

MEMORANDUM

To: Darlene Walter, SeaWorld San Diego
From: Adam Poll, Dudek
Subject: Air Quality and Greenhouse Gas Emissions Technical Memorandum for the 2020 SeaWorld Master Plan Update
Date: October 27, 2021
cc: Asha Bleier, Dudek

Dudek is pleased to submit this air quality and greenhouse gas (GHG) emissions assessment to assist the SeaWorld San Diego (SeaWorld) with environmental planning requirements for the 2020 SeaWorld Master Plan Update (Project).

This memorandum evaluates potential air quality impacts from construction and operation of the Project in accordance with the California Environmental Quality Act (CEQA) Guidelines and in comparison to the 2001 Final Environmental Impact Report for the SeaWorld Master Plan Update (2001 FEIR).

The contents and organization of this memorandum are as follows:

- Section 1, Project Description
- Section 2, Air Quality Assessment
- Section 3, Conclusions
- Section 4, References Cited

1 Project Description

SeaWorld is updating its 2002 Master Plan to provide a comprehensive update that has largely been implemented. As with the 2002 SeaWorld Master Plan Update, the 2020 Master Plan sets forth the long-range conceptual development program, development parameters, and project review procedures for the future renovation and development of the entire leasehold area. The 2020 Master Plan would be part of the City's Local Coastal Program for Mission Bay Park.

SeaWorld's 2020 Master Plan would retain the five designated planning areas—theme park, guest parking, administration and support, SeaWorld Marina, and Perez Cove Shoreline; however, the 2020 Master Plan would transition from a “site-specific” development paradigm as outlined in the 2002 Master Plan to an “area-specific” development paradigm that more closely matches SeaWorld's future renovation needs. The 2020 Master Plan would define each planning area with a description of the existing uses, allowed uses, general development criteria, and project-specific development criteria for all future development within the SeaWorld leasehold. The 2020 Master Plan would not result in the expansion of the leasehold.

2 Air Quality Assessment

The Project is located within the San Diego Air Basin (SDAB) and is within the jurisdictional boundaries of the San Diego County Air Pollution Control District (SDAPCD), which has jurisdiction over the City where the Project is located. Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include VOCs, NO_x, CO, SO_x, particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (coarse particulate matter, or PM₁₀), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size (fine particulate matter, or PM_{2.5}). VOCs and NO_x are important because they are precursors to ozone (O₃).

2.1 Thresholds of Significance

The significance criteria used to evaluate the Project impacts to air quality is based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this air quality analysis, a significant impact would occur if the Project would (14 CCR 15000 et seq.):

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

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the Project would have a significant impact on air quality.

As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 requiring the preparation of air quality impact assessments for permitted stationary sources (SDAPCD 2016). The SDAPCD sets forth quantitative emissions thresholds below which a stationary source would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 1 are exceeded.

Table 1. San Diego Air Pollution Control District Air Quality Significance Thresholds

Construction Emissions	
Pollutant	Total Emissions (Pounds per Day)
Respirable Particulate Matter (PM ₁₀)	100
Fine Particulate Matter (PM _{2.5})	55
Oxides of Nitrogen (NO _x)	250
Oxides of Sulfur (SO _x)	250
Carbon Monoxide (CO)	550

Table 1. San Diego Air Pollution Control District Air Quality Significance Thresholds

Volatile Organic Compounds (VOCs)	137 ^a		
Operational Emissions			
Pollutant	Total Emissions		
	Pounds per Hour	Pounds per Day	Tons per Year
PM ₁₀	—	100	15
PM _{2.5}	—	55	10
NO _x	25	250	40
SO _x	25	250	40
CO	100	550	100
Lead and Lead Compounds	—	3.2	0.6
VOCs	—	137 ^a	15

Sources: SDAPCD 2016.

Notes: — = not available.

^a VOC threshold based on the threshold of significance for VOCs from the South Coast Air Quality Management District and the Monterey Bay APCD as stated in the City’s Guidelines for Determining Significance.

The thresholds listed in Table 1 represent screening-level thresholds that can be used to evaluate whether Project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 3, the Project could have the potential to result in a cumulatively considerable net increase in these pollutants and, thus, could have a significant impact on the ambient air quality.

