


## SLO County Air Pollution Control District - CEQA Comment Letter

APCD\_slocleanair <APCD\_slocleanair@co.slo.ca.us>

Mon 9/25/2023 3:56 PM

To: Susan Strachan <sstrachan@co.slo.ca.us>; PL\_Diablo <PL\_Diablo@co.slo.ca.us>

Cc: Andrew Mutziger <amutziger@co.slo.ca.us>; Dora Drexler <ddrexler@co.slo.ca.us>

 3 attachments (2 MB)

4-02-Air-Quality-SLOCAPCDinput.pdf; 4208-7\_signed.pdf; 4-09-Greenhouse-Gas-Emissions-APCDinput.pdf;

Dear Susan Strachan,

Please see the attached CEQA Comment Letter. Should you have any questions or comments, please contact our office at (805) 781-5912.

Thank you,

San Luis Obispo County Air Pollution Control District  
3433 Roberto Court  
Main: 805-781-5912  
Fax: 805-781-1002



Air Pollution Control District  
San Luis Obispo County



Air Pollution Control District  
San Luis Obispo County

**VIA EMAIL ONLY**

September 25, 2023

Susan Strachan  
County of San Luis Obispo Department of Planning and Building  
976 Osos Street, Room 300  
San Luis Obispo, CA 93408  
sstrachan@co.slo.ca.us  
diablo@co.slo.ca.us

SUBJECT: APCD Comments Regarding the Draft Environmental Impact Report for  
PG&E Diablo Canyon Nuclear Power Plant Decommissioning Project

Dear Susan Strachan:

Thank you for including the San Luis Obispo County Air Pollution Control District (APCD) in the environmental review process. We have completed our review of the Draft Environmental Impact Report (DEIR) for the PG&E Diablo Canyon Nuclear Power Plant (DCPP) Decommissioning Project (Proposed Project) that would occur approximately seven miles northwest of Avila Beach. The DEIR estimated Phase 1 and 2 air quality and greenhouse gas impacts and mitigation benefits for the project are in Appendix D and the reported results are in DEIR Sections 4-02 Air Quality and 4-09 Greenhouse Gas (GHG) Emissions. The DEIR proposes GHG mitigation for those impacts above baseline emissions that are stated in Section 4-09. Facility decommissioning would occur in two phases: Phase 1 (2024 through 2031): Pre-planning and Decommissioning Project Activities, and Phase 2 (2032 through 2039): Completion of Soil Remediation, Final Status Surveys, and Final Site Restoration.

Post-decommissioning operations would include activities at the DCPP site associated with the Proposed Project and would include operation of a new Greater Than Class C Low-Level Radioactive Waste Storage Facility, Security Building, indoor Firing Range, and Storage Buildings. Future Actions would include marina improvements and operations include parking lot construction and a boat hoist to allow for recreational activities at the Marina. Both of these operations and future actions would involve lower levels of employment, and total trips to and from the site relative to baseline conditions as specified in DEIR Section 2.2.3.1.

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The following comments are formatted into 3 sections. The **(1) General Comments** section states information pertinent to the applicant, lead agency, and/or public.

The **(2) Air Quality** and **(3) Greenhouse Gas Emissions** sections may state mitigation measures and/or rules and requirements which the APCD recommends be set as conditions of approval for the project. The **lead agency** may contact the APCD Planning Division for questions and comments related to the content in this letter at 805-781-5912.

*Please Note: The APCD recently updated the [Land Use and CEQA Webpage](#) on the [slocleanair.org](#) website. The information on the webpage displays the most up-to-date guidance from the SLO County APCD, including the [2023 CEQA Greenhouse Gas Guidance & Threshold Recommendations](#), [Quick Guide for Construction Mitigation Measures](#) and [Quick Guide for Operational Mitigation Measures](#).*

### **(1) General Comments**

The Proposed Project's air quality and GHG emissions impact analysis and proposed mitigation measures are considered generally acceptable to SLO County APCD. APCD has recommended changes and improvements that we will highlight in Sections 2 and 3 of this letter. Specific recommendations and improvements are included in comment boxes in two attachments to this letter: 4-02-Air-Quality-SLOCAPCDinput.docx and 4-09-Greenhouse-Gas-Emissions-APCDinput.docx. Both files also include minor APCD recommended track change edits.

### **(2) Air Quality**

#### **APCD CEQA Handbook & Tier 1 Quarterly Construction Threshold Guidance (Pages 4.2-21 & 22)**

The DEIR's Air Quality section references SLO County APCD's 2012 CEQA Handbook. However, the 2017 administrative update is pertinent to the DEIR's Air Quality section and should be referenced. Specifically, SLO County APCD would like to point out that Mitigation Measure AQ-2 for Phase 1 of the Proposed Project would mitigate ROG + NOx emissions in excess of APCD's Tier 1 construction threshold of 2.5 tons/quarter. The 2017 administrative update determined that quantitatively mitigating impacts between 2.5 to 6.3 tons/quarter is no longer essential. The reason behind this change is that local, state, and federal measures and regulations have significantly improved our county's air quality relative to when the threshold and quantitative mitigation requirement were established. Based on this, APCD recommends the applicant decide whether they still want to choose to quantitatively mitigate impacts above the Tier 1 threshold or if they are comfortable quantitatively mitigating only impacts above the APCD's Tier 2 threshold of 6.3 tons/quarter. See APCD's comment in the attached Air Quality word document for more details.

#### **Mitigation Measure AQ-2 (Page 4.2-23 & 24)**

In a comment provided in the attached Air Quality word document, SLO County APCD provided recommendations on how this section should clarify the implementation of this mitigation measure.

#### **Naturally Occurring Asbestos and Asbestos and Lead Abatement**

SLO County APCD provided more information for the applicant's reference on these federally regulated potential toxic air pollutants in comments on Pages 4.2-27 & 28 in the attached Air Quality Word document.

### (3) Greenhouse Gas Emissions

#### **Section 4.9.1 Environmental Setting – Existing Conditions (Page 4.9-4)**

#### **Section 4.9.4 Environmental Impact Analysis and Mitigation – Post-Decommissioning Operations (Page 4.9-10)**

#### **Section 4.9.4 Environmental Impact Analysis and Mitigation – MM GHG-1 (Page 4.9-12)**

For the Phillips 66 Santa Maria Refinery decommissioning project that also has a credit for baseline emissions, APCD recommended that if decommissioning activities are halted for a year or longer, the lead agency should reset the baseline to zero. APCD has this same recommendation for the Proposed Project in SLO County APCD comments in the three above listed DEIR sections; see attached DEIR GHG Emissions Word document.

#### **Section 4.9.3 Significance Criteria – San Luis Obispo County APCD (Page 4.9-7)**

#### **Section 4.9.4 Environmental Impact Analysis and Mitigation - Overall Project GHG Emissions and Mitigation (Page 4.9-11)**

SLO County APCD's comment on these DEIR pages of the attached Word document explains why the APCD 10,000 MT CO<sub>2</sub>e/year industrial threshold is not applicable to this project and reiterates our baseline reset recommendation. Although the 10,000 MT threshold is listed, the DEIR appropriately proposes GHG impacts above baseline be mitigated.

#### **Section 4.9.3 Significance Criteria – San Luis Obispo County APCD (Page 4.9-8)**

#### **Section 4.9.4 Environmental Impact Analysis and Mitigation (Page 4.9-11)**

SLO County APCD's comment on Page 4.9-8 recommends that the 2023 CEQA GHG Guidance and pending update be referenced because they will provide current best practices for mitigating excess GHG mitigation. On Page 4.9-11, additional APCD comments provide guidance for improving/clarifying the 2<sup>nd</sup> bullet of MM GHG-1. This bullet identifies applicable GHG mitigation including local GHG reduction and carbon sequestration projects to implement and geographical GHG offsets and future reduction/sequestration projects to secure.

#### **Impact GHG-2 (Page 4.9-14)**

SLO County APCD's comment on this DEIR page provides recommendations of other GHG reducing plans for which the Proposed Project should be evaluated for consistency.

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, feel free to contact me at 805-781-5912.

Sincerely,



ANDREW MUTZIGER  
Division Manager – Planning, Monitoring & Grants

Attachments

cc: Dora Drexler, APCD (ddrexler@co.slo.ca.us)

## 4.2 Air Quality

This section describes the air quality within the air basins that would be affected by the Proposed Project, identifies applicable air district significance thresholds, assesses the Proposed Project's impacts to air quality and their significance, and recommends measures to avoid or substantially reduce any effects found to be potentially significant. The environmental setting is based on information obtained from the Proposed Project description, as well as the Pacific Gas and Electric Company Application Package for the Diablo Canyon Power Plant Decommissioning Project (PG&E, 2021a), including the Traffic Impact Assessment (PG&E, 2021b), the Air Quality and GHG Impact Assessment Report (PG&E, 2021c), and a follow-up technical memorandum of emission calculation updates (PG&E, 2022a). Greenhouse gases (GHGs) are addressed in Section 4.9, *Greenhouse Gas Emissions*.

**Scoping Comments Received.** During the scoping comment period for the EIR, written and verbal comments were received from agencies, organizations, and the public. These comments identified various substantive issues and concerns relevant to the EIR analysis. Appendix B includes all comments received during the scoping comment period. The following list provides a summary of scoping comments applicable to this issue area and considered in preparing this section:

- Ensure consistency with local and regional plans and evaluate whether direct and indirect emissions are accounted for in emissions growth assumptions.
- Evaluate air quality impacts associated with stationary sources and area sources including locomotive engines; off-road construction equipment; on-road equipment (on-road heavy-duty trucks, light-duty trucks, and passenger vehicles); marine vessel and barging activities; and all stationary and portable diesel engines, including the temporary 400-ton gantry crane and two truck-mounted cranes at the Santa Maria Valley Railroad (SMVR) site.
- Address potential air quality and health impacts at the SMVR site in Santa Barbara County.
- Complete and incorporate a Health Risk Assessment (HRA).
- Mitigate and minimize marine vessel emissions.

### 4.2.1 Environmental Setting

#### Existing Site Conditions

The baseline and environmental setting for the Proposed Project includes the DCPD in an "operating" status. When operations cease, PG&E will retire DCPD and transition DCPD into a "decommissioning" status.

The DCPD site maintains air permits to operate an auxiliary boiler, a paint spray booth, portable sandblast and abrasive blast equipment, non-retail gasoline dispensing equipment, and various diesel-powered generators and emergency pump engines. In data reported to the California Air Resources Board (CARB) for 2019, minor stationary sources at the DCPD site emitted air pollutants as follows: 16.5 tons per year of nitrogen oxides (NO<sub>x</sub>); 4.4 tons per year of carbon monoxide (CO); 1.0 ton per year of diesel particulate matter (DPM); and less than one ton per year for other pollutants (CARB, 2021). During the transition into decommissioning or after all spent nuclear fuel is transferred to the independent spent fuel storage installation (ISFSI), the

closure of DCPD would cause eventual shutdown of the existing stationary sources at the site (PG&E, 2022c).

In addition to the DCPD site, the Proposed Project would involve the use of the Pismo Beach Railyard (PBR) as a contingency site for the transport of non-hazardous and non-radiological waste, and one Santa Maria Valley Railyard Facility (SMVR) site in Santa Barbara County (as discussed in Section 2.2). At present, the PBR site is owned by PG&E and used as an equipment staging area and vehicle maintenance facility in support of PG&E's Transmission and Distribution operations. The SMVR-SB site (i.e., Betteravia Industrial Park) does not appear to be actively used but currently serves as storage for rail cars (PG&E, 2021e).

### **Regional Climate and Meteorology**

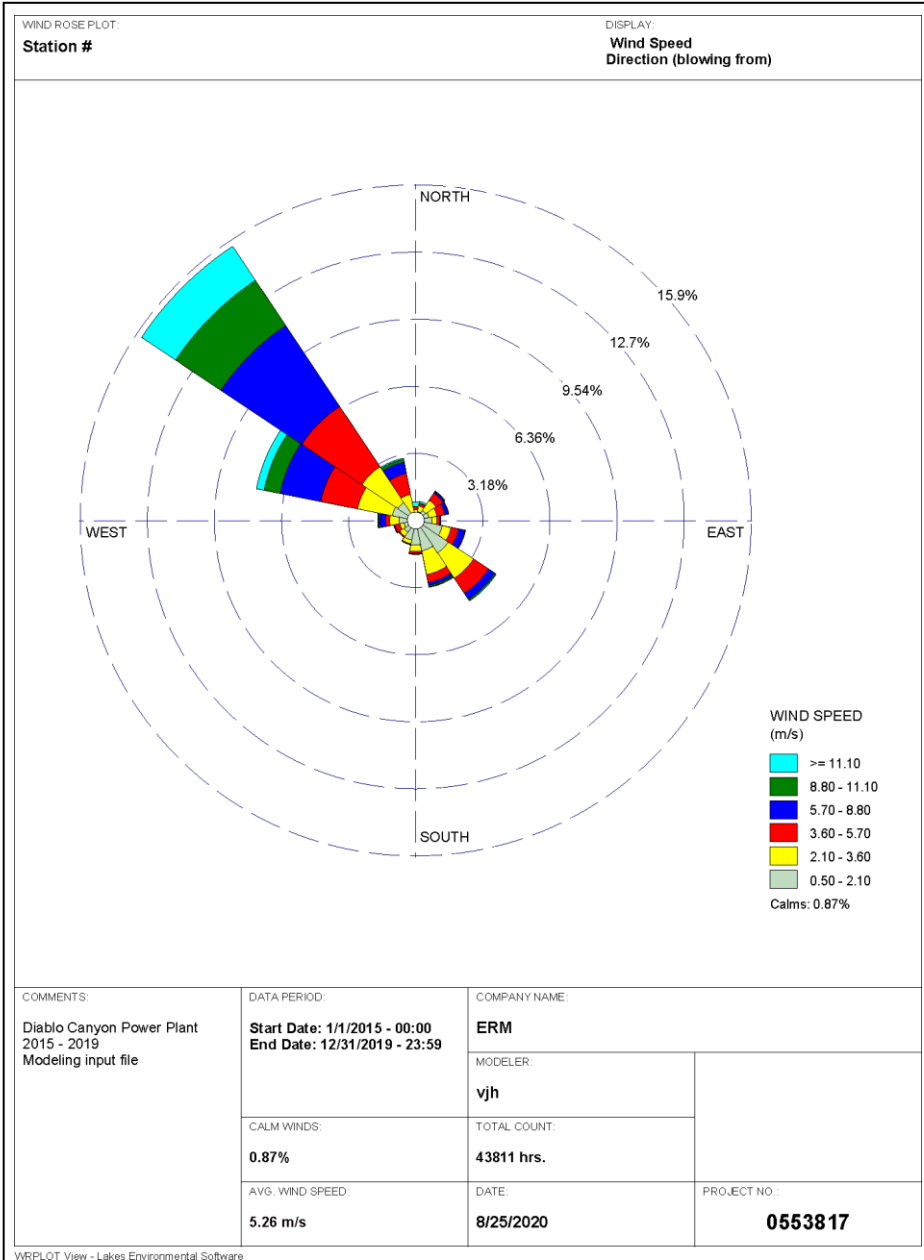
The DCPD facility, including the 750-acre NRC-licensed site, is located on California's Central Coast, bordered by the Pacific Ocean in San Luis Obispo County, approximately 7 miles northwest of Avila Beach. This area is characterized by a semi-arid Mediterranean-type climate. Approximately 18 inches of annual average precipitation occurs in the area generally between October and April, according to records from the National Oceanic and Atmospheric Administration (NOAA) meteorological station at the San Luis Obispo County Regional Airport, approximately 5.5 miles inland (NOAA, 2022).

Near the coast, summers and winters are mild compared to locations further inland. The DCPD site is within the coastal climate zone, where the ocean's influence is significant. The prevailing climate is semi-arid to arid. Low-level temperature inversions (from 1,000 to 2,500 feet) occur frequently over the coastal area. This tends to limit vertical dispersion of pollutants and can lead to increased concentrations of pollutants inland where prevailing winds carry the air. Prevailing onshore winds at DCPD are from the northwest, which is the prevailing daytime wind direction for the entire county. The winds are also greatly influenced by local topography. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze. Occasional winter storms and offshore flows reverse the sea breezes so that winds flow from the east.

The wind flow in the coastal areas is dominated by the North Pacific High, which enhances onshore winds from May to September. From November through April, this North Pacific High moves south, which allows storms in the region.

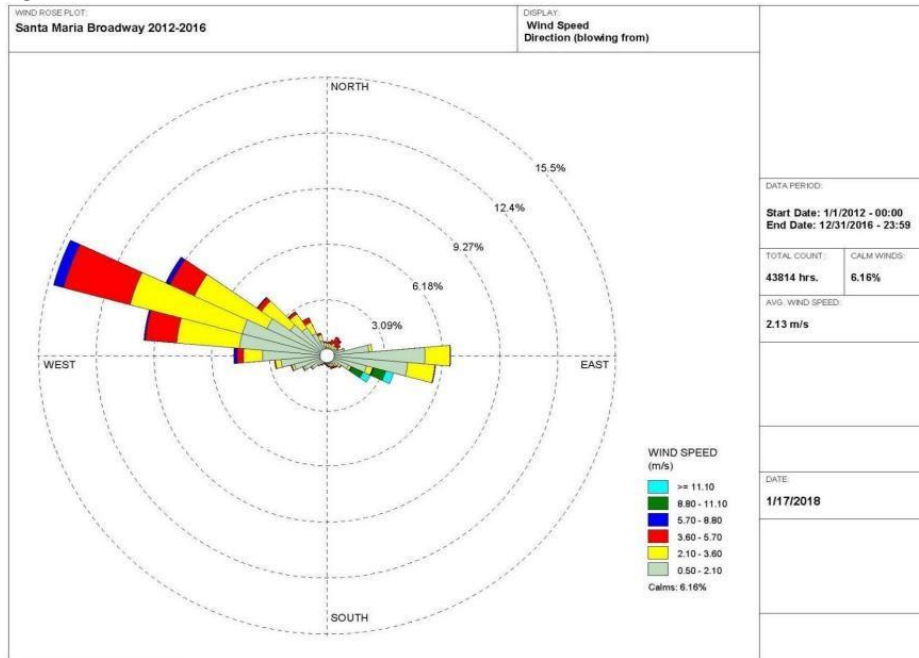
Typical wind speeds and directions for the DCPD site, as depicted in the wind rose in Figure 4.2-1, show a predominant onshore wind flow from the northwest, and a weaker wind from the southeast. DCPD is located in the Irish Hills, along steep cliffs on the shore of the Pacific Ocean. Typical wind speeds and directions in the Santa Maria area, which is representative of the SMVR-SB and PBR sites, are depicted in the wind rose in Figure 4.2-2.

Figure 4.2-1. DCPD Wind Rose 2015 – 2019



Source: PG&E, 2021c - Figure 6.2.1.1-1.

Figure 4.2-2. Santa Maria Wind Rose 2015 – 2019



Source: PG&E, 2021b - Figure 2.3.1.6-5

**Affected Air Quality Jurisdictions**

The Proposed Project area where decommissioning activities would occur is within the South Central Coast Air Basin, and includes all of San Luis Obispo, Santa Barbara, and Ventura Counties. The DCPD and PBR sites are under the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOCAPCD also referred to as SLOAPCD), and the SMVR-SB site is under the jurisdiction of the Santa Barbara County Air Pollution Control District (SBCAPCD).

Transportation-related activities for the Proposed Project would require travel along routes to access out-of-state disposal site destinations. Waste transportation by truck and train are anticipated to follow routes traversing southerly through Santa Barbara and Ventura Counties, and then easterly through Los Angeles, San Bernardino, and Riverside Counties, and on to disposal sites out of state (see Section 2.3.19.1, *Waste Transportation*). Barges leaving the DCPD site to transport waste would travel offshore into federal waters and head north to Oregon, and south to the Port of Long Beach and Santa Catalina Island for Discharge Structure cofferdam fill and restoration materials (see Section 2.3.14, *Discharge Structure Removal*, and Section 2.3.15, *Discharge Structure Restoration*).

Emissions related to transportation would therefore occur in air basins within California but far removed from the DCPD site, including the South Coast, San Joaquin Valley, and Mojave Desert Air Basins.



Proposed Project waste transportation could occur in the following air districts:

- San Luis Obispo County Air Pollution Control District (SLOCAPCD)
- Santa Barbara County Air Pollution Control District (SBCAPCD)
- San Joaquin Valley Air Pollution Control District (SJVAPCD)
- Ventura County Air Pollution Control District (VCAPCD)
- South Coast Air Quality Management District (SCAQMD)
- Mojave Desert Air Quality Management District (MDAQMD)

**Air Pollutants and Monitoring Data**

Air pollutants are defined as two general types: (1) “criteria” air pollutants, representing pollutants with established national and state health- and welfare-based ambient air quality standards (AAQS); and (2) toxic air contaminants (TACs), which may lead to serious illness or increased mortality even when present at relatively low concentrations. An additional public health related issue of concern is Valley Fever, a disease caused by soil-bound fungal spores becoming airborne as part of fugitive dust emissions generated from excavation and other ground-disturbing activities.

**Criteria Air Pollutants**

The US Environmental Protection Agency (USEPA), CARB, and air districts classify an area as attainment (compliance), unclassified (insufficient data available), or nonattainment (non-compliance) depending on the status of monitored ambient air quality data with the AAQS.

Table 4.2-1 provides the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) and summarizes air quality from 2019-2021 collected at the nearest representative monitoring stations to the DCPP site. Prior to 2019, ozone concentrations in the area have exceeded the federal and state 8-hour ozone standards, and recent data shows that PM10 concentrations continue to exceed the state 24-hour and annual standards.

Table 4.2-2 shows the attainment status of criteria pollutants for San Luis Obispo County based on the National and California standards, and Table 4.2-3 shows the attainment status for Santa Barbara County.

**Table 4.2-1. Ambient Air Quality Standards and Background Data**

Pollutant	Averaging Time	Standards and Maximum Concentrations					Health Effects
		CAAQS	NAAQS	2019	2020	2021	
Ozone <sup>2</sup>	1 Hour (ppm)	0.090	--	0.064	0.067	0.060	Breathing difficulty, lung tissue damage
	8 Hour (ppm)	0.070	0.070	0.054	0.064	0.055	
Coarse Particulate Matter (PM10) <sup>2</sup>	24 Hour (µg/m <sup>3</sup> )	50	150	136	111	109	Increased respiratory disease, lung damage, cancer, premature death
	Annual (µg/m <sup>3</sup> )	20	--	24.9	27.5	28.6	
Fine Particulate Matter (PM2.5) <sup>2</sup>	24 Hour (µg/m <sup>3</sup> )	--	35	23.6	84.5	27	

**Table 4.2-1. Ambient Air Quality Standards and Background Data**

Pollutant	Averaging Time	Standards and Maximum Concentrations					Health Effects
		CAAQS	NAAQS	2019	2020	2021	
Carbon monoxide (CO) <sup>3</sup>	Annual (µg/m <sup>3</sup> )	12	12	7.00	9.46	7.30	Chest pain in heart patients, headaches, reduced mental alertness
	1 Hour (ppm)	20	35	3.465	1.33	0.75	
	8 Hour (ppm)	9	9	1.2	1.0	0.4	
Nitrogen dioxide (NO <sub>2</sub> ) <sup>1</sup>	1 Hour (ppm)	0.18	0.10	0.025	0.023	0.017	Lung irritation and damage
	Annual (ppm)	0.030	0.053	0.025	0.023	0.017	
Sulfur dioxide (SO <sub>2</sub> ) <sup>2</sup>	1 Hour (ppm)	0.25	0.075	0.002	0.002	0.004	Increased lung disease, breathing problems for asthmatics
	24 Hour (ppm)	0.04	--	0.0007	0.0003	0.0006	

Source: CARB, 2016; USEPA, 2021.

Acronyms: ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; "--" = no standard or no data or insufficient annual coverage currently available.

<sup>1</sup> Data from Nipomo Regional Park monitoring station: Ozone, NO<sub>2</sub>.

<sup>2</sup> Data from Nipomo Mesa Station: PM10, PM2.5, SO<sub>2</sub>.

<sup>3</sup> Data from Santa Maria-South Broadway monitoring station: CO is not monitored in San Luis Obispo County. The nearest representative station that monitors ambient CO concentrations is the Santa Maria-South Broadway station in Santa Barbara County.

**Table 4.2-2. Attainment Status for San Luis Obispo County**

Pollutant	Attainment Status	
	State	Federal
Ozone, 1-hour and 8-hour averages	Non-Attainment	Non-Attainment (Eastern San Luis Obispo County) Attainment (Western San Luis Obispo County)
PM10, 24-hour and annual averages	Non-Attainment	Unclassified/Attainment
PM2.5	Attainment	Unclassified/Attainment
SO <sub>2</sub>	Attainment	Unclassified
NO <sub>2</sub>	Attainment	Unclassified
CO	Attainment	Unclassified
Lead	Attainment	Unclassified

Source: SLOCAPCD, 2019.

Acronyms: PM10 = coarse particulate matter, PM2.5 = fine particulate matter, SO<sub>2</sub> = sulfur dioxide, NO<sub>2</sub> = nitrogen dioxide, CO = carbon monoxide.

**Table 4.2-3. Attainment Status for Santa Barbara County**

Pollutant	Attainment Status	
	State	Federal
Ozone, 1-hour and 8-hour averages	Non-Attainment	Unclassified/Attainment
PM10, 24-hour and annual averages	Non-Attainment	Unclassified
PM2.5	Unclassified	Unclassified/Attainment
SO <sub>2</sub>	Attainment	Unclassified/Attainment
NO <sub>2</sub>	Attainment	Unclassified/Attainment
CO	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment

Source: SBCAPCD, 2021.

Acronyms: PM10 = course particulate matter, PM2.5 = fine particulate matter, SO<sub>2</sub> = sulfur dioxide, NO<sub>2</sub> = nitrogen dioxide, CO = carbon monoxide.

The general and adverse health effects caused by the regulated criteria pollutants appear in Table 4.2-1. Overall exposure to criteria air pollutant levels and levels of TACs contribute to the health burden of the regional population. While the NAAQS and CAAQS are health-protective standards set to minimize both human health effects and other environmental effects of air pollutants, these standards do not preclude individuals from experiencing health impacts from criteria pollutant exposure. The health impacts also contribute to the region’s baseline rates of mortality and illnesses, and individual responses are highly variable depending on individual circumstances.

#### **Toxic Air Contaminants**

TACs are compounds known or suspected to cause adverse long-term (cancer and chronic) or short-term (acute) health effects. The California Health and Safety Code defines a TAC as an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard many times greater than another TAC. There are almost 200 compounds designated in California regulations as TACs (Cal. Code. Regs., tit. 17, §§93000-93001). The list of TACs includes substances defined in federal statute as hazardous air pollutants pursuant to Section 112(b) of the federal Clean Air Act (42 U.S.C. §7412(b)). Some of the TACs are groups of compounds containing many individual substances (e.g., copper compounds, polycyclic aromatic compounds, radionuclides). TACs are emitted from mobile sources, including diesel engines; and industrial processes and stationary sources, such as dry cleaners, gasoline stations, paint and solvent operations, and stationary fossil fuel-burning combustion. Ambient TACs concentrations tend to be highest in urbanized and industrial areas near major TACs emissions sources or near major mobile TACs emissions sources, such as heavily traveled highways or major airports/seaports. Information on the regulation of emissions of radionuclides to the air is found in Section 4.10, *Hazardous and Radiological Materials*.

### **Valley Fever**

Coccidioidomycosis, often referred to as San Joaquin Valley Fever or Valley Fever, is a fungal infection that varies with the season and most commonly affects people who live in hot dry areas with alkaline soil. This disease affects both humans and animals and is caused by inhalation of arthroconidia (spores) of the fungus *Coccidioides immitis*. *Coccidioides immitis* spores are found in the top few inches of soil, and the existence of the fungus in most soil areas is temporary. The cocci fungus lives as a saprophyte (an organism, especially a fungus or bacterium, which grows on and derives its nourishment from dead or decaying organic matter) in dry, alkaline soil. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil until they are stirred up by wind, vehicles, excavation, or other ground-disturbing activities and become airborne. Agricultural workers, construction workers, and other people who are outdoors and are exposed to wind, dust, and disturbed topsoil are at an elevated risk of contracting Valley Fever (California Department of Public Health [CDPH], 2019).

African Americans, Asians, women in the third trimester of pregnancy, and persons whose immunity is compromised are most likely to develop the most severe form of the disease (CDPH, 2019).

DCCP is located in the Central Coast region of California, which is an area of California where relatively high numbers of cases of Valley Fever are reported. Data from 2013 to 2019 show that the average San Luis Obispo County incidence rate of infection during these years was about 74 per 100,000. Santa Barbara County, where the SMVR sites are located, has an incident rate during these years of about 15 per 100,000 (CDPH, 2019).

### **Sensitive Receptors**

The impact of air pollutant emissions on sensitive members of the general population (e.g., infants, children, pregnant women, elderly, and acutely and chronically ill) is a special concern. Per the CARB Air Quality and Land Use Handbook, sensitive receptor locations include schools, daycare centers, nursing homes, hospitals, parks and playgrounds, and residences. Recommendations from CARB advise land use agencies to provide a buffer distance to separate sensitive receptors by at least 500 feet from freeways or high-traffic roads and by at least 1,000 feet from railyards (CARB, 2005).

Residential areas are sensitive to air pollution because individuals normally spend much of their time at their dwellings. Industrial and commercial areas are considered the least sensitive to air pollution because exposure periods are relatively shorter or intermittent.

The DCCP site is generally surrounded by open space, PG&E owned or leased land, conservation space, federally owned parcels, and the Pacific Ocean (see Figure 2-7, Land Ownership). There are no residences or other occupied properties located within approximately 6.5 miles of the site. Recreational uses, including parks, playgrounds, and beaches, are located nearby, with the closest of these being Coon Creek Beach, approximately 3.7 miles from the site (Google Earth Pro, 2022b).

The off-site truck and rail waste haul routes are in closer proximity to sensitive receptors, such as schools and residences, in the more densely populated areas along the transportation routes and near the PBR site. **The closest residences to the PBR rail site are approximately 148 feet (45**

meters) from the site boundary, and the closest school is Judkins Middle School approximately 246 feet (75 meters) from the site boundary. The SMVR-SB site is surrounded by industrial, agricultural, and undeveloped lands with no sensitive receptors within 1,000 feet (Google Earth Pro, 2022a).

### Existing Emissions Inventory

The predominant emission sources in San Luis Obispo County are mobile sources, including on-highway motor vehicles, railroad locomotives, and marine vessels. CARB compiles regionwide emission inventories with planning and forecast estimates for all groups of sources. The existing inventory shows that more than 75 percent of all nitrogen oxide (NO<sub>x</sub>) emissions in the County are from ships and commercial vessels, and more than 10 percent of NO<sub>x</sub> emissions in the County are from on-road motor vehicles. Dust from construction activity in the County accounts for more than 65 percent of all PM<sub>10</sub> (CARB, 2017a). Relatively minor stationary sources are in use at DCPP for supporting routine operation of the power plant. The daily emissions from electric utilities, dust from construction activity, off-road equipment used during construction, ships, all on-road motor vehicles, and trains in San Luis Obispo County are shown for inventory year 2017 in Table 4.2-4.

**Table 4.2-4. Daily Average Emissions for San Luis Obispo County (2017, tons per day)**

Source Category -Total	NO <sub>x</sub>	VOC	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SO <sub>x</sub>
San Luis Obispo County	21.83	3.99	1.85	0.5	29.82	0.36
<b>Source Category - Subtotals</b>						
Electric Utilities	0.06	-	-	-	0.12	-
Dust from Construction Activities	-	-	1.24	0.12	-	-
Off-Road Equipment <sup>1</sup>	0.89	1.18	0.06	0.05	14.74	0
Ships and Commercial Boats <sup>1</sup>	16.52	0.95	0.15	0.14	1.17	0.33
On-Road Motor Vehicles <sup>1</sup>	4.16	1.82	0.4	0.19	13.76	0.03
Trains	0.2	0.01	-	-	0.03	-

Source: CARB, 2017a.

Acronyms: NO<sub>x</sub> = nitrogen oxides, VOC = volatile organic compounds, PM<sub>10</sub> = coarse particulate matter, PM<sub>2.5</sub> = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.

<sup>1</sup> Includes all construction off-road equipment, all vessels, and all on-road motor vehicles.

Emission sources in Santa Barbara County are dominated by mobile sources, including on-highway motor vehicles, railroad locomotives, and marine vessels. The existing inventory shows that nearly 85 percent of all NO<sub>x</sub> emissions in the County are from ships and commercial boats, and more than 10 percent of NO<sub>x</sub> emissions in the County are from on-road motor vehicles. Dust from construction activity in the County accounts for more than 35 percent of all PM<sub>10</sub> (CARB, 2017b). The daily emissions from electric utilities, dust from construction activity, off-road equipment used during construction, ships, all on-road motor vehicles, and trains in Santa Barbara County are shown for inventory year 2017 in Table 4.2-5.

**Table 4.2-5. Daily Average Emissions for Santa Barbara County (2017, tons per day)**

Source Category - Total	NO <sub>x</sub>	VOC	PM10	PM2.5	CO	SO <sub>x</sub>
Santa Barbara County	61.65	8.25	6.58	1.37	51.57	1.07
<b>Source Category - Subtotals</b>						
Electric Utilities	0.04	0.02	-	-	0.15	-
Dust from Construction Activities	-	-	5.3	0.53	-	-
Off-Road Equipment <sup>1</sup>	1.29	1.61	0.8	0.07	20.67	-
Ships and Commercial Boats <sup>1</sup>	52.31	3.04	0.43	0.40	3.51	1.03
On-Road Motor Vehicles <sup>1</sup>	7.36	3.56	0.75	0.36	27.14	0.04
Trains	0.65	0.02	0.02	0.01	0.1	-

Source: CARB, 2017b.

Acronyms: NO<sub>x</sub>= nitrogen oxides, VOC = volatile organic compounds, PM10 = course particulate matter, PM2.5 = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.

<sup>1</sup> Includes all construction off-road equipment, all vessels, and all on-road motor vehicles.

### 4.2.2 Regulatory Setting

Sources of air pollutant emissions in the region are regulated by the USEPA, CARB, the SLOCAPCD, and the SBCAPCD. The SLOCAPCD has published California Environmental Quality Act (CEQA) Guidelines and significance criteria for air quality impact analysis. The SBCAPCD has also published guidelines for air quality impact analysis. Each local air district adopts a set of rules and regulations pertaining to air quality.

Appendix C includes a summary of relevant federal and state laws, regulations, and policies that pertain to air quality. Local laws, regulations, and policies related to air quality are discussed below. For purposes of this impact analysis which spans multiple air districts, volatile organic compounds (VOC), reactive organic compounds (ROC), and reactive organic gases (ROG) are synonymous with each other and can be considered interchangeable.

#### San Luis Obispo County Air Pollution Control District

The SLOCAPCD is responsible for planning, implementing, and enforcing federal and state ambient air quality standards in San Luis Obispo County and for permitting and controlling stationary sources and TAC pollutants. The SLOCAPCD’s Rules regulate sources of air pollution in San Luis Obispo County. The SLOCAPCD rules that may be applicable to the Proposed Project, specifically the DCCP and PBR sites, are identified below (SLOCAPCD, 2020).

- **SLOCAPCD Rule 401 – Visible Emissions.** This rule prohibits discharge of air contaminants or other material that are as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or that obscure an observer’s view.
- **SLOCAPCD Rule 402 – Nuisance.** This rule prohibits discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any such persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property.

**Commented [AM1]:** Note: For reference, SLO County APCD recently posted legacy 2017 and 2021/2022 and current 2023 administrative update handbook versions to the following webpage. APCD recommends these the DEIR reference these documents in appropriate locations in the EIR. <https://www.slocleanair.org/rules-regulations/land-use-ceqa/ceqahandbook.php>

- **SLOCAPCD Rule 403 – Particulate Matter Emission Standards.** This rule prohibits discharge of particulate matter in excess of rates specified in Section 403. B.
- **SLOCAPCD Regulation II – Permits.** Rules outline general permits required to construct, operate, and sell or rent stationary sources of air contaminants.
- **Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) – SLOCAPCD** implements the asbestos NESHAP regulation, which includes surveys, notification requirements, forms, and fees (SLOCAPCD, 2023).

#### County of San Luis Obispo

The County of San Luis Obispo has also adopted a General Plan that includes air quality related goals and policies, with particular interest around ozone concentrations (San Luis Obispo, 2010). The strategies aim to provide an overall reduction in vehicle miles traveled and support the County's efforts in attaining state and federal ambient air quality standards.

The policies for air quality that are relevant to the activities of the Proposed Project are as follows:

- **Policy AQ 3.7 Reduce vehicle idling.** Encourage the reduction of heavy-vehicle idling throughout the county, particularly near schools, hospitals, senior care facilities, and areas prone to concentrations of people, including residential areas.
- **Policy AQ 3.8 Reduce dust emissions.** Reduce PM10 and PM2.5 emissions from unpaved and paved County roads to the maximum extent feasible.

#### Santa Barbara County Air Pollution Control District

The SBCAPCD is responsible for planning, implementing, and enforcing federal and state ambient air quality standards in Santa Barbara County and for permitting and controlling stationary sources and TAC pollutants. The SBCAPCD's Rules regulate sources of air pollution in Santa Barbara County. The SBCAPCD rules that may be applicable to the Proposed Project, specifically the SMVR-SB site, are identified below. As described in Section 1.3.3.2, *Surface Transportation Board*, railroads are under the jurisdiction of the federal government such that local agencies are preempted from exercising jurisdiction.

- **SBCAPCD Rule 302 – Visible Emissions.** This rule prohibits discharge of air contaminants or other material that are as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or that obscure an observer's view.
- **SBCAPCD Rule 303 – Nuisance.** This rule prohibits discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any such persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property.

### 4.2.3 Significance Criteria

Per State CEQA Guidelines Appendix G, the Proposed Project would be found to cause a significant environmental impact if it would:

- Conflict with or obstruct implementation of applicable air quality plans.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

#### San Luis Obispo County Air Pollution Control District

The SLOCAPCD recommends using the CEQA process to mitigate emissions from any short-term construction activities that exceed quantitative thresholds. Mitigation defined in the SLOCAPCD CEQA Air Quality Handbook (SLOCAPCD, 2012) should be applied if a project causes potentially significant impacts in order to avoid conflicting with implementation of the applicable air quality plan.

For ozone precursors (Nitrogen Oxides [NO<sub>x</sub>] and Volatile Organic Compounds [VOC]) during construction:

- Daily: Construction projects exceeding 137 lb/day (NO<sub>x</sub> and VOC combined) require Standard Mitigation Measures.
- Quarterly Tier 1: Construction projects exceeding 2.5 ton/quarter (NO<sub>x</sub> and VOC combined) require Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. Off-site mitigation may be required if feasible mitigation measures are not implemented, or if no mitigation measures are feasible for a project.
- Quarterly Tier 2: Construction projects exceeding 6.3 ton/quarter (NO<sub>x</sub> and VOC combined), require Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and off-site mitigation.

For diesel particulate matter (DPM) during construction:

- Quarterly Tier 1: Construction projects exceeding 0.13 ton/quarter (DPM) require Standard Mitigation Measures, BACT for construction equipment.
- Quarterly Tier 2: Construction projects exceeding 0.32 ton/quarter (DPM) require Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

For fugitive particulate matter during construction, dust emissions exceeding 2.5 ton/quarter require Fugitive PM<sub>10</sub> Mitigation Measures and may require the implementation of a CAMP.

The SLOCAPCD recommends the following thresholds of significance for long-term operational emissions (SLOCAPCD, 2012).

- For ozone precursors (NO<sub>x</sub> and VOC combined): 25 lb/day or 25 ton/year.
- For diesel particulate matter (DPM): 1.25 lb/day.



- For fugitive particulate matter (PM10) dust: 25 lb/day or 25 ton/year.
- For CO: 550 lb/day.

For activities at the DCPD and PBR sites, the operational threshold for DPM of 1.25 lb/day will be used for the localized single-site emissions. Since DPM is a localized concern, this operational threshold will be used for these localized emissions. Projects that emit more than 1.25 lb/day of DPM should implement on-site diesel-exhaust control measures, and if sensitive receptors are within 1,000 feet, the SLOCAPCD may also require a HRA (SLOCAPCD, 2012).

#### **Santa Barbara County Air Pollution Control District**

Currently, neither the County of Santa Barbara nor the SBCAPCD have daily or quarterly quantitative emission thresholds established for short-term construction emissions. Emissions from construction activities are normally short-term and subject to standardized emission control strategies. For the Proposed Project, however, SBCAPCD staff recommended during early agency consultation that the proposed decommissioning activities be compared to thresholds for longer-term operation due to the duration of decommissioning activities occurring over many years. Quantitative thresholds for operation established by the County of Santa Barbara are more stringent than those recommended by the SBCAPCD.

Although quantitative thresholds of significance are not currently in place for short-term or construction emissions, the SBCAPCD recommends that construction projects that would emit more than 25 tons per year of any pollutant to obtain emission offsets under SBCAPCD Rule 804 (SBCAPCD, 2017). APCD Rule 202(D)(16), related to permits and exemptions, requires that:

*Notwithstanding any exemption in these rules and regulations, if the combined emissions from all construction equipment used to construct a stationary source which requires an Authority to Construct have a projected actual in excess of 25 tons of any pollutant, except carbon monoxide, in a 12 month period, the owner of the stationary source shall provide offsets as required under the provisions of Rule 804, Emission Offsets, and shall demonstrate that no ambient air quality standard would be violated.*

The SBCAPCD Board adopted significance thresholds for the operation of a project as not having a significant impact on air quality if the project will:

- Emit (from all project sources, both stationary and mobile) less than the daily trigger for offsets or Air Quality Impact Analysis set in the APCD New Source Review Rule, for any pollutant (i.e., 240 lb/day for Reactive Organic Compounds (ROC) or NO<sub>x</sub>; and 80 lb/day for PM10. There is no daily operational threshold for CO; it is an attainment pollutant).
- Emit less than 25 lb/day NO<sub>x</sub> or ROC from motor vehicle trips only.
- Not cause or contribute to a violation of any CAAQS or NAAQS (except ozone).
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board (10 excess cancer cases in a million) for cancer risk and not exceed a Hazard Index of 1.0 for non-cancer risk.
- Be consistent with the latest adopted federal and state air quality plans for Santa Barbara County (SBCAPCD, 2017).

### County of Santa Barbara

The County of Santa Barbara recommends finding that a project will not have a significant air quality effect on the environment, if operation of the project will:

- Emit (from all project sources, mobile and stationary) less than the daily triggers of: 55 lb/day for NO<sub>x</sub> or ROC, and 80 lb/day for PM10 (Santa Barbara, 2021). Because PM10 includes PM2.5, emissions of PM2.5 are presumed to be subject to the PM10 threshold;
- Emit less than 25 lb/day NO<sub>x</sub> or ROC from motor vehicle trips only;
- Not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not allow land uses that create objectionable odors or does not expose sensitive receptors to objectionable odors;
- Not exceed the APCD health risk public notification thresholds adopted by the APCD Board for air toxics; and
- Be consistent with the adopted federal and state Air Quality Plans.

#### 4.2.4 Environmental Impact Analysis and Mitigation

**Impact AQ-1: Conflict with or obstruct implementation of an applicable air quality plan (Class III: Less than Significant).**

This discussion addresses whether the Proposed Project’s emissions sources, which are primarily off-road equipment, on-road vehicles, rail locomotives, and marine vessels would conform with the air quality management plans adopted by SLOCAPCD or other local air districts. All decommissioning activities would comply with the applicable rules, regulations, and programs.

#### Phase 1

##### *DCPP Project Site*

For the area including the DCPP site and its surroundings, the SLOCAPCD and CARB ensure implementation of California’s air quality management plans, collectively known as the State Implementation Plan. State-level air quality planning strategies to attain CAAQS are implemented through rules, regulations, and programs adopted by SLOCAPCD and CARB to control ozone precursors, PM10, and PM2.5.

All decommissioning activities would comply with all applicable air pollution control rules and regulations, including SLOCAPCD’s Rule 401 and 402, which prevent nuisance and regulate fugitive dust emissions. The Proposed Project activities would also conform to the federal and state Clean Air Act requirements by complying with the rules and regulations contained in the State Implementation Plan, which carries forward the necessary programs from the local air quality plan.

A project could be inconsistent with the applicable air quality management plan or attainment plan if it causes population and/or employment growth or growth in vehicle-miles traveled in excess of the growth forecasts included in the attainment plan.

The Proposed Project as a decommissioning activity would not contribute to population growth, or an increase in employees at the DCPP site. The overall effects of the Proposed Project would be to deploy a temporary workforce, involving short-term employment. For all locations of proposed activities (including the railyards), the total full-time employees used for Phase 1 activities of decommissioning would be much lower than current full-time employees commuting to and from the DCPP. Associated vehicle trips and miles traveled by the workforce would decrease overall from the baseline of existing conditions. Currently DCPP employs approximately 1,157, but generally employs up to 1,400 workers (see Section 2.2.3.1), and during decommissioning it's estimated there would be around 870 workers daily in Phase 1, and around 160 workers daily by Phase 2. Accordingly, the Phase 1 activities of decommissioning would not conflict with or obstruct implementation of the applicable air quality plan, and this impact would not be significant (Class III).

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### Railyards

The ability of Phase 1 activities at the railyards to conform with applicable air quality management plans is included in the overall discussion for Phase 1, above.

### Phase 2

Activities in Phase 2 include contaminant remediation, demolition of remaining utilities and structures, soil grading and landscaping, long-term stormwater management, and closure of the Intake Structure. Since Discharge Structure removal and restoration activities span both Phases 1 and 2, the emissions were considered in Phase 1 to provide a conservative estimate. Similar to Phase 1 activities, Phase 2 activities would comply with all applicable air pollution control rules and regulations and would involve a much lower level of employment and a decrease in overall vehicle trips and miles traveled by the workforce from the baseline of existing conditions. The Phase 2 activities of decommissioning and long-term operations would not conflict with or obstruct implementation of the applicable air quality plan, and this impact would not be significant (Class III).

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### Post-Decommissioning Operations

**New Facility Operations.** Following Phase 2, activities at the DCPP site associated with the Proposed Project include operation of the new GTCC Storage Facility, Security Building, indoor Firing Range, and Storage Buildings. PG&E would continue to comply with all applicable air pollution control rules and regulations and would involve a much lower level of employment and a decrease in overall vehicle trips and miles traveled by the workforce from the baseline of existing conditions. Long-term operations of the new facilities would not conflict with or obstruct implementation of the applicable air quality plan. This impact would not be significant (Class III).

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**Future Actions.** Marina improvement and operations include parking lot construction and a boat hoist to allow for recreational activities at the Marina. The recreational use of the site would involve lower levels of employment, and total trips to and from the site from baseline conditions.

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The Marina activities would not conflict with or obstruct implementation of the applicable air quality plan. **This impact would not be significant** (Class III).

**Mitigation Measures for Impact AQ-1. No mitigation measures are required.**

**Impact AQ-2: Result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is in nonattainment (Class II: Less than Significant with Mitigation).**

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This section quantifies the criteria air pollutant emissions for each phase and site of the Proposed Project to compare with the significance thresholds for protecting regional air quality planning efforts. The Proposed Project would create criteria air pollutant emissions during decommissioning and dismantlement activities. The sources directly related to the Proposed Project include off-road equipment, on-road vehicles, rail locomotives, and marine vessels used in the process of dismantling, decontaminating, and removing the DCPP facility components after final shutdown.

Emissions estimates are based on use of regulatory agency-approved emissions factors and calculation methods. PG&E used the most up-to-date available emissions estimating methodologies at the time of PG&E's primary submittals to the County (during 2021). The emissions factor sources used include:

- CalEEMod version 2016.3.2 – California's emission estimating software for based on emissions factors from CARB's OFFROAD2011 and EMFAC2014 databases (PG&E, 2021c).
- EMFAC2017 –CARB's USEPA-approved database of on-road vehicle emissions and on-highway transportation activity (PG&E, 2021c).
- USEPA Compilation of Air Emissions Factors (AP-42) – Provides methods for fugitive dust emissions factor determinations for various construction/ demolition and mobile source dust emissions sources, including material loading and handling, grading (PG&E, 2022a).
- 2019 Port of Long Beach Air Emissions Inventory – Marine vessel emissions sources (PG&E, 2022a).
- USEPA 2009 Emissions Factors for Locomotives (EPA-420-F-09-025) – Rail hauling emissions (PG&E, 2021c).
- USEPA 2018 Emission Factors for Greenhouse Gas Inventories (PG&E, 2021c).

### Phase 1

#### **DCPP Project Site**

The DCPP Project site is in the western and coastal portion of San Luis Obispo County, which is designated as non-attainment for state-level ozone and PM10 standards. Emissions during Phase 1 would include criteria air pollutants, including ozone and PM10 precursor pollutants, that could exceed quantitative thresholds of significance and would represent a cumulatively considerable net increase of a nonattainment pollutant. Emissions exceeding the quantitative thresholds could contribute to the significant cumulative impact of existing or projected violations of the ambient air quality standards.

Decommissioning activities would generate emissions at the DCPD site and off site along the roadways traveled by Project-related traffic. Project emissions would be caused by exhaust from vehicles and equipment (this includes ozone precursors VOC or ROG and NO<sub>x</sub>, CO, and particulate matter [PM<sub>10</sub> and PM<sub>2.5</sub>]) and fugitive dust/particulate matter from ground-disturbing activities and travel on unpaved surfaces and on paved roads. Waste, rock, and gravel transportation via rail and barge would also cause criteria air pollutant emissions including VOCs, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> in San Luis Obispo County and in the jurisdictions of other air districts far removed from the DCPD site.

To minimize fugitive dust from unpaved surfaces and emissions from other ground-disturbing activities, all decommissioning activities would be required to comply with local air district rules regarding dust control (including SLOCAPCD Rule 401 and 402). Diesel and gasoline-powered equipment would include either portable or mobile sources (off-road equipment). These sources are subject to the Statewide Portable Equipment Registration Program and emissions performance standards for in-use off-road equipment fleets (see EIR Appendix C). On-road motor vehicle emissions would occur primarily off-site with sources including heavy-duty trucks to deliver equipment, water, and other materials, heavy-duty trucks to haul away demolished material and soil, and light-duty vehicles carrying crews and medium-duty deliveries. These on-road motor vehicle emissions would not be localized at the DCPD site but would contribute to a net increase of emissions within the South Central Coast Air Basin.

Decommissioning activities would occur over two main phases. Phase 1 would occur following the shutdown of DCPD Unit 1 in November 2024 and last approximately eight years and may be phased. The targeted schedule for Phase 1 construction spans 2024 to 2031. Phase 2 is targeted to commence after 2031.

Table 4.2-6 summarizes the maximum daily emissions of anticipated decommissioning activity at the DCPD site including DCPD harbor tugboats, ocean tugboats traveling to the offshore boundary of San Luis Obispo County including tugboats for gravel from the Port of Long Beach and quarry rocks from Santa Catalina Island, and truck and rail waste transportation in the County. Table 4.2-7 summarizes the quarterly rates of emissions.

