Permit Amendment
Source Analysis & Technical Review

Company	**Diamond Green Diesel LLC**	Permit Number	**160299 and Vol. Update of GHGPSDTX200M1** *(associated permit PSDTX1576M1)*
City	**Port Arthur**	Project Number	**361154**
County	**Jefferson**	Regulated Entity Number	**RN110966884**
Project Type	**Amendment**	Customer Reference Number	**CN605753813**
Project Reviewer	**Ariel Ramirez**	Received Date	**July 28, 2023**
Site Name	**Diamond Green Diesel Port Arthur Facility**		

Project Overview

Diamond Green Diesel LLC (DGD) owns and operates a renewable diesel fuels plant in Port Arthur, Jefferson County. The facility converts waste grease, animal fats, used cooking oils, and other plant and vegetable oils into renewable diesel fuel and other renewable fuels. DGD submitted an expedited 'as-built' permit amendment application proposing to update previous representations and emissions from the originally permitted sources to reflect actual construction/operational conditions since the initial start-up of the facility in November 2022. Additionally, DGD proposes to consolidate Permit by Rule (PBR) authorization 172263 as part of this project. Maintenance, Startup, and Shutdown (MSS) activities are authorized by this permit.

Emission Summary

Air Contaminant	Current Allowable Emission Rates (tpy)	Emissions Consolidated from PBR (tpy)	Proposed Allowable Emission Rates (tpy)	Change in Allowable Emission Rates (tpy)	Project Changes at Major Sources* (tpy)
PM	12.83	0.00	12.83	0.00	29.3
PM_{10}	12.71	0.00	12.71	0.00	29.1
$PM_{2.5}$	10.74	0.00	10.74	0.00	27.0
VOC	214.03	0.02	251.57	37.52	373.5
NO_X	32.99	0.00	39.57	6.58	93.5
CO	79.48	0.00	113.18	33.70	241.4
SO_2	21.20	0.00	21.24	0.04	39.4
NH_3	4.49	0.00	4.48	-0.01	N/A
H_2S	0.12	0.00	0.11	-0.01	0.20
CO2	158204	0.00	166779	8575	N/A
CH_4	5.34	0.00	4.00	-1.34	N/A
N_2O	0.33	0.00	0.35	0.02	N/A
CO_2 Equivalent	158426.05	0.00	166975.05	8549	414,889

*A retrospective PSD applicability analysis has been completed for the 'as-built' amendment and includes affected sources from the adjacent Premcor Port Arthur refinery as all sources are located at the same site. Updated retrospective net project increases have been included in the Federal Applicability section of this document. The retrospective review did not result in additional pollutants being subject to PSD.

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	August 1, 2023
Site rating & classification:	0.00 / High
Company rating & classification:	0.00 / High
Has the permit changed on the basis of the compliance history or rating?	No

Did the Regional Office have any comments? If so, explain.	N/A

Public Notice Information

Requirement	Date
Legislator letters mailed	8/2/23
Date 1st notice published	8/9/23
Publication Name: Port Arthur News	
Pollutants: carbon monoxide, hazardous air pollutants, hydrogen sulfide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less and sulfur dioxide	
Date 1st notice Alternate Language published	8/10/23
Publication Name (Alternate Language): El Perico	
1st public notice tearsheet(s) received	8/22/23
1st public notice affidavit(s) received	8/22/23
1st public notice certification of sign posting/application availability received	9/20/23
SB709 Notification mailed	8/4/23
Date 2nd notice published	11/8/23
Publication Name: Port Arthur News	
Pollutants: carbon monoxide, hazardous air pollutants, hydrogen sulfide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less and sulfur dioxide	
Date 2nd notice published (Alternate Language)	11/9/23
Publication Name (Alternate Language): El Perico	
2nd public notice tearsheet(s) received	11/17/23
2nd public notice affidavit(s) received	11/17/23
2nd public notice certification of sign posting/application availability received	12/14/23

Public Interest: None.

Federal Rules Applicability

Requirement	
Subject to NSPS?	**Yes**
Subparts **A, Kb, NNN, & IIII**	
Subject to NESHAP?	**Yes**
Subparts **A & FF**	
Subject to NESHAP (MACT) for source categories?	**Yes**
Subparts **A, FFFF, ZZZZ, & DDDDD**	
Nonattainment review applicability: The site is located in Jefferson County, which is currently classified as attainment/unclassified for all criteria pollutants; therefore, nonattainment review is not applicable.	

