis of ESL (odor vs. health, degree of confidence, margin of safety, etc.), acceptable reductions in existing  $GLC_{max}$ , and restrictions on facility operations. Based on the above factors, the operational conditions, and the frequency of occurrence, the toxicologist then makes a final determination on the likelihood that the predicted emissions will increase the risk of adverse health or welfare effects.

The applicant provided site-wide refined modeling, which was used to predict impacts from on-site operations and was reviewed and approved by ADMT. Modeling predicts that the short-term  $GLCs_{max}$  for routine emissions of Crude Oil and Natural Gas Condensates (each with a short-term ESL of  $3500 \ \mu g/m3$ ) would be 2.5 times their short-term ESL. The predicted frequency of two-times ESL exceedance for each chemical is only 6 hours per year. The predicted short-term  $GLCs_{ni}$  for Crude Oil and Natural Gas Condensates would be 1.1 times their ESL. The corresponding frequencies of exceedance at the  $GLCs_{ni}$  are predicted to be 14 and 15 hours per year respectively. Hence, considering the magnitude and frequency of ESL exceedances, the generic nature of the ESLs and the conservative modeling assumptions, the modeled short-term impacts for Crude Oil and Natural Gas Condensates are allowable.

As for the routine and MSS activities of Naphtha/Petroleum hydrotreated Light, the predicted short-term  $GLC_{max}$  would be 3.1 times its short-term ESL (Short-term ESL: 3500 µg/m3). The predicted frequency of two-times ESL exceedance is 9 hours per year. The predicted short-term  $GLC_{ni}$  would be 1.2 times the ESL. The corresponding predicted frequency of ESL exceedance is 37 hours per year. However, when the modeled emissions are limited to routine operations alone, both the short-term  $GLC_{max}$  and the short-term  $GLC_{ni}$  are predicted to be far less than the short-term ESL, thus making MSS activities the major driver of the short-term ESL exceedance for Naphtha. Therefore, considering the generic nature of the ESLs, the magnitude and frequency of short-term ESL exceedance, that MSS is the major culprit for the short-term exceedance, and the conservatism built into the modeling approaches, the predicted short-term impacts for Naphtha/Petroleum hydrotreated Light are allowable.

Overall, the assessment shows that the predicted short-and long-term impacts for all the modeled chemicals at this facility are expected to be protective of both human health and the environment. Therefore, based on the potential concentrations reviewed by the Executive Director's staff, it is not expected that there will be adverse health effects on Port Arthur, sensitive subgroups, or on public welfare and the environment Executive Director's Response to Public Comment Sunoco Partners Marketing & Terminals L.P., Permit No. 56508, PSDTX1444M1, and GHGPSDTX191 Page 13 of 15

as a result of exposure to the proposed emissions rates associated with this project.

## **Comment 2: Jurisdictional Issues**

#### Quality of Life

Commenters expressed concern regarding the negative effect on the aesthetics of the surrounding area and the quality of life for those near the proposed facility.

#### Location/Zoning

Commenters expressed concern regarding the location of the facility as it relates to current zoning ordinances and the proximity to parks, schools, and residential areas.

#### Property Values

Commenters expressed concerned that the facility will negatively impact their property values.

(Hilton Kelley on behalf of himself and CIDA, Inc.)

**Response 2:** The TCAA establishes the TCEQ's jurisdiction to regulate air emissions in the state of Texas. The TCEQ's review of requests for air quality authorizations is limited to a review of the Best Available Control Technology (BACT) and a health effects review. Accordingly, the TCEQ does not have jurisdiction to consider facility location or land use issues when determining whether to approve or deny a permit. Except under limited circumstances, which do not exist for this particular permit application, the issuance of a permit cannot be denied on the basis of facility location. The issuance of an air quality authorization does not override any local zoning requirements that may be in effect and does not authorize an applicant to operate outside of local zoning requirements. Similarly, the TCEQ does not have jurisdiction to consider potential effects on property values, aesthetic impacts, or to consider economic issues such as effects on tourism.