**Table 4.2-6. Phase 1, DCPD Site, Maximum Daily Unmitigated Emissions (pounds per day)**

Phase	NO <sub>x</sub> + ROG	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SO <sub>x</sub>
Phase 1, DCPD Site	370	28.50	13.61	463.37	82.21
SLOCAPCD Threshold	137	-	-	-	-
Threshold Exceeded? (Yes/No)	Yes	N/A	N/A	N/A	N/A

Source: EIR Appendix D, Phase 1 AQ/GHG Summary, Table 1.1 and Table 1.2.

Acronyms: NO<sub>x</sub>= nitrogen oxides, ROG = reactive organic gasses, PM<sub>10</sub> = course particulate matter, PM<sub>2.5</sub> = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub>= sulfur oxides.

**Table 4.2-7. Phase 1, DCPP Site, Maximum Quarterly Unmitigated Emissions (tons per quarter)**

Phase	NO <sub>x</sub> + ROG	Exhaust PM10 or DPM	Fugitive PM10
Phase 1, DCPP Site	11.9	0.09	0.52
SLOCAPCD Threshold	2.5	0.13	2.5
Threshold Exceeded? (Yes/No)	Yes	No	No

Source: EIR Appendix D, Phase 1 AQ/GHG Summary, Table 1.1, Table 1.2.

Acronyms: NO<sub>x</sub>= nitrogen oxides, ROG = reactive organic gasses, PM10 = course particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.

Emissions quantified in Table 4.2-6 and Table 4.2-7 reflect the Proposed Project, which includes commitments to minimize fugitive dust, use of Tier 4 equipment, and compliance with SLOCAPCD requirements (see Table 2-12). For emissions exceeding the SLOCAPCD thresholds, mitigation measures must be identified to minimize or avoid adverse impacts of the emissions, as described under *Overall Project Air Pollutant Emissions*. Phase 1 emissions of ozone precursors (NO<sub>x</sub> and VOC) would exceed the SLOCAPCD daily and quarterly thresholds. Phase 1 emissions of PM10 would be below the thresholds. The Proposed Project emissions increases of ozone precursors during Phase 1 would result in a potentially significant impact on SLOCAPCD regional emissions, and the recommended mitigation is described below.

**Railyards**

**Pismo Beach Railyard.** PBR is a back-up or contingency site that could potentially be used for the transfer of only non-radioactive and non-hazardous decommissioning waste from trucks to rail cars (see Table 2-9). Emissions are shown for Phase 1 activities and included in the discussion of DCPP site impacts, above. Since Phase 2 includes final site restoration for DCPP, and waste would not be transported by rail in Phase 2, the PBR would not be used during Phase 2. Table 4.2-8 and Table 4.2-9 show the portion of Proposed Project activities at PBR would not cause a significant impact on SLOCAPCD regional emissions (Class III).

**Table 4.2-8. PBR Site, Maximum Daily Unmitigated Emissions (pounds per day)**

Phase	NO <sub>x</sub> + ROG	PM10	PM2.5	CO	SO <sub>x</sub>
Phase 1, PBR Site	29.1	0.9	0.6	65.2	0.1
SLOCAPCD Threshold	137	-	-	-	-
Threshold Exceeded? (Yes/No)	No	N/A	N/A	N/A	N/A

Source: PG&E, 2021c – Table 3.5.

Acronyms: NO<sub>x</sub>= nitrogen oxides, ROG = reactive organic gasses, PM10 = course particulate matter, PM2.5 = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.

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**Table 4.2-9. PBR Site, Maximum Quarterly Unmitigated Emissions (tons per quarter)**

Phase	NO <sub>x</sub> + ROG	Exhaust PM10 or DPM	Fugitive PM10
Phase 1, PBR Site	0.9	0.02	0.01
SLOCAPCD Threshold	2.5	0.13	2.5
Threshold Exceeded? (Yes/No)	No	No	No

Source: PG&E, 2021c – Table 3.6.

Acronyms: NO<sub>x</sub> = nitrogen oxides, ROG = reactive organic gasses, PM10 = course particulate matter, DPM = Diesel Particulate Matter.

**SMVR-SB.** Table 4.2-10 shows the criteria air pollutant emissions for Proposed Project activities at SMVR-SB. Phase 1 emissions at the SMVR-SB site would not exceed SBCAPCD thresholds and would not cause a significant impact on regional emissions in Santa Barbara County (Class III).

**Table 4.2-10. SMVR-SB Site, Maximum Daily Unmitigated Emissions (pounds per day)**

Phase	NO <sub>x</sub>	VOC	PM10	PM2.5	CO	SO <sub>x</sub>
Phase 1, SMVR-SB Site	6.3	0.8	0.2	0.2	24.3	0.1
SBCAPCD Threshold	25	25	80	80	-	-
Threshold Exceeded? (Yes/No)	No	No	No	No	N/A	N/A

Source: EIR Appendix D, Phase 1 AQ/GHG Summary, Table 4.2.

Acronyms: NO<sub>x</sub> = nitrogen oxides, VOC = volatile organic compounds, PM10 = course particulate matter, PM2.5 = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.

**Waste and Fill Transport Emissions in Other Air Districts**

Emissions due to waste transportation from DCPD would occur outside of SLOCAPCD and SBCAPCD. The truck and rail transportation in Phase 1 would require use of long-haul trucks originating from DCPD then traveling onto regional highways and railroad locomotives using the PBR or SMVR railyards as starting points for travel to disposal sites.

Waste transport emissions in other air districts would be minor when considered in the context of the baseline transportation-related emissions that occur on California’s road and rail networks. For consistency with impact classifications in the SLOCAPCD and SBCAPCD jurisdictions, the threshold of 25 lbs/day for ozone precursors (NO<sub>x</sub> and VOC combined) from motor vehicle trips, which equates to an annual rate of 5 tons per year, would be relevant (SBAPCD, 2017; SLOCAPCD, 2012).

The peak annual rates of emissions from waste transport by truck and rail through each of the other air districts that are far removed from the DCPD site are summarized below in Table 4.2-11. Based on the limited annual quantities of truck and rail emissions, the Proposed Project would be unlikely to adversely impact regional emissions in other air districts that are far removed from the DCPD site (Class III).

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**Table 4.2-11. Worst Case Truck and Rail Unmitigated Emissions in Other Air Districts (tons per year)**

Air District	NO <sub>x</sub> + VOC	PM10	PM2.5	CO	SO <sub>x</sub>
Ventura County Air Pollution Control District (VCAPCD)	0.035	0.001	0.001	0.012	< 0.001
South Coast Air Quality Management District (SCAQMD)	0.146	0.005	0.003	0.034	0.001
San Joaquin Valley Air Pollution Control District (SJVAPCD)	0.055	0.003	0.001	0.008	< 0.001
Mojave Desert Air Quality Management District (MDAQMD)	0.197	0.005	0.004	0.058	0.001
Motor Vehicle Trips Emissions Threshold	5	---	---	---	---
<b>Threshold Exceeded? (Yes/No)</b>	<b>No</b>	N/A	N/A	N/A	N/A

Source: EIR Appendix D, Phase 1 AQ/GHG Summary, Table 1.5.  
 Acronyms: NO<sub>x</sub> = nitrogen oxides, VOC = volatile organic compounds, PM10 = course particulate matter, PM2.5 = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.

The peak annual rates of emissions from the transport of waste, gravel, and quarry rock by harbor craft and barges piloted by ocean tugboats beyond the jurisdiction of SLOCAPCD and through federal waters offshore to Oregon and to the Port of Long Beach and Santa Catalina Island are summarized for informational purposes in Table 4.2-12. The emissions caused by use of ocean tugboats beyond the offshore boundary of San Luis Obispo County and along the total length of the route to the Oregon disposal site or the fill sites in Long Beach and Santa Catalina Island would be outside of the Project area and are unlikely to substantially impact air quality conditions offshore.

**Table 4.2-12. Worst Case Harbor Craft and Barge Unmitigated Emissions Outside of the Project Area (tons per year)**

	NO <sub>x</sub>	VOC	PM10	PM2.5	CO	SO <sub>x</sub>
<b>Offshore Waste Transport</b>	<b>11.01</b>	<b>1.03</b>	<b>0.39</b>	<b>0.36</b>	<b>6.51</b>	<b>0.01</b>

Source: EIR Appendix D, Phase 1 AQ/GHG Summary, Table 6.1 (Barge for Remainder of Route SoCal + OR).  
 Acronyms: NO<sub>x</sub> = nitrogen oxides, VOC = volatile organic compounds, PM10 = course particulate matter, PM2.5 = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.  
 Note: Barge emissions represent emissions occurring through federal waters off the shore of California and Oregon. Barge emissions within the boundaries of SLO County are included in Phase 1 total emissions.

**Phase 2**

Table 4.2-13 summarizes the maximum daily emissions during Phase 2, and Table 4.2-14 summarizes the quarterly emissions during Phase 2. Emissions during Phase 2 would be lower than Phase 1 due to much less intensive activity and fewer transportation trips. All decommissioning emissions during Phase 2 would be below the applicable SLOCAPCD thresholds and less than significant (Class III). No Phase 2 activities are anticipated to occur at the railyards.

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**Table 4.2-13. Phase 2, DCPP Site, Maximum Daily Unmitigated Emissions (pounds per day)**

Phase	NO <sub>x</sub> + ROG	PM10	PM2.5	CO	SO <sub>x</sub>
Phase 2, DCPP Site	28.42	32.94	8.38	85.91	0.25
SLOCAPCD Threshold	137	-	-	-	-
Threshold Exceeded? (Yes/No)	No	N/A	N/A	N/A	N/A

Source: EIR Appendix D, Phase 2 AQ/GHG Summary, Emission Calculations for Phase 2 based on PG&E, 2021d.  
Acronyms: NO<sub>x</sub> = nitrogen oxides, ROG = reactive organic gasses, PM10 = course particulate matter, PM2.5 = fine particulate matter, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides.  
All barge trips were included in Phase 1 calculations to provide a conservative estimate, therefore barge trips are not included in Phase 2 reported emissions.

**Table 4.2-14. Phase 2, DCPP Site, Maximum Quarterly Unmitigated Emissions (tons per quarter)**

Phase	NO <sub>x</sub> + VOC	Exhaust PM10 or DPM	Fugitive PM10
Phase 2, DCPP Site	0.78	0.02	0.54
SLOCAPCD Threshold	2.5	0.13	2.5
Threshold Exceeded? (Yes/No)	No	No	No

Source: EIR Appendix D, Phase 2 AQ/GHG Summary, Emission Calculations for Phase 2 based on PG&E 2021d.  
Acronyms: NO<sub>x</sub> = nitrogen oxides, VOC = volatile organic compounds, PM10 = course particulate matter, DPM = Diesel Particulate Matter.

**Post-Decommissioning Operations**

**New Facility Operations.** Following Phase 2, operational activities at the DCPP site would include long-term management of the GTCC Waste Storage facility and operation of the Security Building, indoor Firing Range, and Storage Buildings. Emissions estimates appear in EIR Appendix D, Phase 2 AQ/GHG Summary. **These operational activities would not generate emissions at levels that could exceed the applicable SLOCAPCD thresholds, and this impact would be less than significant (Class III).**

**Future Actions.** Marina improvement and operations would result in emissions that have already been accounted for **in the Phase 2 to present a worst-case scenario (see Table 4.2-14). As noted above, impacts would be less than significant (Class III).**

**Overall Project Air Pollutant Emissions and Mitigation**

Overall effects of the Proposed Project include emissions from Phase 1 activities at the DCPP site that would result in criteria air pollutant emissions at rates exceeding the SLOCAPCD thresholds of significance for ozone precursors (NO<sub>x</sub> and VOC). Phase 2 activities would not exceed the SLOCAPCD thresholds of significance.

This analysis identifies mitigation measures to reduce the impact of ozone precursor emissions during Phase 1. MM AQ-1 requires PG&E to implement a Decommissioning Activity Management Plan (DAMP). MM AQ-2 requires PG&E to achieve off-site emissions reductions to offset the effects of any Project-related ozone precursor emissions over 2.5 tons/quarter (NO<sub>x</sub> and VOC combined) prior to initiating Phase 1. The quantity of off-site emission reductions necessary to mitigate Phase 1 would be equal to the amount of Project NO<sub>x</sub> and VOC combined emissions

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**Commented [AM2]:** With SLO County APCD's 2017 Clarification Memo (see: <https://www.slocleanair.org/rules-regulations/land-use-ceqa/ceqahandbook.php>) for our 2012 CEQA Handbook, APCD administratively determined that there was no longer a need for exceedances of our 2.5 tons of ROG + NO<sub>x</sub>/qrt construction threshold to be mitigated quantitatively with offsite measures. Instead, APCD's recommendation is that emission impacts between 2.5 and 6.3 tons of ROG + NO<sub>x</sub> be mitigated qualitatively using Standard and Best Available Control Technology mitigation measures listed in the APCD CEQA Handbook. Emissions exceeded APCD's 6.3 ton ROG + NO<sub>x</sub>/qrt threshold are still required to be mitigated with Standard, BACT, and quantitatively reduced to a level of insignificances with offsite mitigation. The reason behind this change is that local, state, and federal measures and regulations have significantly improved our County's air quality relative to when the threshold and quantitative mitigation requirement were established.

Based on the DEIR, it appears that the project applicant may be choosing to quantitatively mitigate any ROG + NO<sub>x</sub> emissions above the 2.5 ton/qrt threshold.

(estimated to range up to 11.9 tons/quarter (Table 4.2-7) minus the threshold level of 2.5 tons/quarter, or up to 9.4 tons/quarter of reductions, as established by the SLOCAPCD recommendations (SLOCAPCD, 2012).

Potential off-site emissions reductions strategies sponsored by PG&E through MM AQ-2 could include but would not be limited to the following (SLOCAPCD, 2012):

- Fund a program to buy and scrap older heavy-duty diesel vehicles or equipment,
- Replace/repower transit buses,
- Replace/repower heavy-duty diesel school vehicles (i.e., bus, passenger, or maintenance vehicles),
- Retrofit or repower heavy-duty construction equipment, or on-road vehicles,
- Repower or contribute to funding clean diesel locomotive main or auxiliary engines,
- Purchase VDECs for local school buses, transit buses or construction fleets,
- Install or contribute to funding alternative fueling infrastructure (i.e., fueling stations for clean natural gas, liquified petroleum gas, conductive and inductive electric vehicle charging, etc.),
- Fund expansion of existing transit services, and
- Replace/repower marine diesel engines.

The mitigation measures would facilitate reducing emissions of ozone precursors (NO<sub>x</sub> and VOC combined). However, the overall effectiveness of the mitigation measures would be uncertain. For example, PG&E may encounter difficulty in contracting a complete fleet of off-road equipment including specialized machines that achieves the Tier 4 emission standards for off-road compression-ignition engines, as specified in the California Code of Regulations, Title 13, Section 2423(b)(1). Additionally, an agreed-upon program to achieve off-site emissions reductions may not be able to achieve cost-effective reductions at a rate and schedule that fully offsets the project impact.

The emissions rates forecasted for the Proposed Project are based on PG&E's best available Project design information at the time of environmental review. Future design refinements, refinements in emissions estimating methodologies, and the ultimate equipment selection would influence the actual emissions rates. To ensure that actual emissions are reported and mitigated during the life of decommissioning activities, this analysis recommends Mitigation Measures (MMs) AQ-1 and AQ-2, which include a program of continuing agency oversight. The mitigation measure for off-site emission reduction projects (MM AQ-2) includes provisions to ensure that Proposed Project emissions would not occur at rates exceeding the applicable thresholds. This impact would be less than significant with mitigation for Phase 1 (Class II).

#### Mitigation Measures for Impact AQ-2.

**AQ-1 Implement a Decommissioning Activity Management Plan (DAMP).** Upon the filing of initial building, grading, or construction permit applications related to decommissioning for each phase of decommissioning activities, the Applicant or its designee shall develop a DAMP and submit it to the County Department of Planning and Building and San Luis Obispo County Air Pollution Control District (APCD) for review and approval. During each phase of decommissioning activities, the Applicant or its designee shall implement the DAMP by reporting to the County and APCD quarterly

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with a summary of Project emissions and actions to reduce any emissions exceeding quarterly thresholds. The DAMP shall include, but not be limited to, the following elements for the approved Project: a Dust Control Management Plan, a tabulation of on- and off-road equipment in use including off-road equipment diesel engine Tier levels, a schedule of on-highway truck trips demonstrating efforts to promote travel during non-peak hours, limits to the length of the construction workday if feasible to achieve lower daily emissions, and phasing of construction activities to achieve lower daily emissions. If occurring concurrently, the Orano System ISFSI modifications project shall be considered in the DAMP's construction phasing both for on- and off-road equipment usage and on-highway truck trips to limit the maximum daily emissions occurring at the DCPD site between both projects. The DAMP shall confirm that off-road diesel equipment engines meet or exceed Tier 4 exhaust emissions standards, unless the Applicant or its designee demonstrates that Tier 4 equipment is unavailable. If Tier 4 equipment is unavailable, engines using retrofit controls verified by CARB or USEPA may be used provided that the engine achieve or exceed emission reductions equivalent to that of a Tier 4 engine. Equipment shall have a sticker available for inspection indicating the Tier of engine.