PSD review applicability: The site is located in Jefferson County, which is classified as attainment for all criteria pollutants. The DGD facility and the adjacent Premcor Refinery are both considered major sources with respect to PSD, and the DGD facility has a potential to emit (PTE) in excess of 100 tpy for at least one pollutant. The project underwent PSD review as part of the initial September 2020 applications (TCEQ project nos. 312721 and 312722 triggered PSD review for VOC, NOx, CO, PM10, PM2.5, and GHG), and again during the last permit amendments issued November 2022 (TCEQ project nos. 341636 and 341637 which triggered PSD review for VOC, NOx, CO, PM, PM10, PM2.5, and GHG) as the PTE for those pollutants aggregated with the project emissions associated with DGD facility and the adjacent Premcor Refinery (emissions aggregated for federal applicability purposes), exceeded the applicable significance threshold in 40 CFR § 52.21(b)(23)(i)). PSD was applied to both permits.

With this project, a retrospective PSD analysis has been completed for this 'as-built' permit amendment application which reflects an update to the PSD analysis that was completed in support of the prior permit amendment. DGD provided an updated PSD applicability analysis for the project with the addition of emission rates included in this permit amendment application. As shown in the table below, the updated project emissions for each regulated pollutant does not change the previous PSD applicability analysis determination from the 2022 amendment project. The PTE for SO_2 and H_2S are less than the applicable significance thresholds, and PSD requirements do not apply for these pollutants. The site will not emit lead (Pb). Additionally, the emissions increases associated with the current amendment do not propose increases in amounts greater than the PSD significant thresholds; therefore, PSD is not applicable to the current 'as-built' permit amendment application.

Project Description	Air Contaminants – Total Emissions (tpy)								
	CO	NOx	PM	PM10	PM2.5	SO2	VOC	H2S	CO2e
Initial Project (2020)	109.95	46.18	20.04	19.92	17.95	38.14	140.47	0.23	300,331
Amendment Project (2022)	149.15	62.22	26.84	26.66	24.60	39.33	254.71	0.23	406,342
As-Built Updated Project [1]	182.85	68.80	26.84	26.66	24.60	39.37	292.46	0.22	414,889
Contemporaneous Increases	58.5	24.7	2.4	2.4	2.4	n/a	80.2	n/a	-
Updated Net Emissions Increase	241.4	93.5	29.3	29.1	27.0	39.40	373.5	0.2	414,889
PSD Significance Threshold	100	40	25	15	10	40	40	10	75,000
PSD applicable?	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes

[1] Note that the as-built project includes new DGD sources and new, modified, and affected sources at the adjacent Premcor Refinery.

Title V Applicability - 30 TAC Chapter 122 Rules

Requirement

Title V applicability: The site is subject to the Title V program because it is an existing major source and operates under Title V permit no. O4228.

Periodic Monitoring (PM) applicability: Periodic Monitoring is applicable because the site is a major source. The following provisions for monitoring are being included in the special conditions:

- Fuel flow meter on heaters to measure fuel usage recorded monthly;
- Semi-annual monitoring for natural gas;
- Monthly throughput recordkeeping for storage tanks and temperature monitoring for heated tanks
- 28VHP LDAR program for components in VOC service, 28PI for ultra-heavy liquids with low vapor pressures, , 28 AVO for components in aqueous ammonia service; difficult to monitor components under the 28VHP program have been represented to be monitored annually for a 75% reduction credit.
- Standard monitoring conditions for MSS activities.

Compliance Assurance Monitoring (CAM) applicability: The site is subject to Title V permitting requirements. Although not modified as part of this project, the flare and vapor combustor are control devices used to achieve compliance with an applicable requirement of the permit, and control emissions sources with a pre-control emission rate in excess of an applicable major source threshold. CAM for the flares is addressed by continuous flow and composition monitoring. CAM for the vapor combustor is addressed by requiring temperature monitoring. The capture system is required to be inspected annually in accordance with 40 CFR Part 60, Appendix A, Test Method 21 and the bypass monitored.

Process Description

The DGD Facility converts waste grease, animal fats, used cooking oils, and other plant and vegetable oils to produce renewable diesel, renewable naphtha (gasoline), renewable propane and butanes, and other light end gases. The DGD process converts low quality animal fats and waste oils into a higher value renewable diesel product using an Ecofining™ process that uses hydrotreating and isomerization technologies. The main processing steps of the DGD process include pretreatment, refining, and isomerization.

Raw materials (fats and oils) are received via pipelines and trucks, then pumped into three pretreatment blend tanks (EPNs T-301, T-302, and T-303) or, on an as-needed basis, into one flex tank (EPN T-304). Materials used in pretreatment of the raw material, including bleaching earth, filter aid, and citric acid, will be delivered to the plant via railcar and/or truck. Particulate materials (bleaching earth and filter aid) will be unloaded to storage silos (EPNs E-BE-DGD, E-FA-DGD) via pneumatic conveyors and controlled by a dust collector (EPN C-DGDUNLD). The renewable diesel production unit will use a pretreatment process followed by an advanced hydroprocessing-isomerization process to produce a fungible biomass-based diesel product. The pretreatment process steps are de-gumming, washing and bleaching, used to remove contaminants (primarily phosphorus and other elements) that could foul the hydrotreating and isomerization catalysts of the hydroprocessing-isomerization process. The pretreatment area will include three storage vessels for blending the raw materials (EPNs T-301, T- 302, and T-303). Blended fats and oils will be centrifuged to separate solids and hydrated phospholipids from the biomass oils and treated with acid and caustic. Removal of additional impurities will be accomplished with clay adsorption, and the pretreated oil will be recovered by filtration. Three storage vessels (EPNs T-311, T-312, and T-313) will receive the pretreated material to feed the refining process. The refining process area will include process equipment for hydroprocessing, isomerization, and separation. Two small process heaters (EPNs E- 55-201 and E- 55-202) will be included in the process area. Hydrogen required for the hydroprocessing will be purchased from third-party providers and delivered via pipeline. A flare (FIN E-30-FLARE) will be used primarily for start-up/shut down events, any emergencies or upsets, routine sweeps, or to control vapors during certain offloading operations. The unit also includes a cooling tower (EPN CT-350). Renewable diesel will be stored in three tanks (EPNs T-103, T-2301, and T-2302) and transported off-site by ship at a third-party marine dock or at the existing refinery dock, or via pipeline. The renewable naphtha product will be stored in two tanks (EPNs T-321 and T-322) and transported off-site via ship at the existing refinery dock. Renewable propane and butanes will be stored in six bullet tanks and will be exported via truck or rail (EPN: C-LPGLOAD) or potentially sent via pipeline to a third-party hydrogen producer to be used as renewable feedstock. A new boiler will be constructed at the adjacent Port Arthur refinery to provide steam for the project. Process wastewaters and contact stormwaters will be pretreated at the renewable diesel plant prior to discharge to the Port Arthur Refinery Wastewater Treatment Plant (WWTP). The wastewater pretreatment unit will consist of several tanks to store, equalize, and neutralize the fat-containing wastewaters and contact stormwaters, followed by separation by a dissolved air floatation unit, followed by aerobic biological treatment, and followed again by dissolved air floatation unit separation. Effluent from the pre- treatment train will then be routed to the Premcor refinery's wastewater treatment plant.

Amine will be used at the plant in the refining and subsequent processes to remove hydrogen sulfide (H2S) and carbon dioxide (CO2) from the product streams. A new amine regeneration system will be constructed at the Port Arthur refinery to treat the rich amine generated at the renewable diesel plant and provide lean amine back to the renewable plant. The system will include new fresh and spent amine storage tanks. The amine that will be utilized in this process is diethanolamine (DEA). In accordance with TCEQ's September 19, 1996 Memorandum on quantifying air contaminants, emission calculations are not required for compounds with vapor pressures below 0.0002 psia at 40 °C. Because the vapor pressure of DEA is 0.000005 psia at 40 °C, emissions are negligible, and estimates have not been generated. A new sour water storage tank and sour water stripper will also be constructed at the Port Arthur refinery to separate and treat hydrogen sulfide and ammonia that is present in the sour water generated by the renewable fuels process. Off gases from the new amine regenerator and new sour water stripper will be routed to the Port Arthur refinery's existing Sulfur Recovery Units. The renewable diesel plant will also include a slop oil storage tank (EPN T-325) and two stand-by emergency generators (EPNs E-01-EMGEN and E-02-EMGEN) and the associated diesel fuel storage tanks (EPNs

GEN1-TK and GEN2-TK). The standby-by emergency generators will be used to provide back-up power to the control room and the Operations/Office Building in the event utility-provided power is disrupted.

Sustainable Aviation Fuel (SAF) Unit

The Sustainable Aviation Fuel (SAF) Unit was authorized with the permit amendment issued November 2022 and is currently under construction. It is represented to be a bolt-on unit to the existing DGD renewable diesel facility and will convert a portion of the DGD-produced renewable diesel into SAF Blendstock (renewable jet fuel). Renewable diesel from the Ecofining Unit will be sent to the proposed SAF Unit as a feedstock where it will be vacuum fractionated in a tower. Heat to the vacuum fractionator tower will be provided by a new reboiler heater (EPH E-59-701). The overhead off-gases from the fractionator will be routed back into the fuel gas system. The renewable naphtha stream from the fractionator will be returned to the Econfining Unit and reprocessed. The renewable jet stream will be routed to a side stripper column for purification, sent to tankage for storage, and then exported via Premcor's marine dock or a third-party marine dock, or via pipeline. The heavy renewable diesel stream from the fractionator will be routed to the existing renewable diesel product storage tanks. The produced renewable jet will be stored in three new storage tanks (EPNs T-2303, T-2304, and T-2305). Tank T- 2303 will serve as the rundown tank, and the renewable jet will be transferred from this tank to the two shipment tanks, T-2304 and T-2305. From the shipment tanks, the renewable jet will be transported off-site by ship or ocean-going barge at a third-party marine dock or at the existing Premcor refinery dock, or via pipeline. To satisfy federal SAF fuel blending requirements, a small amount (approximately 0.1%) of traditional jet fuel will be blended into the renewable jet product. Following startup of the proposed SAF Unit, the DGD facility will be able to operate in various production modes ranging from an all-diesel production mode (currently authorized scenario) in which no renewable jet would be produced, to a maximum jet mode in which both renewable jet and renewable diesel would be produced. Intermediate production modes between these two extremes may also occur. Because maximum worse-case emissions have been represented in this application, production under any of these scenarios would be authorized. Operation in any of the jet producing modes will result in a reduction of renewable diesel production relative to the all-diesel mode and will result in the production of an overall heavier renewable diesel product. The proposed SAF Unit will require a small amount of incremental cooling water, but the new Cooling Tower E-CT-350 permitted with the original DGD project has adequate capacity to provide this need. The proposed SAF unit will not result in an increase in sour water or wastewater generation, steam demand, or flaring, above the levels that have already been permitted in the existing all-diesel mode scenario. The SAF Unit will be a net generator of steam, which can be re-used elsewhere in the process and serve to offset an equivalent amount of virgin steam generation.

Project Scope

DGD submitted an expedited 'as-built' permit amendment application proposing to update previous representations and emissions from the originally permitted sources to reflect actual construction/operational conditions since the initial start-up of the facility in November 2022. The summary of the proposed changes are as follows:

- Increase the maximum short-term firing rate for the feed treater heater (EPN E-55-201);
- The short-term NOx and CO MSS emission rates authorized by Project 341637 for EPN E-59-701) were inadvertently left off MAERT during the last permit update, and DGD requests that the MAERT be corrected to include these emission rates;
- Increase maximum temperatures for the feed and treated fat tanks (EPNs: T-301, T-302,T-303, T- 304, T-311, T-312, and T-313);
- Increase maximum short-term temperature for the renewable diesel rundown tank (EPN: T-103);
- Lower vapor pressure for treated fat tanks (EPNs: T-304, T-311, T-312, and T-313) based on post-operational test data;
- For the flare (EPN E-30-FLARE), increase maximum short-term and annual average routine flow rates and revise typical stream compositions for both the short-term and annual average case. Additionally, the emission rate changes will result in a voluntary update of emissions associated with Flare Cap EPN E-30-FLARE for GHGPSDTX200M1.
- Update estimated fugitive piping component counts based on actual equipment tagging data for the constructed facility. Note, revised fugitive equipment counts include the fugitive equipment authorized by PBR 172263, which is being consolidated with this project;
- Update the uncontrolled MSS emission rates as a result of higher true vapor pressures caused by the higher storage temperatures of the fats;

Changes to the MAERT

EPN	Source	Comment
E-55-201	Feed Treating Heater	minor annual increase for NOx and CO and short-term increases due to calculation updates and increase in maximum short-term firing rate
C-DGDFUG	Piping Fugitives	Increase in emissions due to updated component counts and consolidated emissions from PBR
E-30-FLARE	Flare 30	Increase in emissions due to increase in flow rate and updates to stream compositions; voluntary update of GHG emissions associated with the flare cap
T-304	Treated Fat/Oil Tank	Increase in emissions due to updated calculation representations and temperatures
T-301	Blend Tank 1	
T-302	Blend Tank 2	
T-303	Blend Tank 3	
Blend Tank Annual Cap		
T-311	Treated Fat/Oil Tank No. 1	Decrease in emissions due to updated calculation representations and lower vapor pressure
T-312	Treated Fat/Oil Tank No. 2	
T-313	Treated Fat/Oil Tank No. 3	
Treated Fat Tank Annual Cap		
T-103	Renewable Diesel Rundown Tank	Increase in emissions due to increased short-term temperature
C-UMSSDGD	Uncontrolled MSS	Increase in emissions due to higher true vapor pressure and higher storage temperatures of the fats; updates to calculations only, no change in MSS activities historically represented
E-59-701	SAF Fractionator Reboiler Heater	NOx and CO MSS emission rates authorized by Project 341637 for EPN E-59-701 were inadvertently left off MAERT during the last permit update and representations have been added with this project. The reviewer verified that the emissions were represented in the submitted calculations with project 341637 (note, this EPN was initially represented as E-55-203 but updated to E-59-701 on 8/29/22).

Changes to the Special Conditions

Current SC	New SC	Description
10, 50	10, 50	Minor footnote added to tables clarifying CO emission limits are corrected to 3%O_2
14	14	Minor update to table in subpart A to include Treated Fat service as an option for EPN T-304, as represented in application. Update to subpart F to refer back to current project rather than the initial 2020 authorization.
15	15	Updated temperature/vapor pressure table for tanks, as represented in application

All changes to the MAERT and Special Conditions become effective upon issuance of the amended permit.

Source Name	**EPN(s)**	**Best Available Control Technology Description**
Heater	E-55-201	Max firing rate of 80 MMBtu/hr and annual average rate of 49 MMBtu/hr. NOx emission factor of 0.025 lb/MMBtu NOx annual and 0.035 lb/MMBtu NOx on an hourly basis; use of ultra-low NOx burners firing natural gas or process fuel gas and good combustion practices. CO emission factor of 0.0363 lb/MMBtu annual with concentration limit of 50 ppmvd at 3% O_2 0.15 lb/MMBtu hourly emission limit of NOx for MSS.