## **Comment 3: Violations/Enforcement**

Commenters expressed concern about historical air violations, and that the suspected lack of adherence to regulations and transparency will consequentially diminish the air quality surrounding the site.

## (Hilton Kelley on behalf of himself and CIDA, Inc.)

**Response 3:** There are a number of mechanisms by which the TCEQ monitors compliance with permit conditions and state and federal regulations. To the extent that personnel, time, and resources are available, the TCEQ investigates permit operations to ensure compliance with applicable rules and regulations. Although specific to each site, investigations generally explore the entire operation of the plant. The investigation schedule may be increased if violations are found, repeated, or if a regulated entity is classified as an unsatisfactory performer.

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The permit holder is also required to maintain records to demonstrate compliance. Records must be made available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction. The Regional Office may perform investigations of the plant as required. The investigation may include an inspection of the site including all equipment, control devices, monitors, and a review of all calculations and required recordkeeping.

The TCEQ regional offices prioritize their responses to complaints based on the potential for adverse health effects associated with the alleged violation. For example, a "priority one" case means serious health concerns exist, and the case will be investigated immediately. A "priority four" case, on the other hand, means no immediate health concerns exist; therefore, it will be investigated within 30 days.

Staff from the TCEQ regional office evaluate all complaints received and regional investigations and are not limited by media. Complaints regarding regulated entities may be addressed to the TCEQ Corpus Christi Regional Office at (361) 825-3100 or by calling the 24-hour toll-free Environmental Complaints Hotline at 1-888-777-3186. Citizen-collected evidence may be used. *See* 30 TAC § 70.4, Enforcement Action Using Information Provided by Private Individual.

Violations are usually addressed through a notice of violation letter that allows the operator a specified period of time within which to correct the problem. The violation is considered resolved upon timely corrective action. A formal enforcement referral will be made if the cited problem is not timely corrected, if the violation is repeated, or if a violation is causing substantial impact to the environment or neighbors. In most cases, formal enforcement results in an agreed enforcement order including penalties and technical requirements for corrective action. Penalties are based upon the severity and duration of the violation(s). Violations are maintained on file and are included in the calculation of a facility and a person's compliance history. Compliance history ratings are considered during permit application reviews.

Generally, administrative and civil penalties in the amount of \$0-10,000 and \$50-25,000 respectively, maybe assessed for violations of the TCEQ rules. *See* Tex. Water Code Chapter 7. However, the specific penalties associated with each violation will be determined on a case by case basis according to the TCEQ Penalty Policy.<sup>2</sup> First, the commission will evaluate the penalty based on the size of the respondent's (i.e. alleged violator) site. For example, any stationary facility that has the potential to emit more than 100 tons per year of any air pollutant is classified as a "major source." Second, the "harm" is categorized as major, moderate, or minor, according to the "Environmental/Property and Human Health Matrix." The harm classification is based on whether an "actual" or "potential" release of contaminants occurred. Third, additional factors including compliance history, repeat violations, will be assessed and will influence the overall amount of the penalty. In addition, any economic benefit or

<sup>2</sup> Available at: https://www.tceq.texas.gov/publications/rg/rg-253.html.

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monetary gain derived from a failure to comply with TCEQ rules or regulations will be considered and may increase the penalty. The final penalty amount will be checked against the minimum and maximum penalty amounts allowed by statute, per day of violation, in order to obtain the final assessed penalty. Additional information about the TCEQ penalty policy may be obtained from the TCEQ website, Penalty Policy of the Texas Commission on Environmental Quality, available at <a href="http://www.tceq.texas.gov/publications/rg/rg-253.html">http://www.tceq.texas.gov/publications/rg/rg-253.html</a>.

#### CHANGES MADE IN RESPONSE TO COMMENT

No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

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REPRESENTING THE EXECUTIVE DIRECTOR OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY