

2.3 Air Quality

This section summarizes information from the *Air Quality/Global Climate Change Analysis* prepared by RBF Consulting for the proposed Project, included as Appendix C of this SEIR, and evaluates existing conditions for air quality plans, air quality attainment in the County, hazardous air pollutants, and odors relative to the Project areas addressed in this SEIR, as well as the potential effects that implementation of the proposed Project may have on these conditions.

2.3.1 Existing Conditions

The General Plan Update PEIR included a discussion of existing conditions related to air quality in Chapter 2.3.1 of the Air Quality chapter, including the FCI lands covered by this project proposal. The air quality conditions described in the General Plan Update PEIR are similar to the conditions on the ground today. No changes to the existing conditions have been identified that would alter the conclusions in the General Plan Update PEIR. All references used in the General Plan Update PEIR (Chapter 6) were reviewed to ensure they are still valid today.

The General Plan Update PEIR described the existing ambient air quality and provided ambient background air quality data for the San Diego Air Basin (SDAB) based on information from the San Diego Air Pollution Control District (APCD). This included data from 2003 to 2007 for criteria air pollutants addressed in the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). Since certification of the General Plan Update PEIR in August 2011 more recent ambient background air quality data has been made available by the APCD. The APCD 2008 Annual Report and 2009 Annual Report show a similar and improving trend for background ambient air pollutant levels in the SDAB as described in the General Plan Update PEIR (APCD 2008a and APCD 2009a).

Also since certification of the General Plan Update PEIR, the SDAB was designated as an attainment area for the 1997 8-hour NAAQS for Ozone (O₃). However, this reclassification did not change the SDAB nonattainment designation for the more stringent 2008 8-hour NAAQS for O₃. As such, the SDAB attainment status remains similar to the attainment status described in the General Plan Update PEIR.

Although this updated information has become available since the certification of the General Plan Update PEIR, the new data does not substantially change the existing conditions or alter any conclusions previously described for air quality in the General Plan Update PEIR. The SDAB has the same attainment status for the most stringent NAAQS and CAAQS, similar improving trends for background ambient air pollutant levels, O₃ and particulate matter remain the main criteria air pollutants of concern in the SDAB, and the primary sources of these criteria air pollutants (e.g., on-road motor vehicles) are also similar to those described in the General Plan Update PEIR. All other existing conditions for air quality within the Project area analyzed in this SEIR are similar to those provided in the General Plan Update PEIR, and are hereby incorporated by reference.

2.3.2 Regulatory Framework

Chapter 2.3.2 of the General Plan Update PEIR describes the regulatory framework related to air quality and is hereby incorporated by reference. Applicable Federal regulations discussed include the Federal Clean Air Act, National Emissions Standards for Hazardous Air Pollutants Program, and the New Source Review and Prevention of Significant Deterioration. Applicable State regulations discussed include the California Clean Air Act, California State Implementation Plan, Assembly Bill 32, the California Climate Solutions Act of 2006 (Health and Safety Code Section 38500 et seq.), Executive Order #S-3-05, and the California Air Toxics “Hot Spots” Information and Assessment Act (AB 2588). Local Applicable regulations include the San Diego County Regional Air Quality Strategy (RAQS); APCD Rules and Regulations; and the County of San Diego Code of Regulatory Ordinances, Title 8, Division 7, Chapter 4, Section 87.428, Dust Control Measures.

Since the certification of the General Plan Update PEIR in August 2011, some of the regulations described in the General Plan Update PEIR have been revised, revoked, or new regulations have been adopted and are described below. These changes include repealing rules that were no longer necessary for the regulation of certain criteria air pollutant emissions, minor changes to the administrative portions of some rules, and the addition of Rule 55, Fugitive Dust Control, which was previously identified as being in development in the General Plan Update PEIR. Most of the rules and regulations described in the General Plan Update PEIR that would apply to the proposed Project remain the same. As such, these new or altered regulations do not substantially change the regulatory circumstances or alter any conclusions previously described for air quality in the General Plan Update PEIR. Therefore, except for the regulations discussed below, the regulatory framework discussion in the General Plan Update PEIR as pertains to air quality has not substantially changed since adoption of the General Plan in August 2011. Therefore, the regulatory framework applies equally to the Project areas addressed in this SEIR, and is therefore not repeated here.

National Ambient Air Quality Standards (NAAQS)

The General Plan Update PEIR described the NAAQS in Chapter 2.3.1.3, Ambient Air Quality Standards, of the Air Quality chapter and depicted these standards in Table 2.3-2, Federal and State Ambient Air Quality Standards. Since the certification of the General Plan Update PEIR in August 2011 the U.S. Environmental Protection Agency (EPA) revised the primary annual national standard for fine particulate matter (PM_{2.5}). On December 14, 2012 the EPA revised the primary annual PM_{2.5} standard from 15 micrograms per cubic meter (µg/m³) to 12 µg/m³ (CARB 2013).

Additionally, on July 5, 2013, the EPA designated the SDAB as an attainment (maintenance area) for the 1997 8-hour O₃ NAAQS threshold of 0.08 parts per million (ppm) (EPA 2013). However, the SDAB remains designated as nonattainment for the 2008 O₃ NAAQS of 0.075 ppm, as described in the General Plan Update PEIR (County of San Diego 2011). To be

designated attainment, the APCD adopted a maintenance plan on December 5, 2012, pursuant to the Clean Air Act Section 175A, demonstrating that the area will maintain compliance with the 1997 O₃ NAAQS for at least 10 years after being designated as attainment, and specifying contingency measures to be implemented if a violation is monitored at any time during the 10-year maintenance period. In addition to the maintenance demonstration and contingency measures, the maintenance plan must also identify the attainment inventory, and commit to continued air quality monitoring and verification of attainment. All existing oxides of nitrogen (NO_x) and volatile organic compounds (VOC) emission control rules and regulations approved into the Ozone State Implementation Plan (SIP) and applicable to San Diego County are retained in the Maintenance Plan (APCD 2012).

San Diego County Regional Air Quality Strategy (RAQS)

As described in Chapter 2.3.2.3, of the General Plan Update PEIR, when the General Plan Update PEIR was being prepared the 2009 RAQS was still in development. The RAQS was initially adopted in 1991 and is updated on a triennial basis, most recently in 2009. As described in the General Plan Update PEIR, the RAQS outlines the APCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS outlines APCD's plans and control measures designed to attain the State air quality standards for O₃. As with the SIP, the RAQS accommodates emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Emissions and reduction strategies related to mobile sources are also considered in the RAQS. The APCD has also developed the air basin's input to the SIP, which is required under the federal Clean Air Act for areas that are out of attainment of air quality standards (APCD 2009b).

The RAQS relies on information from California Air Resources Board (CARB) and the San Diego Association of Governments (SANDAG), including mobile and area source emissions, and information regarding projected growth in the cities and San Diego 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 cities and San Diego County as part of the development of their general plans. The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the SDAB. The SIP also includes rules and regulations that have been adopted by the APCD to control emissions from stationary sources. These SIP-approved rules may be used as a guideline to determine whether a project's emissions would have the potential to conflict with the SIP and thereby hinder attainment of the NAAQS for O₃ (County of San Diego 2011).

San Diego Air Pollution Control District (APCD) Rules and Regulations

Since the General Plan Update PEIR was certified in August 2011, several APCD rules described in the General Plan Update PEIR have been revoked, revised, or adopted. The rules

that have been revoked, revised, or adopted that were specifically mentioned in the General Plan Update PEIR or that would reasonably apply to the proposed Project are described below. APCD Rule 67.6, Solvent Cleaning Operations, was repealed effective May 23, 2008. This rule regulates surface cleaning and striping operations or gas-path cleaners which use solvents for the purpose of removing surface impurities or coatings and products for painting, plating, assembly, heat treatment, and other processes (APCD 2008b).

Minor portions of Rule 69.3.1, Stationary Gas Turbine Engines – Best Available Retrofit Control Technology was revised effective February 24, 2010. This rule prescribes NO_x emission limits for stationary gas turbine engines, corresponding to Best Available Retrofit Technology, as well as monitoring and recordkeeping requirements. This rule applies to gas turbine engines rated at greater than 0.3 megawatts (APCD 2010).

Rule 1200 Toxic Air Contaminants Rule, and Rule 1210, Toxic Air Contaminant Public Health Risks – Public Notification and Risk Reduction, were also revised effective October 11, 2013 (APCD 2013a and APCD 2013b). These rules apply to any new, relocated, or modified emission unit which may increase emissions of one or more TACs that requires an Authority to Construct or Permit to Operate. These rules establish acceptable risk levels and emission control requirements for new and modified facilities that may emit additional TACs. Under Rule 1200, permits to operate may not be issued when emissions of TACs result in an incremental cancer risk greater than 1 in 1 million without application of Toxics-BACT (T-BACT), or an incremental cancer risk greater than 10 in 1 million with application of T-BACT, or a health hazard index (chronic and acute) greater than one.

In the General Plan Update PEIR Rule 55, Fugitive Dust Control, was identified as being in development. Since certification of the General Plan Update PEIR the APCD has adopted Rule 55, and regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site (APCD 2009c)

2.3.3 Analysis of Project Effects and Cumulative Impacts

The cumulative impact analysis study area for air quality in the General Plan Update PEIR was identified as the County and surrounding vicinity including the San Diego region or the airshed for reactive air pollutants and surrounding vicinity for nonreactive or less reactive pollutants (Chapter 2.3.4). As the proposed Project is applying 2011 General Plan principles to assign land use designations for the FCI lands throughout the unincorporated area, the cumulative study area for air quality is the same as the General Plan Update PEIR and is hereby incorporated by reference. In addition, Section 1.9 of this SEIR (Cumulative Project Assessment Overview), provides an update of new projects since adoption of the 2011 General Plan that are considered in the cumulative analysis in order to make the analysis complete.

2.3.3.1 Air Quality Plans

This section describes potential direct and cumulative impacts associated with air quality plans as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines, and the County of San Diego Guidelines for Determining Significance, Air Quality, the proposed Project would have a significant impact if it would conflict with or obstruct implementation of the RAQS, applicable portions of the SIP, and/or any local air quality plans.