**AQ-2 Provide Funding for Off-site Mitigation of Equipment Emissions.** Upon the filing of any construction permit applications related to decommissioning, for each phase of decommissioning activities, the Applicant or its designee shall develop and implement or fund a program for off-site mitigation of decommissioning equipment emissions. The program for off-site mitigation shall provide ozone precursor (NO<sub>x</sub> and VOC combined) and Diesel Particulate Matter (DPM) reductions equal to the quantity of Project emissions that exceed the APCD threshold (or a different quantity based on the APCD-approved decommissioning activity management plan). The program shall achieve emissions reductions from existing sources in the western portion of San Luis Obispo County, including surrounding communities. Decommissioning Project emissions do not include emissions from the Orano System ISFSI modifications project.

The APCD has a grant program with three funding categories. If this option is selected, the Applicant or its designee shall pay the APCD at the current rate at the time of payment. This fee will be a monetary value per ton of ozone precursor and DPM emitted over the threshold, plus a 15 percent administration fee for the APCD to secure and administer SLO County projects that secure reductions. After the Applicant submits this initial payment to APCD, the Applicant shall report to the County and APCD quarterly whether Project emissions exceed the quantity of emissions mitigated through the pre-payment. If the initial pre-payment ends up being insufficient after the first year, the Applicant shall make subsequent payments to ensure timely mitigation. The three funding categories include:

1. Marine vessel propulsion and auxiliary engine repowers that reduce emissions in surplus to the Commercial Harbor Craft Regulations (13 CCR 2299.5 and 17 CCR 93118.5);

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**Commented [AM3]:** APCD recommends that before the start of Phase 1, the DAMP process would update the EIR's project emissions estimate based on the current understanding of the sub-phases and the actual fleet and activities that will be performed. Over the first year, estimated emissions in excess of the APCD's quarterly threshold would need to be mitigated by applicant funded emission reduction projects or by paying APCD to secure the reductions through an APCD emission reduction grant program. Both options are discussed in AQ-2, however, for clarity, projects do not necessarily have to be funded prior to the start of the project. The intent of this mitigation is to implement emission reductions as close to the project timeline as possible, however there can be a lag with implementing reduction projects due to logistics, new equipment production schedules, etc. Relative to the last paragraph in this measure, APCD recommends that some flexibility in mitigation timing be acknowledged. Every year, depending on the accuracy of the previous year's pre-payment would be determined and a credit or debit would be applied to the next year's emissions impact estimate. With estimated excess impacts to be mitigated in the same fashion.

2. Replacement and/or repower of agricultural tractors and off-road construction equipment in surplus to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation (13 CCR 2449, et seq.); and
3. Electrification or repower of agricultural irrigation engines.

Prior to initiating any site disturbance, the Applicant or its designee shall demonstrate to the County Department of Planning and Building and APCD that the emission reduction project(s) are identified and funded prior to commencing decommissioning activities.

**Impact AQ-3: Expose sensitive receptors to substantial pollutant concentrations (Class II: Less than Significant with Mitigation).**

This section addresses whether the Proposed Project could adversely change ambient air quality concentrations of criteria air pollutants or TACs in a way that would substantially impact public health effects experienced by sensitive receptors.

**Phase 1**

***DCPP Project Site***

Overall decommissioning activities would result in locally increased concentrations of construction-related emissions, including criteria air pollutants, DPM, and other TACs, which would cause increased health risk and hazards near each site of emissions. This discussion separately addresses criteria air pollutants, TACs, Valley Fever, and naturally occurring asbestos.

Criteria Air Pollutants

The mass of increased criteria air pollutant emissions and emissions of ozone precursor (NO<sub>x</sub> and VOC combined) pollutants during the Proposed Project would lead to incremental changes in downwind concentrations of the criteria air pollutants directly and through secondary pollutant formation.<sup>13</sup> Emissions rates that are less than the mass-based significance thresholds would not be likely to cause localized exposure of sensitive receptors to ground-level concentrations of the criteria air pollutants in excess of the AAQS, which are set at health-protective levels.

Phase 1 emission sources would be spread across the various work areas within the DCPP site and transportation corridors. Implementing the Proposed Project as described would reduce the mass of criteria air pollutant emissions and minimize the potential adverse health effects of criteria pollutant concentrations that could be experienced by sensitive receptors. The analysis of criteria pollutant emissions under Impact AQ-2 finds that Phase 1 emissions of ozone precursors would exceed the SLOCAPCD thresholds. Implementing the recommended mitigation measures for Impact AQ-2 would require PG&E to implement a decommissioning activity management plan (MM AQ-1) and to achieve off-site emissions reductions (MM AQ-2) to offset the effects of ozone precursor emissions. With mitigation measures identified for Impact AQ-2, the

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<sup>13</sup> Secondary pollutants are not those emitted at the site, but rather are created by complex reactions over time and distance, like ozone and secondary PM2.5.

Phase 1 emissions of ozone precursors would be offset to ensure that they do not exceed the emissions thresholds, and sensitive receptors in the region would not be exposed to substantial pollutant concentrations of ozone. Health impacts from ground level ozone put people with asthma, children, older adults, and people who are active outdoors most at risk. These risks include coughing, sore throat, difficulty breathing deeply, inflammation of the airways, increasing asthma attacks, increased susceptibility to lung infection, and aggravation of lung diseases including asthma, chronic bronchitis, and emphysema (USEPA, 2022). The potential exposure of sensitive receptors to ozone concentrations and associated health impacts would be mitigated to less than significant for Phase 1 (Class II).

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#### Toxic Air Contaminants

The primary health risks to nearby sensitive receptors would be driven by carcinogenic DPM emissions from the equipment and vehicles used during decommissioning. Noncancer effects of DPM are normally less of a concern than cancer risks. The duration of decommissioning activities at any single site represents a potential to deliver a dose over a relatively short time period, which in this case spans eight years (2024-2031). The recommended exposure duration for estimating cancer risk to residents or off-site workers would be 30 years or 25 years, respectively. Cancer risks at nearby schools are evaluated based on a 9-year exposure, as specified by the Office of Environmental Health Hazard Assessment (OEHHA), Guidance Manual for the Preparation of Health Risk Assessments (OEHHA, 2015).

Uncertainty in the quantification of cancer risk occurs because of the varying exposure times of residents, workers, and people at schools. Additionally, risk varies with the changing levels of concentrations of pollutants brought about during different decommissioning activities that occur only during a fraction of an individual exposure period. Emissions and the potential for exposure would generally cease at the end of decommissioning. Risk quantification is also strongly influenced by the distances between sources and receptors. Concentrations of mobile source DPM emissions are greatly reduced by distance, such that a separation of 1,000 feet normally allows sensitive land uses to avoid high levels of DPM concentrations (CARB, 2005).

The majority of decommissioning activities and most of the Project-related emissions would occur at the DCPD site. For Phase 1 activities, emissions at the DCPD site would exceed the SLOCAPCD threshold of 1.25 lb/day of DPM (PG&E, 2022a – Table 1.2). PG&E and its consultants prepared a HRA to determine the adverse health effects of the overall DPM emissions within San Luis Obispo County and northern Santa Barbara County. An initial HRA supported the application (PG&E, 2021b; PG&E, 2021c); PG&E updated the HRA to focus on the SMVR sites after consultation with SBCAPCD staff (PG&E, 2022b).

The scope of PG&E's HRA is large-scale in that it considers grids of receptors throughout western San Luis Obispo County and northern Santa Barbara County and encompasses the following sources:

- DCPD on-site demolition,
- Barge maneuvering and travel,

- Trucks traveling out of state including routes to PBR as a contingency (PG&E, 2021b) and to each of the two SMVR sites (PG&E, 2022b),
- SMVR on-site construction and railcar operation, and
- Rail transport between each of the two SMVR sites and the UPRR main line connection.

By modeling the impacts of DPM emissions from onsite as well as off-site sources, including on-road vehicles and vehicles on the regional roadways, the HRA provides quantification of cancer risks and chronic health hazards for receptors throughout the region, including the most-impacted sensitive receptors nearest to the different locations of activities (PG&E, 2022b). The HRA presents maps of residential cancer risk for all modeled receptors (PG&E, 2022b), and the Judkins Middle School, that is across the street from PBR, was analyzed as the site of worst-case potential school exposure (PG&E, 2021c).

There would be little potential to expose sensitive receptors to substantial pollutant concentrations of DPM emitted from activities at the DCPD site due to the large distances separating the on-site activities from potential sensitive receptors (refer to Sensitive Receptors discussion in Section 4.2.1 for distances). For all coastal locations, onshore winds cause mixing and dispersion allowing dissipation of localized concentrations.

Table 4.2-15 summarizes the cancer risk results for activities at the DCPD site, including transportation and improvements at the PBR and SMVR-SB (Betteravia Industrial Park) sites.

**Table 4.2-15. DCPD Site and SMVR-SB Site (Betteravia Industrial Park) Cancer Risk Results**

Location	UTM, Easting (m)	UTM, Northing (m)	Cancer Risk (Chances in One Million)
Maximum Exposed Individual at a Residential (MEIR) location	704592.0	3894935.7	1.28
Maximum Exposed Individual at a Worker (MEIW) location	726936.2	3866810.8	0.62
Judkins Middle School, near PBR	715063.0	3891697.3	0.84
SLOCAPCD / SBCAPCD Threshold	---	---	10
Threshold Exceeded? (Yes/No)	---	---	No

Source: PG&E, 2022b – Table 4.

Acronyms: UTM – Universal Transverse Mercator coordinates.

For the residences or other sensitive receptors nearest to the DCPD site, the combination of on-site demolition, marine vessels, and truck travel results in an excess cancer risk of 1.28 chances in one million at the Maximum Exposed Individual at a Residential (MEIR) location in the community of Avila Beach (PG&E, 2022b). The maximally exposed off-site worker receptors near the SMVR-SB site would have 0.62 chances in one million, and school exposure at Judkins Middle School would have 0.84 chances in one million. Noncancer chronic health hazards for this first scenario would be less than applicable thresholds (PG&E, 2022b). These levels would not exceed any threshold of significance for adverse health effects and would not be greater than 10 excess cancer cases in a million for all receptors. This represents a less-than-significant impact for all receptors for the Proposed Project activities at the DCPD site, PBR, and SMVR-SB (Class III).

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### Valley Fever

Valley Fever infections are known to occur throughout Southern California. Potential infection could occur as a result of inhaling fugitive dust emissions. By generating fugitive dust, the Proposed Project could cause exposure to the arthroconidia (spores) of the fungus *Coccidioides immitis* if those spores are present in areas being disturbed or in areas where travel occurs on unpaved surfaces. Exposure to the *Coccidioides immitis* spores could cause individuals nearby to contract the disease. Ground disturbing activities at the DCPD site would generate the largest proportion of fugitive dust emissions; however, because the DCPD site is generally surrounded by open space, the potential for decommissioning activities at the DCPD site to expose the public to *Coccidioides immitis* spores would be low. The Proposed Project would not require grading as part of the anticipated site improvements at either of the SMVR sites. The primary way to avoid Valley Fever is to limit exposure to the *Coccidioides immitis* spores. Controlling fugitive dust is an effective strategy for preventing *Coccidioides immitis* spores from becoming airborne. As part of the Proposed Project PG&E would reduce the amount of disturbed area, reduce vehicle speeds on unpaved surfaces, and water disturbed soil areas during decommissioning (Applicant Commitment (AC) AQ-1, *Minimize Fugitive Dust*, and AC AQ-5, *SLOAPCD Fugitive Dust Reduction Measures*). As such, the potential for the Proposed Project to substantially increase the incidence of Valley Fever infection would not be significant (Class III).

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### Naturally Occurring Asbestos

If airborne particulates include naturally occurring asbestos (NOA), they could be subject to the California TAC Identification and Control Program (Health and Safety Code Section 39650 et seq. [H&SC §§ 39650-39675]). PG&E investigated the potential presence of NOA in surface materials, including roads, parking lots, and other areas to be removed as part of the Proposed Project (PG&E, 2021c).

**Commented [AM4]:** More information on NOA can be found on the APCD website at [slocleanair.org/rules-regulations/noa.php](https://www.slocleanair.org/rules-regulations/noa.php), on the California Geological Survey website at <https://www.conservation.ca.gov/cgs/minerals/mineral-hazards/asbestos>, or from CARB at <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/asbestos/asbestos.htm>.

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The July 2020 investigation used a focused geologic evaluation and certified laboratory analytical results to evaluate the asbestos content (PG&E, 2020). Suspected serpentine rock formations on site were included in the evaluation, and the samples collected did not contain concentrations of NOA that exceed the concentration limit in the CARB Airborne Toxic Control Measures for construction activities (PG&E, 2020). The SLOCAPCD maintains a database to show buffer zones where NOA may be encountered in the County, and the DCPD site is not located within these buffer zones. PG&E would need to submit to the SLOCAPCD a form for an NOA Exemption including the geologic evaluation prior to ground disturbing activities (PG&E, 2021d). The Proposed Project would not require grading as part of the anticipated site improvements at either of the SMVR sites. The potential for the Proposed Project to substantially increase airborne concentrations of NOA would not be significant (Class III).

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**Commented [AM5]:** NESHAP requirements for regulated structures include but are not limited to:

1. Hire a Certified Asbestos Consultant to conduct asbestos survey report.
2. Submit a notification form and survey to the APCD, at least ten (10) business days prior to demolition, regardless of RACM. For renovation and tenant improvement projects, a notification and survey must be submitted at least ten (10) business days prior to RACM asbestos abatement.
3. Submit a written work plan addressing asbestos handling procedures in order to prevent visible emissions.

Go to [slocleanair.org/rules-regulations/asbestos.php](https://www.slocleanair.org/rules-regulations/asbestos.php) for more information.

### Proper Abatement of Regulated Asbestos-Containing Material (RACM)

Demolition and renovation activities can involve handling, abatement, and disposal of regulated asbestos-containing material (RACM). RACM could be encountered during the demolition and decommissioning of DCPD. If the Proposed Project encounters RACM or requires demolition or renovation of a regulated structure, it may be subject to various regulatory requirements including those detailed in the asbestos NESHAP regulation (40 CFR 61, Subpart M).



### Proper Abatement of Lead-Based Coated Structures

Demolition, remodeling, sandblasting, or removal of structures with lead-based coatings can result in the release of lead-containing particles from the site. Proper abatement of lead-based paint must be performed to prevent the release of lead particles from the DCPD site. An APCD permit would be required for sandblasting operations.

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**Commented [AM6]:** For additional information regarding lead abatement, contact the San Luis Obispo County Environmental Health Department at 805-781-5544 or Cal-OSHA at 818-901-5403. Additional information can also be found online at [epa.gov/lead](http://epa.gov/lead).

### Railyards

**Pismo Beach Railyard.** Proposed Project activities at the PBR site were evaluated for adverse health effects by PG&E and its consultants within the HRA as updated for all Phase 1 activities (PG&E, 2022b).

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The cancer risk results for activities at the DCPD site including transportation and improvements at the PBR and SMVR-SB (Betteravia Industrial Park) sites are shown in Table 4.2-15, as discussed with the overall discussion of Phase 1 activities.

The potential to expose sensitive receptors to substantial pollutant concentrations through use of the PBR site would be a less than significant impact (Class III).

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**SMVR-SB.** Proposed Project activities at the SMVR-SB (Betteravia Industrial Park) site were included in the HRA as discussed with the evaluation of the DCPD site (PG&E, 2022b).

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The cancer risk results for activities at the DCPD site including transportation and improvements at the PBR and SMVR-SB (Betteravia Industrial Park) sites appear in Table 4.2-15, as discussed with the overall discussion of Phase 1 activities.

No schools are near the SMVR-SB site. The cancer risk impact for the SMVR-SB site reflects the Proposed Project's use of equipment meeting Tier 4 emission standards (AC AQ-2) and Tier 4 Interim equipment for smaller equipment (model year 2012 or newer for engines rated under 100 hp) and limiting idling of diesel equipment or vehicles (AC AQ-3) to minimize pollutant concentrations. The potential to expose sensitive receptors to substantial pollutant concentrations through use of the SMVR-SB site would be a less than significant impact (Class III).

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### Phase 2

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Emissions during Phase 2 would occur generally within the DCPD site and would occur at lower rates than those in Phase 1 due to much less intensive activity and fewer transportation trips. The railyard sites would not be used during Phase 2. For residences or other sensitive receptors nearest to the DCPD site, adverse health effects from Phase 1 would be substantially higher than those resulting from decommissioning emissions in Phase 2. Phase 2 emissions would not affect any receptors near the DCPD site (Class III).

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### Post-Decommissioning Operations

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**New Facility Operations.** Following Phase 2, long-term operations including management of the new GTCC Storage Facility and operation of the Security Building, indoor Firing Range, and Storage Buildings would occur within the DCPD site. These activities would occur far from sensitive

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receptors and would not create emissions likely to result in substantial pollutant concentrations (Class III).

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**Future Actions.** Marina improvement and operations would be completed by a third party who would be required to obtain necessary land use and building permits as well as a new or amended lease from CSLC. The Breakwaters would remain in place and the Marina would be used for small vessels to be launched into the Intake Cove. These improvements and operations would occur far from sensitive receptors. Emissions from these activities were included conservatively in the Phase 2 calculations and were found to not result in in substantial pollutant concentrations (Class III).