With respect to odors, SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

The SDAPCD document Supplemental Guidelines for Submission of Air Toxics “Hot Spots” Program Health Risk Assessments provides guidance with which to perform health risk assessments (HRAs) within the SDAB. The current SDAPCD thresholds of significance for TAC emissions from the operations of both permitted and non-permitted sources are combined and are less than 1 in 1 million for cancer and less than 1.0 for the chronic hazard index (SDAPCD 2019b) for projects that do not implement technical best achievable control technology (T-BACT). For projects that implement T-BACT, the cancer threshold is 10 in 1 million.

2.2 Impact Analysis

Issue AQ-1. Would the Project conflict with or obstruct implementation of the applicable air quality plan?

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plans for attainment and maintenance of the ambient air quality standards in the basin—

specifically, the State Implementation Plan (SIP) and Regional Air Quality Strategy (RAQS).¹ The federal O₃ maintenance plan, which is part of the SIP, was adopted in 2012. The most recent O₃ attainment plan was adopted on October 14, 2020 and approved by the California Air Resources Board (CARB) on November 19, 2020. The SIP includes a demonstration that current strategies and tactics will maintain acceptable air quality in the SDAB based on the National Ambient Air Quality Standards (NAAQS). The RAQS was initially adopted in 1991 and is updated on a triennial basis (most recently in 2020). The RAQS outlines SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The SIP and RAQS rely on information from CARB and San Diego Association of Governments (SANDAG), including mobile and area source emissions, as well as information regarding projected growth in the County as a whole and the cities in the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the County and the cities in the County as part of the development of their general plans.

If a project proposes development that is greater than that anticipated in the local plan and SANDAG's growth projections, the project might be in conflict with the SIP and RAQS and may contribute to a potentially significant cumulative impact on air quality. According to the Project's Transportation Impact Analysis (TIA), the 2001 FEIR assumed 2,000 near-term daily trips and 15,300 horizon year daily trips, which includes employees and visitors (LLG 2020). The Project's near-term trips are expected to be 755 and horizon year daily trips would be 10,135, which would be a reduction in trips for the near-term and horizon year projection compared to the 2001 FEIR. As such, the Project would not be growth-inducing and would result in fewer emissions than what was included in the SIP and RAQS.

While the SDAPCD and City do not provide guidance regarding the analysis of impacts associated with air quality plan conformance, the County's Guidelines for Determining Significance and Report and Format and Content Requirements – Air Quality, does discuss conformance with the RAQS (County of San Diego 2007). The guidance indicates that if a project, in conjunction with other projects, contributes to growth projections that would not exceed SANDAG's growth projections for the City, the project would not be in conflict with the RAQS (County of San Diego 2007). As previously discussed, the Project would not contribute to growth in the region that is not already accounted for. Therefore, a **less than significant** impact would result.

Issue AQ-2. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and SDAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

¹ For the purpose of this discussion, the relevant federal air quality plan is the ozone maintenance plan (SDAPCD 2020). The RAQS is the applicable plan for purposes of state air quality planning. Both plans reflect growth projections in the SDAB.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for particulate matter, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated.

The 2001 FEIR estimated construction emissions from the SeaWorld Master Plan Update assuming 200,000 brake horsepower-hour of on-site equipment and off-site trucks to build out each acre. Table 2 presents the maximum daily emissions generated during construction of the Project as shown in the 2001 FEIR.

Table 2. Estimated Daily Construction Criteria Air Pollutant Emissions - Unmitigated

	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	Lbs per day					
<i>Maximum</i>	3	43	10	3	2	2
<i>SDAPCD Threshold</i>	137	250	550	250	100	55
Threshold Exceeded?	No	No	No	No	No	No

Notes: lbs = pounds; VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; SDAPCD = San Diego County Air Pollution Control District.

As shown in Table 2, the emissions of the 2001 FEIR's construction emissions would not exceed any of the SDAPCD's thresholds. The Project would not increase construction beyond what was evaluated in the 2001 FEIR. Furthermore, over-time construction fleets become more efficient as older equipment is retired and thus emissions from the Project would likely be lower assuming the same level of activity. Therefore, construction impacts associated with criteria air pollutant emissions would be **less than significant**. Although emissions during construction in Table 2 were shown to be less than significant without mitigation, the 2001 FEIR included mitigation measure 4.9-1 to reduce emissions of criteria air pollutants during construction. Mitigation measure 4.9-1 will still be required by the Project as described below.

Mitigation Measure 4.9-1 As a condition of any grading or building permit, construction management procedures shall be implemented to clean up dirt and debris spillage from public roads, and route construction traffic through the least sensitive areas. Use of transportation control measures to encourage carpooling among construction workers and to schedule deliveries to non-peak traffic hours is recommended to reduce adverse, but less than significant impacts from construction-related exhaust emissions.

No quantitative reductions were assumed with implementation of mitigation measure 4.9-1 and impacts as shown in Table 2 would remain **less than significant**.

Operational Emissions

Operation of the Project would generate VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from employee and visitor vehicles, marine vessels, and stationary sources (boilers, generators, spray booths, gasoline dispensing, etc.). As discussed in the TIA, the Project would result in a net reduction in daily trips associated with employees and visitors. The Project also has retired eight SDAPCD permits since the 2001 FEIR, including the four cogeneration units, three saltwater ozone treatment units, and marine coating station which would result in a net reduction in emissions associated with the stationary sources. The natural gas fired boiler has since been replaced with a low-NO_x version as well as the gasoline service 10,000-gallon tank being replaced with an 8,000-gallon tank due to a decrease in throughput. Similarly, the marine vessel activity would not increase beyond that evaluated in the 2001 FEIR. Finally, the emissions from mobile sources and marine vessels would decrease compared to what was evaluated in the 2001 FEIR due to fleet turnover and increases in mobile source and marine vessel efficiency. The 2001 FEIR concluded that the Project would result in less than significant air pollutant emissions during operation. Because the Project would result in fewer air quality emissions than what was evaluated in the 2001 FEIR, the Project would also result in a **less than significant** impact during operation.

Cumulative Analysis

The SDAB has been designated as a federal nonattainment area for O₃ and a state nonattainment area for O₃, PM₁₀, and PM_{2.5}. The poor air quality in the SDAB is the result of cumulative emissions from motor vehicles, off-road equipment, commercial and industrial facilities, and other emission sources. Projects that emit these pollutants or their precursors (i.e., VOCs and NO_x for O₃) potentially contribute to poor air quality. In analyzing cumulative impacts from a project, the analysis must specifically evaluate the project's contribution to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for the California Ambient Air Quality Standard (CAAQS) and NAAQS. If the project does not exceed thresholds and is determined to have less-than-significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, a project would only be considered to have a significant cumulative impact if the project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

Regarding short-term construction impacts, the SDAPCD thresholds of significance are used to determine whether the project may have a short-term cumulative impact. As shown in Table 2, the Project would not exceed the threshold for any criteria air pollutant during construction. Therefore, the Project would have a less than significant cumulative impact during construction.

Additionally, for the SDAB, the RAQS serves as the long-term regional air quality planning document for the purpose of assessing cumulative operational emissions in the basin to ensure the SDAB continues to make progress toward NAAQS- and CAAQS-attainment status. As such, cumulative projects located in the San Diego region would have the potential to result in a cumulative impact to air quality if, in combination, they would conflict with or obstruct implementation of the RAQS. Similarly, individual projects that are inconsistent with the regional planning documents upon which the RAQS is based would have the potential to result in cumulative operational impacts if they represent development and population increases beyond regional projections.

Regarding long-term cumulative operational emissions in relation to consistency with local air quality plans, the SIP and RAQS serve as the primary air quality planning documents for the state and SDAB, respectively. The SIP and RAQS rely on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their general plans. Therefore, projects that propose development that is consistent with the growth anticipated by local plans would be consistent with the SIP and RAQS and would not be considered to result in cumulatively considerable impacts from operational emissions. As stated previously, the Project would not result in significant regional growth that is not accounted for within the RAQS. As a result, the Project would not result in a cumulatively considerable contribution to pollutant emissions. Cumulative impacts would be **less than significant** during construction and operation.

Issue AQ-3. Would the Project expose sensitive receptors to substantial pollutant concentrations?