		0.345 lb/MMBtu limit of CO and limit of 500 ppmvd at 3% O_2 for MSS. CO concentration limit of 100 ppmvd at 3% O_2 for CO on hourly basis PM: opacity less than 5% SO_2: pipeline quality natural gas with max sulfur concentration of 5 gr/dscf, or process fuel gas with H2S concentration limit of 162 ppmv on a rolling 3-hr average, and 39 ppmv on a rolling 12-month average. VOC and GHG: Use of low carbon fuel (natural gas), good combustion practices, proper operation and maintenance
SAF Fractionator Reboiler Heater	E-59-701	Source is not modified with the current project, rather the MAERT is being administratively corrected to reflect NOx and CO MSS short-term emission rates that were inadvertently left off during the last amendment project. The BACT analysis provided with the previous project is as follows: Maximum hourly and annual average firing rates of 230 MMBtu/hr and 200 MMBtu/hr, respectively, and will be fired with plant fuel gas or natural gas. CEMS will be installed to measure NOx, CO, and O2. NOx emission factor of 0.015 lb/MMBtu hourly and annual; will be met with the use of ultra-low NOx burners and SCR. 0.15 lb/MMBtu hourly emission limit of NOx for MSS. DGD proposes to utilize good combustion practices and proper design to meet a CO concentration limit of 50 ppmvd at 3% O_2 (0.0345 lb/MMBtu). For all heaters on an annual average basis. CO concentration limit of 100 ppmvd at 3% O_2 for CO on hourly basis. For MSS, DGD proposes a limit of 500 ppmvd at 3% O_2 (0.363 lb/MMBtu) for CO. PM: good combustion practices and clean burning fuel to maintain opacity less than 5% SO_2: utilize plant fuel gas with a maximum H2S concentration in the fuel of 162 ppmv on a rolling 3-hr average and 39 ppmv on a rolling 12-month average NH_3: control ammonia injection system to minimize ammonia slip to a maximum outlet concentration of 10 ppmvd at 3% O_2 from the stack GHG and VOC: use of low carbon fuel, good combustion efficiency, proper operation and maintenance, and proper combustion design and practices.
Fixed Roof Tanks	T-304, T-301, T-302, T-303, T-311, T-312, T-313, T-103	Existing fixed roof tanks with capacities greater than 25,000 gal and vapor pressure <0.5 psia. All fixed roof tanks utilize submerged fill piping, will be painted white, and have a drain dry design.
Flare	E-30-FLARE	Existing steam-assisted flare with minimum DRE of 99% for C_2 and C_3 compounds, and DRE of 98% for all other compounds. Flare will comply with requirements of 40 CFR §60.18 and be equipped with a flow monitor and calorimeter.
Uncontrolled MSS	C-UMSSDGD	Utilize best management practices to limit MSS emission associated with facility process equipment opening activities and route as much residual material as possible back into the process unit or onsite storage and take steps to minimize the remaining VOC material that may potentially be emitted. Equipment containing VOCs with a vapor pressure of 0.5 psia or greater will be purged to control device until the concentration in the equipment vapor space is reduced to either 10% of the LEL or 10,000 ppmv prior to opening the equipment to the atmosphere.
Fugitives	C-DGDFUG	Existing requirements to utilize the 28VHP LDAR program for VOC, 28PI for ultra-heavy liquids with low vapor pressures, and 28AVO program for components in ammonia service. Additionally, difficult to monitor valves are monitored on an annual basis for a 75% reduction credit.

Permits Incorporation

PBR	Description (include affected EPNs)	Action
172263	Authorized additional fugitive components (EPN C-DGDFUG: <0.01 lb/hr and 0.02 tpy VOC)	Consolidate

Impacts Evaluation

Was modeling conducted? **Yes** Type of Modeling: **AERMOD**

Is the site within 3,000 feet of any school? **Yes**

Additional site information: Site-wide modeling for the overall "as-built" project was conducted together (includes both Diamond Green Diesel LLC and the Premcor Refining Group Inc.) as all sources are located at the same site.

In this application, the impacts analysis was conducted retrospectively as an "as-built" update to reflect actual construction and operational conditions since the 2022 modeling analysis (TCEQ project no. 341637). Based on the modeling review, the air quality analysis (AQA) is acceptable for all review types and pollutants, except for soybean oil, methyl esters, which had exceedances at the adjacent Premcor (permit 6825A) site. The exceedances for soybean oil underwent a Toxicology review as part of the previous modeling submittal (TCEQ project no. 341637) which is revisited and for the current as-built project, and the exceedances of soybean oil, methyl esters were considered to be acceptable. With this project, the modeling submittal was updated to utilize newer versions of AERMOD and AERMET, as well as incorporate more representative meteorological data. Specifically, the previous modeling submittal (project 341637) was performed using AERMOD version 21112 and AERMET version 19191. The current modeling is performed using AERMOD version 22112 and AERMET version 22112. In November 2022 TCEQ ADMT published new preprocessed meteorological using the new AERMET version and concurrently updated the single year meteorological data year from 2016 to 2020. As a result, the exceedance levels previously reviewed and accepted by the Toxicology Division decreased significantly. In addition, the ADMT verified that when comparing the UIMs for the modeled sources, the generic impacts for most of the modeled sources decrease from the previous modeling demonstrations. This leads to the conclusion that the updated versions and met data contribute to the lower exceedances, given that all other model setups are the same (e.g. the receptor grids). Note the location of the GLCmax and GLCni did not change between the historical and current modeling submittal. In summary, the updated modeling and lower exceedances have been reviewed and considered acceptable and further review is not required. The health effects review is complete and no adverse health effects are expected to occur among the public health, welfare, or the environment as a result of exposure to the emissions from the facilities authorized by this permit. Please see the model audit memo dated October 26, 2023 (WCC Document Number 6756190), and historical Toxicology memo dated September 8, 2022 for full details.

Project Reviewer	12/18/23 Date	Team Leader	12/18/23 Date