#### Mitigation Measures for Impact AQ-3.

**AQ-1 Implement a Decommissioning Activity Management Plan (DAMP)**

**AQ-2 Provide Funding for Off-site Mitigation of Equipment Emissions**

**Impact AQ-4: Create objectionable odors affecting a substantial number of people (Class III: Less than Significant).**

#### Phase 1

##### *DCPP Project Site*

Typical objectional odors during construction include ammonia, chlorine, and hydrogen sulfide, and the Proposed Project would not create these pollutants in measurable quantities. Diesel equipment exhaust could be a potential source of odor during any of the decommissioning activities, although only for people immediately adjacent to the source. There are no residences or other occupied properties located within 6.5 miles of activities on the DCPP site, and no decommissioning activity would have a substantial number of people near it. During decommissioning at the DCPP site there would be no objectionable odors that would affect a substantial number of people resulting in a less-than-significant impact (Class III).

##### *Railyards*

**Pismo Beach Railyard.** The Proposed Project activities at the PBR site would not create any notable odor sources. Some objectionable odors may be temporarily created during development of improvements at the site, such as from diesel exhaust. These odors would not affect a substantial number of people, would only occur during short periods of time, and would be consistent with general construction activities that are not out of the ordinary. Odors related to activities at the PBR site would not cause a significant impact to a substantial number of people (Class III).

**SMVR-SB.** Activities at the SMVR-SB site would not create any notable odor sources. Development of improvements and waste transport activities at these sites would cause emissions from diesel exhaust. These odors would not affect a substantial number of people, would only occur during short periods of time, and would be consistent with general construction

and railyard activities that are not out of the ordinary. Odors related to activities the SMVR-SB site would not cause a significant impact to a substantial number of people (Class III).

### **Phase 2**

Phase 2 activities would result in emissions that would be similar to but well below those of Phase 1. As the distances to sensitive receptors would not change, Phase 2 would also not create objectionable odors that would affect a substantial number of people. This impact would be less than significant (Class III).

#### ***Post-Decommissioning Operations***

**New Facility Operations.** Following Phase 2, operational activities at the DCCP site would include long-term management of the GTCC Waste Storage facility and operation of the Security Building, indoor Firing Range, and Storage Buildings. These activities are not known to create objectionable odors, and with the large distances to sensitive receptors any potentially objectionable odors would not affect a substantial number of people. This impact would be less than significant (Class III).

**Future Actions.** Marina improvement and operations would not include activities known to create objectionable odors, and with the large distances to sensitive receptors any potentially objectionable odors would not affect a substantial number of people. This impact would be less than significant (Class III).

**Mitigation Measures for Impact AQ-4.** No mitigation measures are required.

### **4.2.5 Cumulative Impact Analysis**

#### **Geographic Extent Context**

The geographic area of analysis for cumulative air quality impacts is the South Central Coast Air Basin because the majority of Proposed Project emissions and cumulative project emissions would be confined to this region. Cumulative effects may also be experienced within the immediate vicinity of the sources.

Section 3.3, *Cumulative Projects*, discusses and lists relevant similar projects within the geographic vicinity of the Proposed Project and barge route. These include approved and planned development projects in Avila Beach, the cities of Pismo Beach and Santa Maria, County of Santa Barbara, and approved and in progress energy projects near the barge route.

Cumulative projects that may be located within one mile of the Proposed Project and are considered for potential cumulative impacts related to air quality include:

#### ***Diablo Canyon Power Plant***

- Orano System ISFSI Modifications (#1)
- Communications Facility (#2)
- Flying Flags Campground (#4)
- Port San Luis Breakwater Repair (#25)

**Pismo Beach Railyard**

- Signal at Bello and Price Canyon Road (#7)
- Public Safety Center (#9)
- Bello Road Paving (#10)
- Price Street Sidewalk Pavers (#11)
- Realign Frady Lane (#12)
- Storm Drain on Wadsworth from Bello to Judkins Middle School (#13)

**SMVR-SB – Betteravia Industrial Park (County of Santa Barbara)**

- No projects within 1 mile of SMVR-SB

**Cumulative Impact Analysis**

**Phase 1 and Phase 2**

Cumulatively adverse air quality impacts could occur if the cumulative projects identified above were to cause significant air quality impacts concurrently with the Proposed Project and near a sensitive receptor. The potential for cumulative emissions to cause excessive air pollutant concentrations would be greatest for any sensitive receptors located proximate to two or more work sites that are active at the same time. Decommissioning activities could overlap with certain cumulative projects on the DCPD site. The Orano System ISFSI Modifications (#1) would be likely to occur on a concurrent schedule with Phase 1. The precise daily peak emissions of the overlapping activities cannot be readily predicted. However, each project would be expected to implement feasible emissions control measures that would be required through County and/or local air district review.

As shown in Table 4.2-16, the Orano System ISFSI modifications would not exceed daily or quarterly SLOCAPCD air quality thresholds.

**Table 4.2-16. Orano System ISFSI Modifications, DCPD Site Maximum Emissions**

Phase	NO <sub>x</sub> + VOC	Exhaust PM10 or DPM	Fugitive PM10
Daily Emissions (lbs/day)	47.81	0.59	2.58
SLOCAPCD Threshold (lbs/day)	137	7	-
Threshold Exceeded? (Yes/No)	No	No	N/A
Quarterly Emissions (tons/quarter)	2.07	0.03	0.14
SLOCAPCD Threshold (tons/quarter)	2.5	0.13	2.5
Threshold Exceeded? (Yes/No)	No	No	No

Source: Stantec, 2022 – Table 3.

Acronyms: NO<sub>x</sub> = nitrogen oxides, VOC = volatile organic compounds, PM10 = coarse particulate matter, DPM = Diesel Particulate Matter.

The potential for a long-term cumulative impact would be limited to the duration of decommissioning because the peak levels of emissions from decommissioning activities emissions would occur during limited durations of certain activities that would incrementally transition through the decommissioning schedule. Upon conclusion of Phase 1, the emissions during Phase 2 would occur at substantially lower rates. With implementation of the recommended mitigation mea-

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Commented [AM7]: Since we know of this overlap potential, to effectively address cumulative impacts from Phase 1 and the separate DCPD Orano Systems project, recommend that AQ impacts from Orano be required to be added to the Decommissioning DAMP quarterly evaluation.

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tures, the Proposed Project's contribution toward cumulative impacts would be limited in duration and intensity.

The discussion for Impact AQ-1 indicates that the Proposed Project would be likely to conform with applicable air quality management plans. Although cumulative projects could worsen this impact, the contribution of the Proposed Project would not be cumulatively considerable.

The discussion for Impact AQ-2 shows that emissions from Phase 1 activities at the DCPP site would result in criteria air pollutant emissions at rates exceeding the SLOPCAPCD thresholds and result in a cumulatively considerable net increase of ozone precursor emissions before considering mitigation. Mitigation identified for Impact AQ-2 would provide funding to achieve emissions reductions that would reduce the effects to a level that is not cumulatively considerable. Similarly, Impact AQ-3 shows the Proposed Project could expose sensitive receptors to substantial pollutant concentrations. Due to the distances between the Proposed Project activities and the cumulative projects and the distances between the Proposed Project to sensitive receptors, the cumulative effects of excess cancer risks for activities at the DCPP site, PBR, and SMVR-SB sites would not be significant.

The discussion of Impact AQ-4 indicates that the Proposed Project would not emit significant objectionable odors, and so would not create a substantial contribution to cumulative odor impacts.

#### ***Post-Decommissioning Operations***

**New Facility Operations.** As discussed, Impacts AQ-1, AQ-2, AQ-3, and AQ-4 would create less than significant impacts for new facility operations. While cumulative projects could potentially worsen these impacts, considering the distances between the Proposed Project and cumulative projects as well as the Proposed Project and sensitive receptors, the cumulative effect for new facility operations would not be significant.

**Future Actions.** Marina improvement and operations would have less than significant impacts for Impacts AQ-1, AQ-2, AQ-3, and AQ-4. While cumulative projects could potentially worsen these impacts, considering the distances between the Proposed Project and cumulative projects, as well as between the Proposed Project and sensitive receptors, they would not create cumulatively significant impacts.

#### **4.2.6 Summary of Significance Findings**

Table 4.2-17 presents a summary of the environmental impacts, significance determinations, and mitigation measures for the Proposed Project.

**Table 4.2-17. Summary of Impacts and Mitigation Measures – Air Quality**

Impact Statement	Impact Significance Class				Mitigation Measures
	Phase 1		Phase 2 Post-Decom		
	DCPP	PBR/SB	DCPP	Ops/Marina	
<b>AQ-1:</b> Conflict with or obstruct implementation of an applicable air quality plan	III	III/III	III	III/III	None required
<b>AQ-2:</b> Result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is in nonattainment	II	III/III	III	III/III	<b>AQ-1:</b> Implement a Decommissioning Activity Management Plan (DAMP) <b>AQ-2:</b> Provide Funding for Off-site Mitigation of Equipment Emissions
<b>AQ-3:</b> Expose sensitive receptors to substantial pollutant concentrations	II	III/III	III	III/III	<b>AQ-1</b> and <b>AQ-2</b> (see above)
<b>AQ-4:</b> Create objectionable odors affecting a substantial number of people	III	III/III	III	III/III	None required
Cumulative Impact	Not cumulatively considerable		Not cumulatively considerable		None required

Acronyms: PBR = Pismo Beach Railyard, SB = Betteravia Industrial Park (Santa Barbara County), Post-Decom = Post-Decommissioning, Ops = Long-Term Operations, Class I = Significant and Unavoidable, Class II = Less than Significant with Mitigation, Class III = Less than Significant, Class IV = Beneficial, NI = No Impact.

## 4.9 Greenhouse Gas Emissions

This section evaluates the potential for the Proposed Project to generate greenhouse gas (GHG) emissions, either directly or indirectly, within the Proposed Project area. Potential air quality impacts are discussed in Section 4.2, *Air Quality*. The section begins with a discussion of the scientific background on GHG emissions management, and the existing environmental setting related to GHG emissions. Following that discussion, the section identifies applicable significance thresholds, assesses potential impacts associated with GHG emissions from decommissioning activities and their significance, and recommends measures to avoid or substantially reduce any effects found to be potentially significant.

**Scoping Comments Received.** During the scoping comment period for the EIR, written and verbal comments were received from agencies, organizations, and the public. These comments identified various substantive issues and concerns relevant to the EIR analysis. Appendix B includes all comments received during the scoping comment period. The following list provides a summary of scoping comments applicable to this issue area and considered in preparing this section:

- Consider the Proposed Project's effects on climate change including analysis of GHG emissions.
- Quantify GHG emissions from all Project sources (direct and indirect), present significance thresholds, and determine the significance of impacts.
- Design and operate the Project to minimize GHG emissions including use of high-efficiency equipment, reducing haul trips, using a truck fleet with the newest/cleanest possible vehicles including zero to near-zero emission vehicles, using locomotives and marine vessels with the cleanest available engine emissions technology including operational parameters to maximize fuel efficiency, and consider on-site renewable energy generation.

### 4.9.1 Environmental Setting

#### Introduction

GHGs are defined as any gas that absorbs infrared radiation in the atmosphere. GHGs include, but are not limited to, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>). These GHGs lead to the trapping and buildup of heat in the atmosphere near the Earth's surface, commonly known as the greenhouse effect. There is overwhelming scientific consensus that human-related emissions of GHGs above natural levels have contributed significantly to global climate change by increasing the concentrations of the gases responsible for the greenhouse effect, which causes atmospheric warming above natural conditions.

Because GHG emissions are known to increase atmospheric concentrations of GHGs, and increased GHG concentrations in the atmosphere exacerbate global warming, a project that adds to the atmospheric load of GHGs adds to the problem. To avoid disruptive and potentially catastrophic climate change, annual GHG emissions must be substantially reduced. The impact to climate change due to the increase in ambient concentrations of GHGs differs from criteria pollutants (see Section 4.2, *Air Quality*), in that GHG emissions from a specific project do not cause direct adverse localized human health effects. Rather, the direct environmental effect of

GHG emissions is the cumulative effect of an overall increase in global temperatures, which in turn has numerous indirect effects on the environment and humans.

The Intergovernmental Panel on Climate Change (IPCC) completed a Fifth Assessment Report (AR5) in 2014 that contains information on the state of scientific, technical, and socio-economic knowledge about climate change. The AR5 includes working group reports on basics of the science, potential impacts and vulnerability, and mitigation strategies. Global climate change has caused physical, social, and economic impacts in California, such as land surface and ocean warming, decreasing snow and ice, rising sea levels, increased frequency and intensity of droughts, storms, and floods, and increased rates of coastal erosion. In its Climate Change 2014 Synthesis Report, which is part of the AR5, the IPCC (2014) notes:

*Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems...warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen.*

The potential of a gas or aerosol to trap heat in the atmosphere is called global warming potential (GWP). The GWP of different GHGs varies because they absorb different amounts of heat. Carbon dioxide (CO<sub>2</sub>), the most abundant GHG, is used to relate the amount of heat absorbed to the amount of the gas emissions; this is referred to as CO<sub>2</sub> equivalent (CO<sub>2</sub>e). CO<sub>2</sub>e is the amount of GHG emitted multiplied by the GWP. The GWP of CO<sub>2</sub>, as the reference GHG, is 1. Methane has a GWP of 25; therefore, 1 pound of methane equates to 25 pounds of CO<sub>2</sub>e. Table 4.9-1 shows a range of gases with their associated GWP, their estimated lifetime in the atmosphere, and the GWP over a 100-year timeframe (per federal and state reporting requirements).

**Table 4.9-1. Global Warming Potential (GWP) of Various Greenhouse Gases**

Greenhouse Gas	Life in Atmosphere (years)	100-year GWP (average)
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	120	298
Hydrofluorocarbons	1.5-264	12-14,800
Sulfur Hexafluoride	3,200	22,800

Source: US Environmental Protection Agency (USEPA), 2015.

In California, the California Air Resources Board (CARB) is the primary agency responsible for providing information on implementing the GHG reductions required by the State pursuant to Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, and its 2016 update, Senate Bill (SB) 32. Together, these laws require CARB to develop regulations that reduce GHG emissions to 1990 levels by 2020 and to 40 percent below 1990 levels by 2030. CARB developed and approved its first Scoping Plan in 2008 which described its approach to meeting the AB 32 goal.

After enactment of SB 32, CARB completed the 2017 Climate Change Scoping Plan Update (Scoping Plan) (CARB, 2017) to provide the strategy for achieving California's 2030 GHG emissions

target. In addition to the Scoping Plan, CARB maintains an online inventory of GHG emissions in California. This inventory is an important companion to the Scoping Plan because it documents the historical emission trends and progress toward meeting the 2020 and 2030 targets, which are 431 million metric tons (MMT) of CO<sub>2</sub>e and 260 MMTCO<sub>2</sub>e, respectively.

The 2017 Scoping Plan includes a modeled reference scenario, or “business as usual” projection to monitor the State’s emission reduction progress, which estimates future emissions based on current emissions, expected regulatory implementation, and other technological, social, economic, and behavioral patterns. To meet the 2030 target, the Scoping Plan recommends a range of actions (CARB, 2017), including:

- 50 percent Renewable Portfolio Standard (RPS).
- Doubling building energy efficiency.
- More clean, renewable fuels.
- Cleaner, zero or near-zero emissions cars, trucks, and buses.
- Walkable/bikeable communities with transit.
- Cleaner freight and goods movement.
- Reduced super-pollutants from dairies, landfills, and refrigerants.
- Continue Cap and Trade program for transportation, industry, natural gas, and electricity.
- Invest in communities to reduce emissions.

The CARB 2022 Scoping Plan Update assesses progress towards achieving the SB 32 2030 target, while laying out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan Update discusses the ways in which a CEQA analysis may support climate action and the role of local government action. Examples of GHG reduction mechanisms that may be recommended as mitigation appear in Section 4 of Appendix D of the CARB 2022 Scoping Plan Update (CARB, 2022b).

### Federal

In the most recent national GHG inventory, the USEPA estimated that in 2020, United States GHG emissions were 5,981.4 MMTCO<sub>2</sub>e. Within the United States, fossil fuel combustion accounted for 92.1 percent of CO<sub>2</sub> emissions in 2020; these emissions include the transportation use of fossil fuels and electric power generation. Other contributing types of sources include agriculture, waste, and industrial processes and product use (USEPA, 2022).

### State

Despite growing population and gross domestic product in California, gross GHG emissions continue to decrease. The most recent California GHG inventory was published in 2022 and contains data up to 2020 (CARB, 2022a). In the 2022 California GHG inventory, CARB estimated that GHG emissions from statewide activities totaled 369.2 MMTCO<sub>2</sub>e, or approximately 6 percent of the national total. The progress indicates that California achieved the 2020 GHG emission target of 431 MMTCO<sub>2</sub>e established by AB 32.

Even though California is aggressively moving to reduce its annual GHG emissions, it is already experiencing the effects of GHG-related climate change, which is a relevant aspect of the environmental setting. A 2018 report entitled *Indicators of Climate Change in California* (Office of



Environmental Health Hazard Assessment [OEHHA], 2018) concludes that the changes occurring in California are largely consistent with those observed globally. These climate change indicators show the following:

- Increasing daily annual average temperatures in the State
- More frequent extreme events, including wildfires and heat waves
- Declining runoff volumes due to a diminished snowpack
- Declining number of “winter chill hours” crucial for high-value fruit and nut crops
- Movement of flora and fauna at higher elevations and different times and locations

#### Local

The County of San Luis Obispo (County) initially adopted the EnergyWise Plan in 2011, which included a community-wide inventory of GHG emissions from activities and sources in the unincorporated areas of the County. The inventory calculated municipal and community-wide emissions caused by activities in 2006, including transportation, waste, agriculture, energy, and aircraft-related activities for the unincorporated areas (San Luis Obispo, 2011). An update in 2016 indicated that overall GHG emissions from both government operations and community-wide sources in the unincorporated areas of the County decreased by approximately seven percent between 2006 and 2013, from 1,884,358 (2006) to 1,757,387 MTCO<sub>2</sub>e in 2013 (San Luis Obispo, 2016).