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts (such as cancer) upon sensitive receptors are the most serious hazards of existing air quality conditions in the area. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the SDAPCD (SDAPCD 2019a), include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. As such, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. The closest sensitive receptors to the Project are the South Shores park, Sunset Point Park, and residences across Highway 8.

Health Impacts of Toxic Air Contaminants

Construction

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a TAC. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

TACs are identified by federal and state agencies based on a review of available scientific evidence. In the state of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management and reduction was designed to protect residents from the health effects of toxic substances in the air. In addition, the California Air Toxics “Hot Spots” Information and Assessment Act, Assembly Bill (AB) 2588, was enacted by the legislature in 1987 to address public concern over the release of TACs into the atmosphere.

Examples of TACs include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills.

Project construction would result in emissions of diesel particulate from heavy construction equipment and trucks accessing the site. Diesel particulate is characterized as a TAC by the State of California. The OEHHA has identified carcinogenic and chronic noncarcinogenic effects from long-term exposure, but has not identified health effects due to short-term exposure to diesel exhaust. According to the OEHHA, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the Project. Thus, the duration of the proposed construction activities would only constitute a small percentage of the total 30-year exposure period. As previously discussed, the Project would not exceed the level of construction assessed in the 2001 FEIR and due to improvements in technology and fleet turnover, emissions of TACs would be reduced during construction compared to the 2001 FEIR. Furthermore, construction would not occur in one location throughout the duration and would not concentrate emissions in one location. Finally, sensitive receptors are not in close proximity to any planned development within the Project. Therefore, TACs generated by the Project would not result in concentrations causing significant health risks. Overall, the Project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the Project from construction activities, and impacts would be less than significant.

Operation

Operation of the Project would generate TAC emissions from employee and visitor vehicles, marine vessels, and stationary sources (boilers, generators, spray booths, gasoline dispensing, etc.). As discussed in the TIA, the Project would result in a net reduction in daily trips associated with employees and visitors. The Project also has retired eight SDAPCD permits since the 2001 FEIR, including the four cogeneration units, three saltwater ozone treatment units, and marine coating station which would result in a net reduction in emissions associated with the stationary sources. The natural gas fired boiler has since been replaced with a low-NO_x version as well as the gasoline service 10,000-gallon tank being replaced with an 8,000-gallon tank due to a decrease in throughput. Similarly, the marine vessel activity would not increase beyond that evaluated in the 2001 FEIR. Finally, the emissions from mobile sources and marine vessels would decrease compared to what was evaluated in the 2001 FEIR due to fleet turnover and increases in mobile source and marine vessel efficiency. The 2001 FEIR concluded that the Project would result in less than significant impact to sensitive receptors during operation. Because the Project would result in fewer TAC emissions than what was evaluated in the 2001 FEIR, the Project would also result in a **less than significant** impact during operation.

Health Impacts of Carbon Monoxide

Mobile-source impacts occur on two basic scales of motion. Regionally, Project-related travel would add to regional trip generation and increase the vehicle miles traveled (VMT) within the local airshed and the SDAB. Locally, Project-related traffic would be added to the City's roadway system. If such traffic occurs during periods of poor atmospheric ventilation, consists of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and operates on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale CO "hotspots" in the area immediately around points of congested traffic. Because of continued improvement in mobile emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SDAB is steadily decreasing. As the City does not have guidance for preparing a CO hotspots analysis, the County of San Diego's guidelines are discussed as follows. During construction, projects that cause road intersections to operate at or below level of service (LOS) E and the addition of peak-hour trips from a project and

surrounding projects exceeds 3,000 have the potential to create CO concentrations exceeding the CAAQS. The 2001 FEIR concluded that the Project would not result in a CO hotspot during construction. As previously discussed, the level of construction activity in the updated master plan will not exceed that evaluated within the 2001 FEIR. Therefore, impacts during construction would be **less than significant**.

During operation, projects that cause road intersections to operate at or below LOS E (analysis required only when the addition of peak-hour trips from a proposed project and the surrounding projects exceeds 2,000) and create a CO hotspot create a cumulatively considerable net increase of CO. The Project would result in a decrease in mobile source emissions due to decreased trips and increases in emissions control equipment compared to the 2001 FEIR. Therefore, a CO hotspot analysis is not needed and the Project would have a **less than significant** impact.