#### Existing Site Conditions

The DCPD contributes to community GHG emissions as an active site of employment and by using conventional fossil fuels to operate equipment onsite. DCPD employs approximately 1,157 to 1,400 workers (see Section 2.2.3.1) that commute to the site. These mobile sources of GHG emissions are part of the baseline community-wide GHG emissions. Additionally, existing equipment at the DCPD site includes an auxiliary boiler, diesel-powered generators, and emergency pump engines that support baseline DCPD operations. [Based on the activity of workers commuting to the site and records of fuel used by existing equipment](#) at the DCPD site, the DCPD site creates [current baseline GHG emissions](#) of approximately **5,341 MTCO<sub>2</sub>e per year**.

**Commented [AM1]:** Note: For the P66 Santa Maria Refinery decommissioning project that also has a credit for baseline emissions, APCD recommended that if decommissioning activities are halted for a year or longer, the lead agency reset the baseline to zero. APCD has this same recommendation for the DCPD decommissioning project.

#### 4.9.2 Regulatory Setting

Appendix C summarizes relevant federal and state laws, regulations, and policies related to GHG emissions. Additional details on major state programs and local requirements related to the Project are discussed below.

#### Mandatory Reporting of Greenhouse Gas Emissions

The CARB Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, or mandatory reporting rule (MRR), applies to electric power distribution companies and to fossil fuel electricity generating facilities with a nameplate capacity equal or greater than one megawatt capacity (17 CCR 95100 to 95163). As an Electric Power Entity and an owner of fossil fuel electric power generation sources, the MRR requires PG&E to separately report GHG emissions associated with the electricity delivered to its end-use customers (Section 95111) and emissions from PG&E’s owned electricity generation facilities (Section 95112). The MRR captures the GHG emissions of

the total electricity produced by PG&E's power plants and electricity imported by PG&E for end use by customers. The operations of DCP are categorically excluded from the MRR reporting (Section 95101) because it is powered by nuclear energy and existing on-site stationary combustion emissions are under 10,000 MTCO<sub>2</sub>e per year.

### **Cap-and-Trade Program**

The California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation (Cap-and-Trade Program) was initially approved by CARB in 2011 (17 CCR 95801 to 96022). The Cap-and-Trade Program applies to covered entities that fall within certain source categories, including first deliverers of electricity (such as fossil fuel power plants), natural gas suppliers, and electrical distribution utilities, such as PG&E.

Covered entities must hold compliance instruments sufficient to cover the entity's actual GHG emissions, as evidenced through the MRR requirements. This means that PG&E, as an owner of fossil fuel power plants and as a natural gas and electrical distribution utility, bears separate GHG compliance obligations for delivering electricity to the grid from its power plants and for making natural gas and electricity deliveries to end-users that are not otherwise covered entities in the Cap-and-Trade Program.

The compliance instruments that must be submitted by covered entities may be in the form of either an allowance or an offset for every ton of GHG emitted. The use of compliance offset credits is limited to a small percentage (4 or 6 percent) of each entity's total obligation, and at least one half of the compliance offsets submitted must also provide "direct environmental benefits" to California (defined in 17 CCR Sec 95989). Compliance offset credits are distinct and separate from voluntary-market registry offset credits that are excluded from use in the Cap-and-Trade Program.

The Cap-and-Trade Program allows CARB to approve third-party offset project registries and protocols to facilitate the listing, reporting, and verification of GHG-reductions achieved by offset projects. This helps to create a supply of registry offset credits. Registry offset credits must be converted by CARB into compliance offset credits before they can become eligible for use in the Cap-and-Trade Program.

### **County of San Luis Obispo**

The Conservation and Open Space Element of the San Luis Obispo County General Plan establishes goals focused on reducing community-wide GHG emissions by 2020 by reducing vehicle-miles traveled, increasing energy efficiency, and increasing renewable energy use in the County. To delineate the strategies, the Board of Supervisors adopted the EnergyWise Plan in 2011 (San Luis Obispo, 2011), which identified how the County would achieve a GHG reduction target of 15 percent below baseline by 2020. The EnergyWise Plan is the County's framework for climate action. An update in 2016 summarized progress towards implementing measures and illustrated that overall GHG emissions from both government operations and community-wide sources in the unincorporated areas of the County decreased by approximately seven percent between 2006 and 2013 (San Luis Obispo, 2016). The EnergyWise Plan is not a qualified Climate Action Plan under SB 32.

The goals of the EnergyWise Plan (San Luis Obispo, 2016) fall into categories for government operations and for community-wide action, as follows:

- G1. Reduce energy use in existing County facilities 20 percent by 2020.
- G2. Increase the use of renewable energy sources in County facilities to account for 10 percent of total energy used.
- G3. Reduce the amount of waste generated at County facilities and increase the County's waste diversion rate to 80 percent by 2020.
- G4. Reduce water use in County facilities 20 percent by 2020.
- G5. Reduce emissions from the County's vehicle fleet by using alternative fuels and decreasing vehicle miles traveled.
- G6. Provide additional opportunities for employees to utilize alternative transportation options and reduce commute lengths.
- C1. Address future energy needs through increased conservation and efficiency in all sectors.
- C2. Increase the production of renewable energy from small-scale and commercial-scale renewable energy installations to account for 10 percent of total local energy use by 2020.
- C3. Reduce methane emissions from disposed waste by achieving as close to zero waste as possible through increased diversion rates, methane capture and recovery, and other strategies.
- C4. Reduce emissions from potable water use by 20 percent from per capita baseline levels by 2020 by prioritizing water conservation before development of new water resources.
- C5. Reduce transportation emissions through improvements in vehicle fuel efficiency, expansion of non-auto modes of travel, and implementation of smart growth land use policies.
- C6. Reduce emissions in agricultural practices through water conservation, upgrade of equipment technology, and use of best management practices.

#### **San Luis Obispo County Air Pollution Control District**

Many local air pollution control agencies in California have proposed numerical or other GHG significance criteria. The San Luis Obispo County Air Pollution Control District (SLOCAPCD), which has local regulatory authority over the air pollutant emissions, released the CEQA Air Quality Handbook (SLOCAPCD Handbook) originally in 1997, with updates in 2003, 2009, and 2012. The SLOCAPCD Handbook describes GHG emissions thresholds of significance for San Luis Obispo County (SLOCAPCD, 2012).

The SLOCAPCD staff identified a strategy for minimizing GHG emissions for marine vessels. Large vessels, 300 gross registered tons or larger, are encouraged to participate in the regional voluntary Vessel Speed Reduction program. Through the Vessel Speed Reduction program, agencies and partners can request that container and car carrier companies slow down their vessels to a speed of 10 knots or less from May 15 to November 15. The National Oceanic and Atmospheric Administration (NOAA), with support from the United States Coast Guard, oversees this program to reduce the risk of fatal ship strikes to endangered blue, fin, and humpback whales within and

near the region's national marine sanctuaries (NOAA, 2022). The program also aims to reduce fuel use by marine vessels and regional greenhouse gas emissions and improve regional air quality and human health outcomes.

#### City of Pismo Beach

The City of Pismo Beach Climate Action Plan (2014) includes a GHG emissions reduction target to reduce the community wide GHG emissions to 10 percent below 2005 levels by 2020 (Pismo Beach, 2014).

#### County of Santa Barbara

Santa Barbara County developed the Santa Barbara Energy and Climate Action Plan in 2015 in response to AB32 – Global Warming Solutions Act, SB 375-Sustainable Communities and Climate Protection Act, and SB 97- California Environmental Quality Act, with a goal to reach 15 percent below 2007 levels by 2020 (Santa Barbara, 2015).

Santa Barbara County also prepared a Sustainability Action Plan in 2020, which provides baseline emissions inventory to be incorporated into the County of Santa Barbara's Climate Action Strategy in the future (Santa Barbara, 2020).

As described in Section 1.3.3.2, *Surface Transportation Board*, railroads are under the jurisdiction of the federal government such that local agencies are preempted from exercising jurisdiction over railyards (e.g., SMVR-SB).

#### 4.9.3 Significance Criteria

The impacts caused by GHG emissions are, by their nature, cumulative impacts. Emissions from all GHG sources contribute to the total amount of GHG in the atmosphere, and the effects of GHG emissions are not limited to the localities where they are generated.

Per State CEQA Guidelines Appendix G, the Project would be found to cause a significant environmental impact if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the GHG emissions.

#### San Luis Obispo County Air Pollution Control District

The SLOCAPCD CEQA Air Quality Handbook includes thresholds of significance for construction and operations GHG emissions. For construction projects, the GHG emissions must be quantified and amortized over the life of the project, then added to the operational emissions. The SLOCAPCD's 2021 Interim CEQA GHG Guidance recommends use of 10,000 MTCO<sub>2</sub>e per year as a threshold for stationary sources (industrial projects) in San Luis Obispo County, when the project is required to obtain air quality permits from SLOCAPCD. For CEQA evaluations of other types of projects, such as residential and commercial projects, the SLOCAPCD recommends that lead agencies consider use of a threshold of "no net increase" relative to baseline conditions (SLOCAPCD, 2021).

**Commented [AM2]:** The 10,000 MTCO<sub>2</sub>e per year industrial threshold was developed to ensure there were no significant impacts from new stationary sources (industrial projects) proposed for development in SLO County through 2050. Since the DCPD is was already operating when that threshold was developed and this project eliminates the existing DCPD operations, the 10,000 MT threshold is not applicable to this project. In August 2023, SLO County APCD issued updated CEQA GHG guidance and annual residential, commercial, and mixed use operational phase threshold recommendations for 2020 through 2045 that jurisdictions could consider adopting. Note: APCD is currently refining this guidance and these thresholds for near term issuance. These thresholds may not be applicable to the proposed future land uses under this DCPD decommissioning project. "No net increase" relative to baseline conditions could be applicable to this project. Note: For the P66 Santa Maria Refinery decommissioning project that also has a credit for baseline emissions, APCD recommended that during this P66 decommissioning project, if decommissioning activities are halted for a year or longer, the lead agency reset the baseline to zero. APCD has this same recommendation for the DCPD decommissioning project.

Mitigation defined in the SLOCAPCD CEQA Air Quality Handbook and 2021 Interim CEQA GHG Guidance should be applied if the project causes potentially significant levels of GHG emissions (SLOCAPCD, 2012; SLOCAPCD, 2021). The SLOCAPCD Handbook includes site design methods and efficiency improvements for land use developments that influence long-term transportation demand and energy consumption by County residents and workers; however, the Proposed Project decommissioning activities do not involve developing land for residential and commercial projects. The 2021 interim guidance identifies a hierarchy of on-site and feasible off-site mitigation suggestions, including GHG offset projects, for lead agency consideration.

**Commented [AM3]:** While the 2021 Guidance was what was available at the time this EIR was being developed, for this long term project, APCD recommends that APCD's August 2023 CEQA GHG guidance and pending refinements to that guidance also be referenced because they will provide current best practices.  
<https://www.slocleanair.org/rules-regulations/land-use-ceqa/ceqahandbook.php>

#### Santa Barbara County Air Pollution Control District

The SBCAPCD recommends finding that a project will not have a significant impact on the climate, if the project will:

- Emit less than the screening significance level of 10,000 MTCO<sub>2</sub>e per year, or
- Show compliance with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions [sources subject to the AB 32 Cap-and-Trade requirements pursuant to Title 17, Article 5 (California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms) would meet the criteria], or
- Show consistency with the AB 32 Scoping Plan GHG emission reduction goals by reducing project emissions 15.3 percent below business as usual.

If a project's emissions exceed any of the above thresholds, the SBCAPCD recommends applying mitigation measures (SBCAPCD, 2015).

#### County of Santa Barbara

The County of Santa Barbara subjects all industrial stationary-source projects to a numeric, mass-rate threshold of 1,000 MTCO<sub>2</sub>e per year to determine if GHG emissions from an individual project of stationary sources could constitute a significant cumulative impact. Annual GHG emissions that are equivalent to or exceed the threshold are determined to have a significant cumulative impact on global climate change unless mitigated (Santa Barbara, 2021).

#### 4.9.4 Environmental Impact Analysis and Mitigation

**Impact GHG-1: Generate GHG emissions that may have a significant impact on the environment (Class II: Less than Significant with Mitigation).**

The Proposed Project would generate GHG emissions during decommissioning and dismantlement activities. The sources of GHG emissions directly related to the Proposed Project include off-road equipment, on-road vehicles, rail locomotives, and marine vessels used in the process of dismantling, decontaminating, and removing the DCCP facility after final shutdown.

The baseline and environmental setting for this analysis includes the DCCP in an "operating" status. The basis for this EIR is that PG&E will retire DCCP and transition DCCP into a "decommissioning" status. The retirement plans approved by the California Public Utilities Commission in January 2018 include procuring replacement power supplies from cost-effective, GHG-free

portfolio of energy efficient renewables and energy storage projects, as described in EIR Section 1.2.1, *DCPP License Expiration and Retirement*.

Because decommissioning would be a result of expiration of existing licenses to operate and shutdown of the DCPD reactors, this analysis focuses on the GHG emissions of the decommissioning activities themselves and does not address the effects of procuring replacement power.

The Proposed Project's GHG emissions include direct and indirect emissions. Direct emissions include GHG emissions generated from equipment and vehicles during decommissioning. The Proposed Project includes decommissioning and remediation of the site after plant shutdown. Because of the uncertain future use of the site beyond PG&E's proposal to apply for a new or amended CSLC lease and sublet (or other arrangement) the Marina to a third party for permitting and reuse, the nature of long-term operation and operational-phase emissions associated with any other potential development of the site after completion of the Proposed Project (see Section 8.0, *Potential Site Reuse Concepts*) are not reasonably foreseeable.

Indirect GHG emissions sources can take many forms. Some of these forms include increase or decrease in electricity or water use, loss of natural CO<sub>2</sub> uptake from developing formerly vegetated areas, material recycling, etc.

#### Phase 1

Phase 1 GHG emissions include those caused by construction equipment and transportation via truck, rail, and barge. For GHG emissions that by nature have a global impact, the emissions quantification includes activities within the Proposed Project area, including the railyards, and transportation along routes to access out-of-state disposal site destinations. Therefore, all foreseeable GHG emissions are totaled together regardless of where the emissions occurred.

Phase 1 activities together with Phase 2 comprise the total Proposed Project GHG emissions. Total GHG emissions would occur at variable annual rates over the eight years of Phase 1 activity (2024-2031), then would diminish during the eight years of Phase 2 activity (2032-2039).

Table 4.9-2 summarizes the GHG emissions that would be caused by Phase 1 activities, including on-site decommissioning activities at DCPD, site modifications at the railyard, and waste transportation via either of the SMVR railyard and along the anticipated haul routes to the different disposal destinations.

#### Phase 2

Table 4.9-3 summarizes the GHG emissions that would be caused by Phase 2 remediation and restoration activities with those of long-term Marina operations (see Future Actions, below), including construction equipment related to site remediation and restoration, as well as waste transportation along haul routes.

Phase 2 emissions would occur at much lower annual rates than during Phase 1 because Phase 1 includes the bulk of demolition and transportation of waste from DCPD, and Phase 2 would be limited to the restoration and landscaping of the site following demolition, including Discharge Structure removal and restoration.

**Table 4.9-2. Phase 1 (2024-2031) GHG Emissions**

Proposed Project	Location of Emissions	GHG Emissions (MTCO <sub>2</sub> e)
DCPP Onsite Decommissioning	San Luis Obispo County Air Pollution Control District (SLOCAPCD)	65,770
Waste Transportation	Santa Barbara County Air Pollution Control District (SBCAPCD)	3,868
SMVRR Activities	San Joaquin Valley Air Pollution Control District (SJVAPCD)	7,904
Waste Transportation	South Coast Air Quality Management District (SCAQMD)	116
Waste Transportation	Ventura County Air Pollution Control District (VCAPCD)	296
Waste Transportation	Mojave Desert Air Quality Management District (MDAQMD)	437
Waste Transportation	International	51
Waste Transportation and Rock and Gravel Fill		563
<b>Total Phase 1 Emissions</b>	---	<b>91,744 MTCO<sub>2</sub>e</b>
Maximum Yearly Emissions Rate	---	<b>10,402 MTCO<sub>2</sub>e per year</b>

Source: EIR Appendix D, Phase 1 AQ/GHG Summary, Table 2.1.

**Table 4.9-3. Phase 2 (2032-2039) GHG Emissions Overall**

Proposed Project	GHG Emissions
Total Phase 2 Emissions	7,698 MTCO <sub>2</sub> e
Operational Emissions	316 MTCO <sub>2</sub> e per year
Maximum Yearly Emissions	1,586 MTCO <sub>2</sub> e per year

Source: EIR Appendix D, Phase 2 AQ/GHG Summary, based on PG&E, 2021.

**Post-Decommissioning Operations**

**New Facility Operations.** Following Phase 2, operational activities at the DCPD site would include long-term management of the GTCC Waste Storage Facility, and operation of the Security Building, indoor Firing Range, and Storage Buildings. Emissions estimates for these operational activities are summarized in Table 4.9-3 (details appear in Appendix D, Phase 2 AQ/GHG Summary). These post-decommissioning activities would not generate emissions at levels that could exceed current baseline emissions of 5,341 MTCO<sub>2</sub>e per year. Relative to DCPD site baseline activities, post-decommissioning use of the DCPD site would cause no net increase in GHG emissions. The post-decommissioning activities would not generate GHG emissions at a level that would have a potentially significant impact on the environment (Class III).

**Future Actions.** Marina improvement and operations would be completed by a third party who would be required to obtain necessary land use and building permits from the County as well as a new or amended lease from CSLC. The Breakwaters would remain in place and the Marina would be used for small vessels to be launched into the Intake Cove. An estimate of GHG emissions associated with Marina improvements and operations is included in the results for

**Commented [AM4]:** As stated earlier, for the P66 Santa Maria Refinery decommissioning project that also has a credit for baseline emissions, APCD recommended that during this P66 decommissioning project, if decommissioning activities are halted for a year or longer, the lead agency reset the baseline to zero.

APCD has the same recommendation for the DCPD Decommissioning Project. Therefore, APCD recommends the DEIR be revised to reflect this recommendation and this section should include a contingency that if the baseline is reset, then the project's operational phase GHG impacts should be re-evaluated against an applicable GHG threshold or no net increase above the reset baseline value. For additional guidance, see APCD's 2021 and 2023 CEQA GHG guidance documents.

**Commented [AM5]:** The APCD comment about the "New Facility Operations" section also applies to the "Future Actions" section..

Phase 2 calculations. These activities would not generate emissions at levels that could exceed the current baseline emissions of 5,341 MTCO<sub>2</sub>e per year. As a result, these future actions would not generate GHG emissions at a level that would have a potentially significant impact on the environment (Class III).

### Overall Project GHG Emissions and Mitigation

Phase 1 and Phase 2 activities overall would result in Project GHG emissions rates ranging up to 10,402 MTCO<sub>2</sub>e per year. This level of GHG emissions would exceed the current GHG emissions of the DCPD site in the baseline conditions. This level would also exceed SLOCAPCD recommended threshold of 10,000 MTCO<sub>2</sub>e per year for stationary sources (industrial projects) in San Luis Obispo County and the Santa Barbara County threshold of 1,000 MTCO<sub>2</sub>e per year.

The impact to global climate change is, by definition, cumulative. Because an overall increase in GHG emissions would occur relative to baseline conditions, the Proposed Project would generate GHG emissions at a level that would have a potentially significant impact on the environment, before considering mitigation. Additionally, the Project GHG emissions prior to mitigation would result in a cumulatively considerable contribution to the cumulative impact of global climate change.

The GHG emissions estimates include the effects of Applicant Commitments (ACs) detailed in Table 2-12 which are part of the Proposed Project. However, to achieve “no net increase” of GHG emissions relative to baseline conditions and to demonstrate that Project GHG emissions would be fully (100 percent) offset at a 1-to-1 (1:1) ratio, mitigation would need to occur in amounts that would vary from year to year, up to 10,402 MTCO<sub>2</sub>e per year for the direct and indirect GHG emissions that make up the Proposed Project’s contribution to the cumulative climate change impact.

MM GHG-1 (*Reduce GHG Emissions or Surrender Offset Credits*) is recommended to reduce or offset Project-related GHG emissions to avoid a significant impact on the environment as follows:

- Avoid onsite GHG emissions created by improving the efficiency of operations or avoiding on-site use of diesel fuel, gasoline, and other fossil fuels; for example, by electrification of equipment; or
- Cause GHG reductions or carbon sequestration to occur off site, as represented by local GHG reduction or carbon sequestration projects or offset credits. Local GHG reduction or carbon sequestration projects in San Luis Obispo County and Santa Barbara County should be given first preference. The other four counties of California’s Central Coast air basins (Ventura, Monterey, San Benito, and Santa Cruz counties) should be given second preference. The remaining GHG emission reductions needed could be secured by purchasing and retiring offset credits from CARB-approved offset project registries, Climate Forward Forecast Mitigation Units, or similar GHG reduction/carbon sequestration supplies that are consistent with requirements specified in the State CEQA Guidelines, and case law. Examples of off-site GHG mitigation that appear in Section 4.1.2 of Appendix D of the CARB 2022 Scoping Plan Update (CARB, 2022b) include but are not limited to: local urban forestry; local building retrofit programs; offsite electric vehicle chargers; and public transit subsidies.

**Commented [AM6]:** Again, the 10,000 MT threshold is not applicable to this project, but a "no net increase" threshold could be applicable.

**Commented [AM7]:** Please see updated guidance on identifying local GHG reduction/carbon sequestration project in combination with other geographical offsets in the APCD's Aug 2023 CEQA GHG guidance found here: <https://www.slocleanair.org/rules-regulations/land-use-ceqa/ceqahandbook.php>. This guidance includes a link to a calculator that can be used to help all parties decide on the best mix of local GHG reduction/sequestration projects and offsets based on geography that when combined will mitigate a project's excess GHG impacts. Note, APCD is currently developing and will issue further refinement to the August 2023 guidance. For other potential local GHG mitigation measures, see my September 24, 2021 email to Sandra Alarcon-Lopez, Susan Strachan, Lisa Blewitt, Brewster Birdsall, Rachael Dal Porto, and Jon Ansolabehere. For additional information, please contact APCD's Planning Section.

**Commented [AM8]:** Recommend this bullet be further refined to reflect updated offset guidance found in the APCD's 2023 CEQA GHG guidance.

**Commented [AM9]:** Here, it is important to add the term "voluntary" in front of the word "offset" to ensure there is no confusion with CAP-and-Trade offsets which are also on the CARB registries, but which are not available for CEQA mitigation. Voluntary offsets that meet the requirements specified in Appendix D of the CARB 2022 Scoping Plan are applicable offsets.



MM GHG-1 requires PG&E to reduce or offset GHG emissions annually and to annually report the steps taken and local GHG reductions achieved, credits surrendered, or any GHG offset project sponsored by PG&E. Successful implementation of the mitigation would need to be demonstrated in an initial GHG Reduction and Reporting Plan with subsequent annual reporting for continued agency oversight. With mitigation, the rates of GHG emissions during Phase 1 and Phase 2 of the Proposed Project could feasibly be reduced or offset to a level that would not result in a significant impact on the environment (Class II).

**Mitigation Measure for Impact GHG-1.**

**GHG-1 Reduce GHG Emissions or Surrender Offset Credits.** The Applicant or its designee shall reduce or offset annual incremental greenhouse gas (GHG) emissions from Project-related sources. The incremental GHG emissions are those GHG emissions resulting from decommissioning activities, including transportation, during Phase 1 and Phase 2 of the Project. These incremental emissions are estimated to be less than or equal to 10,402 MTCO<sub>2</sub>e per year.

The Applicant or its designee shall prepare and implement a GHG Reduction and Reporting Plan that describes how annual GHG emissions could be reduced with local projects and offsets. The Plan shall include provisions for and outline of an annual report to the County and APCDs that summarizes the emission reduction measures implemented, quantifies the Project-related estimated GHGs emissions for the year, and demonstrates the quantity of metric tons of local GHG reductions/carbon sequestrations secured and voluntary-market registry offset credits surrendered. Each annual report shall reconcile the actual emissions of the previous year with the mitigation quantity, in terms of MTCO<sub>2</sub>e. The standard of performance for this mitigation is to reduce or offset GHG emissions at a quantity that equals or exceeds the emissions of Phase 1 and Phase 2 of the Project during any year. The Applicant or its designee may demonstrate that lower levels of GHG mitigation are needed during certain years of low activity.

Onsite GHG reductions and local GHG reduction/carbon sequestration projects should be exhausted to the extent feasible prior to surrendering credits from offsite projects. If local projects will provide offsite mitigation, first preference should be given to projects in San Luis Obispo and Santa Barbara Counties and second preference to projects in the other four counties of California's Central Coast air basins (Ventura, Monterey, San Benito, and Santa Cruz counties). Implementing the required amount of any of the following types of emission reductions shall be an acceptable means of mitigation:

- GHG reductions generated or carbon sequestrations within San Luis Obispo and Santa Barbara Counties first and then in the other four Central Coast counties by implementing a GHG reduction project consistent with a methodology or accounting protocol that is equal to or more rigorous than CARB protocol requirements under 17 CCR 95972. The protocol for achieving reductions must determine the extent to which GHG emission reductions and GHG removal enhancements are achieved by the GHG reduction project and must establish a GHG reduction project baseline and demonstrate that the reduction of GHG emissions is real, permanent,

**Commented [AM10]:** APCD recommends that this mitigation measure also state that the excess impacts are to be determined relative to baseline or a reset baseline if decommissioning activities are halted for a year or more. Also, this measure references the APCD's 2021 Interim CEQA GHG guidance. While that 2021 Guidance was what was available at the time this EIR was being developed, for this long term project, APCD recommends that the language in this measure be refined based on APCD's August 2023 CEQA GHG guidance and pending refinements to that guidance because they will provide current best practices.

quantifiable, verifiable, enforceable, and additional. For the purposes of this mitigation measure, the definitions of 17 CCR 95802(a) shall apply. Note that enforceable, as defined in 17 CCR 95802(a), is specific to CARB's Cap-and-Trade regulatory program, where CARB holds enforcement authority. This mitigation measure would generate GHG reductions outside of CARB enforcement authority. Therefore, enforceable is modified to mean in this context that the GHG reduction project generating the GHG offset must be owned by a single entity and must be backed by a legal instrument or contract that defines exclusive ownership.

- GHG reductions from voluntary-market registry offset credits listed with and verified by: (1) one of the following CARB-approved Offset Project Registries: American Carbon Registry (ACR); Climate Action Reserve (CAR); or Verra, formerly Verified Carbon Standard. "Offset Project Registry" has the same definition as that set forth in Section 95802 of Title 17 of the California Code of Regulations (17 CCR 95802); (2) Climate Forward; or (3) GHG reduction/carbon sequestration supplies that are consistent with requirements specified in the State CEQA Guidelines and case law. Offset credits should be selected based on the preference hierarchy found in SLO County APCD's 2021 Interim GHG Guidance or the 2022 CARB Scoping Plan Update Appendix D Section 4.1.

*Plan Requirements and Timing.* The GHG reductions achieved, credits surrendered, or any GHG offset project sponsored by the Applicant or its designee, must be supported by a demonstration to the County that any local projects are acceptable to San Luis Obispo County APCD and that any offsets are consistent with requirements specified in the State CEQA Guidelines and case law. The GHG Reduction and Reporting Plan shall be submitted to the County Department of Planning and Building for review and approval in consultation with the San Luis Obispo County Air Pollution Control District, upon the filing of any building, grading or construction permit applications related to decommissioning. The necessary annual quantity of local GHG reduction/carbon sequestration projects shall be committed to and any verified offset credits under this plan shall be surrendered prior to April 15 of each calendar year following the year of initiating construction.

*Monitoring.* The County Department of Planning and Building, in consultation with the San Luis Obispo County APCD, will review and approve the GHG Reduction and Reporting Plan and any proposed GHG reduction credits prior to their use as mitigation and prior to initiating decommissioning activities. Subsequent annual reporting of GHG emissions and reduction or offset measures implemented will be reviewed and approved by the County Department of Planning and Building in consultation with the San Luis Obispo County APCD.

**Impact GHG-2: Conflict with GHG emissions reduction plans, policies, or regulations (Class III: Less than Significant).**

The GHG emissions sources of the Proposed Project would not be directly regulated by any federal, state, or local GHG emission reduction programs. Decommissioning activities would either be exempt from direct regulation or would be indirectly controlled by the mandatory use

of fuels and equipment fleets that comply with CARB standards to reduce GHG emissions. Transportation fuels (diesel, gasoline, and fuels used by commercial harbor craft) used during the decommissioning activities would need to comply with California's Low Carbon Fuel Standard, which is a standard designed to decrease the carbon intensity of California's transportation fuel supply and provide an increasing range of low-carbon and renewable transportation fuel alternatives. Equipment and vehicles used during decommissioning (Phases 1 and 2) would also need to attain state and federal efficiency standards through the use of recent model-year engines (AC AQ-2), which would avoid unnecessary GHG emissions, and by minimizing use of conventional fossil fuels (AC AQ-6). Compliance with regulations and programs for energy efficiency would also help to reduce GHG emissions from vehicles (see Appendix C).

Decommissioning wastes including concrete and asphalt that can be recycled and reused. The Concrete Reuse Plan would increase the reuse of concrete on site and eliminate the need for off-site transportation and disposal. California's Climate Change Scoping Plan (CARB, 2017) identifies waste diversion and recycling as a policy goal to reduce GHG emissions, and the State has a policy goal that 75 percent of the solid waste generated by a source be reduced, recycled, or composted by 2020. The Conservation and Open Space Element of the San Luis Obispo County General Plan established goals to reduce community-wide GHG emissions by 2020. Although the County does not have a qualified Climate Action Plan under SB 32, the County's EnergyWise Plan (San Luis Obispo, 2016) identifies how government operations and community-wide action may be directed to achieve the GHG reduction goals of the County. The Proposed Project activities would not alter the efforts underway to reduce GHG emissions from government operations and community-wide sources in the County, although the proposed decommissioning activities include steps to recycle and reuse waste, which would be consistent with the County goals for reducing GHG emissions. The Proposed Project would not have any potential to conflict with the goals of the EnergyWise Plan.

There are no other federal, state, or local GHG emissions reduction regulations, policies, or plans that would directly apply to the Proposed Project's GHG emissions sources. Therefore, the Proposed Project would not conflict with any applicable plan, policy, or regulation related to reducing GHGs. Therefore, the potential to conflict with GHG emissions reduction plans, policies, or regulations would be less than significant (Class III).

**Mitigation Measures for Impact GHG-2.** No mitigation measures are required.

#### ***Post-Decommissioning Operations***

**New Facility Operations.** Following Phase 2, operational activities at the DCCP site would include long-term management of the GTCC Waste Storage facility and operation of the Security Building, indoor Firing Range, and Storage Buildings. These activities would require use of equipment and vehicles that would cause GHG emissions at levels below those that would occur during decommissioning. The post-decommissioning operations would not be directly subject to any GHG emission reduction regulations and would either be exempt from or would be required to comply with CARB rules and regulations to reduce GHG emissions. These activities would cause no potential conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions (Class III).

**Commented [AM11]:** The APCD recommends that this section of the EIR also evaluate the project's consistency with the CARB 2022 Scoping Plan, SLOCOG's 2023 Regional Transportation Plan and Sustainable Communities Strategy, Caltrans Sustainability Road Map 2022-2023, and how the EIR uses applicable guidance for project developers in the CAPCOA's 2021 Handbook to reduce conflict with GHG reduction plans, policies, and regulations.

**Future Actions.** Marina improvement and operations would include GHG emissions caused by the use of small vessels for recreational, education, and/or commercial purposes. The third-party operator would be required to obtain the necessary land use and building permits from the County and a new or amended lease from CSLC. These future actions would cause no potential conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions (Class III).

#### 4.9.5 Cumulative Impact Analysis

##### Geographic Extent Context

This impact assessment describes impact of the Proposed Project of contributing towards global climate change through GHG emissions. Because the direct environmental effect of GHG emissions is to influence global climate change, GHG emissions are by their nature inherently a cumulative concern with a cumulatively global scope.

##### Cumulative Impact Analysis

No single project could, by itself, result in a substantial change in climate. As the project-specific analysis for this Proposed Project evaluates effects that are globally cumulative, there is no separate cumulative impacts analysis for global climate change.

Furthermore, the evaluation of GHG impacts evaluates the contribution of the Proposed Project to inherently address cumulative climate change effects and demonstrates that the Proposed Project with mitigation would not generate significant levels of GHG emissions and would not conflict with GHG reduction goals. The Project-specific incremental impact on GHG emissions would therefore not be cumulatively considerable.

#### 4.9.6 Summary of Significance Findings

Table 4.9-4 presents a summary of the environmental impacts, significance determinations, and mitigation measures for the Proposed Project.

**Table 4.9-4. Summary of Impacts and Mitigation Measures – Greenhouse Gas Emissions**

Impact Statement	Impact Significance Class				Mitigation Measures
	Phase 1		Phase 2 Post-Decom		
	DCPP	PBR /SB	DCPP	Ops/ Marina	
<b>GHG-1:</b> Generate GHG emissions that may have a significant impact on the environment	II	II/II	II	III/III	<b>GHG 1:</b> Reduce GHG Emissions or Surrender Offset Credits
<b>GHG-2:</b> Conflict with GHG emissions reductions plans, policies, or regulations	III	III/III	III	III/III	None required
Cumulative Impact	Not cumulatively considerable		Not cumulatively considerable		None required

Acronyms: PBR = Pismo Beach Railyard, SB = Betteravia Industrial Park (Santa Barbara County), Post-Decom = Post-Decommissioning, Ops = Long-Term Operations, Class I = Significant and Unavoidable, Class II = Less than Significant with Mitigation, Class III = Less than Significant, Class IV = Beneficial, NI = No Impact.