Health Impacts of Other Criteria Air Pollutants

Construction and operation of the Project would not result in emissions that exceed the SDAPCD's emission thresholds for any criteria air pollutants. Furthermore, activity would not exceed that evaluated within the 2001 FEIR. Regarding VOCs, some VOCs are associated with motor vehicles and construction equipment, while others are associated with architectural coatings, the emissions of which would not result in the exceedances of the SDAPCD's thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, SDAPCD Rule 67.0.1 restricts the VOC content of coatings for both construction and operational applications.

Furthermore, VOCs and NO_x are precursors to O₃, for which the SDAB is designated as nonattainment with respect to the NAAQS and CAAQS (the SDAB is designated by the EPA as an attainment area for the 1-hour O₃ NAAQS standard and 1997 8-hour NAAQS standard). The health effects associated with O₃ are generally associated with reduced lung function. The contribution of VOCs and NO_x to regional ambient O₃ concentrations is the result of complex photochemistry. The increases in O₃ concentrations in the SDAB due to O₃ precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O₃ concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O₃ ambient air quality standards tend to occur between April and October when solar radiation is highest.

Regarding NO₂, according to the construction emissions analysis, construction of the Project would not contribute to exceedances of the NAAQS and CAAQS for NO₂. Health impacts from exposure to NO₂ and NO_x are associated with respiratory irritation, which may be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, these operations would be relatively short term. Additionally, off-road construction equipment would operate at various portions of the site and would not be concentrated in one portion of the site at any one time. Construction of the Project would not require any stationary emission sources that would create substantial, localized NO_x impacts. Therefore, health impacts would be considered less than significant.

The VOC and NO_x emissions, as described previously, would minimally contribute to regional O₃ concentrations and its associated health effects. In addition to O₃, NO_x emissions would not contribute to potential exceedances of the NAAQS and CAAQS for NO₂. The existing NO₂ concentrations in the area are well below the NAAQS and CAAQS standards. Thus, it is not expected that the Project's operational NO_x emissions would result in exceedances of the NO₂ standards or contribute to the associated health effects.

CO tends to be a localized impact associated with congested intersections. The associated CO “hotspots” were discussed previously as a less-than-significant impact. Thus, the Project’s CO emissions would not contribute to significant health effects associated with this pollutant. Likewise, PM₁₀ and PM_{2.5} would not contribute to potential exceedances of the NAAQS and CAAQS for particulate matter, would not obstruct the SDAB from coming into attainment for these pollutants, and would not contribute to significant health effects associated with particulates.

Based on the preceding considerations, health impacts associated with criteria air pollutants would be **less than significant**.

Issue AQ-4. Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Section 41700 of the California Health and Safety Code and SDAPCD Rule 51 (Public Nuisance) prohibit emissions from any source whatsoever in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. Projects required to obtain permits from SDAPCD are evaluated by SDAPCD staff for potential odor nuisance, and conditions may be applied (or control equipment required) where necessary to prevent occurrence of public nuisance.

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors. Odor issues are very subjective by the nature of odors themselves and due to the fact that their measurements are difficult to quantify. As a result, this guideline is qualitative and will focus on the existing and potential surrounding uses and location of sensitive receptors.

The occurrence and severity of potential odor impacts depends on numerous factors: the nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

Construction

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the Project. Potential odors produced during proposed construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be **less than significant**.

Operation

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Project includes an emergency generator and natural gas boilers. The emergency generator would be used infrequently and an odor emissions during testing and maintenance would disperse rapidly. Similarly, the boilers

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are not anticipated to generate odors during operation. Therefore, Project operations would result in an odor impact that would be **less than significant**.

3 Conclusions

The Project would not have growth inducing effects and thus would be consistent with the RAQS and SIP. The Project would not exceed the SDAPCD's mass daily and annual significance thresholds during construction or operation. The Project would not increase emissions of air quality pollutants or TACs that would exceed that evaluated within the 2001 FEIR. The Project would result in less than significant impacts of other emissions such as odors. Therefore, air quality impacts would be **less than significant**, no mitigation would be required, and no new impacts beyond those identified in the 2001 FEIR would occur.

4 References Cited

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

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