Impact Analysis

The General Plan Update PEIR evaluated impacts from the adoption of the goals and policies of the 2011 General Plan countywide, including FCI lands. In addition, the 2011 General Plan Update PEIR evaluated buildout of the land use designations applied throughout the unincorporated area with the exception of former FCI lands. The 2011 General Plan PEIR determined that buildout under the 2011 General Plan would result in less than significant direct and cumulative impacts related to consistency with air quality plans due to the implementation of a combination of federal, State and local regulations and existing County regulatory processes. The discussion of impacts can be found in Chapter 2.3, Air Quality, section 2.3.3.1 of the General Plan Update PEIR and is hereby incorporated by reference. As stated in section 2.3.3 of the General Plan Update PEIR, these impacts would be less than significant through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; and the adopted 2011 General Plan goals and policies identified in the General Plan Update PEIR.

Similar direct and cumulative impacts identified in the General Plan Update PEIR related to consistency with air quality plans would occur with the proposed Project. As noted in the Project's *Air Quality/Global Climate Change Analysis* (Appendix C), the proposed Project would result in an increase in development within the unincorporated County lands resulting in corresponding increases in air pollutant emissions. As such, buildout of the proposed Project could result in impacts regarding a conflict with the RAQS, SIP, or other air quality plan. However, future development associated with the buildout of the proposed Project would be required to demonstrate compliance with the strategies and measures adopted as part of the RAQS and SIP during the County's environmental review process for each development application, as well as with the requirements of the County and/or APCD to reduce emissions of O₃ precursors and particulate matter. Furthermore, since certification of the General Plan Update PEIR the APCD has adopted additional regulations such as Rule 55 which would reduce potential fugitive dust emissions from construction during buildout of the proposed Project, as well as a Maintenance Plan for the 1997 O₃ NAAQS, which contains NO_x and VOC emission control measures. Future development associated with the buildout of the proposed Project

would also be required to demonstrate compliance with Rule 55 and the APCD Maintenance Plan.

Based on the requirements for consistency with emission control strategies in the RAQS, SIP, as well as APCD rules and regulations future development of the Project areas addressed in this SEIR would not conflict with or obstruct implementation of the San Diego RAQS or other applicable air quality plans. Therefore, implementation of the proposed Project would result in less than significant direct and cumulative impacts related to the consistency with air quality plans and no mitigation would be required.

2.3.3.2 *Air Quality Violations*

This section describes potential direct and cumulative impacts associated with the air quality violations due to the exceedance of established air pollutant thresholds as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines, and the County of San Diego Guidelines for Determining Significance, Air Quality, the proposed Project would have a significant impact if it would exceed the quantitative screening-level thresholds (SLTs) for the attainment-criteria pollutants (nitrogen dioxide [NO₂], sulfur dioxide [SO₂], and carbon monoxide [CO]), and for nonattainment-criteria pollutants (ozone [O₃] precursors and particulate matter). Specifically, the proposed Project would result in a significant impact if it would result in:

- a. Emissions that exceed 250 pounds per day of oxides of nitrogen [NO_x], or 75 pounds per day of volatile organic compounds [VOCs];
- b. Emissions of CO that, when totaled with the ambient concentrations, will exceed a 1-hour concentration of 20 parts per million (ppm) or an 8-hour average of 9 ppm, or exceed 550 pounds per day of CO, or 100 pounds per year of CO;
- c. Emissions of PM_{2.5} that will exceed 55 pounds per day; or,
- d. Emissions of PM₁₀ that exceed 100 pounds per day and increase the ambient PM₁₀ concentration by 5 micrograms per cubic meter (µg/m³) or greater at the maximum exposed individual.

Impact Analysis

The General Plan Update PEIR evaluated impacts from the adoption of the goals and policies of the 2011 General Plan countywide, including FCI lands. In addition, the General Plan Update PEIR evaluated buildout of the land use designations applied throughout the unincorporated area with the exception of former FCI lands. The General Plan Update PEIR determined that buildout under the 2011 General Plan would result in potentially significant direct and cumulative impacts related to air quality violations. The discussion of impacts can be found in Chapter 2.3 Air

Quality and is hereby incorporated by reference. These impacts would be reduced through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted 2011 General Plan goals and policies; and, specific mitigation measures/implementation programs identified in the General Plan Update PEIR; however, even with these programs in place, the impacts would not be reduced to below a level of significance because future development would exceed established quantitative SLTs.

Future development under the proposed Project would generate short-term emissions associated with construction activities within the unincorporated County lands, including emissions from off-road equipment, vehicles, fugitive dust from surface disturbance, and architectural coatings. Since construction emissions for individual projects would be temporary, and the total duration would vary from project to project, such emissions were therefore not modeled. Nevertheless, such emissions would be cumulative in nature, as future construction activities for several projects implementing the GPA could occur simultaneously. As such, the proposed Project would result in a potentially significant cumulative air quality impact with respect to construction-related emissions.

Similar direct and cumulative impacts identified in the General Plan Update PEIR related to air quality violations would occur with the proposed Project. As described in the Project's *Air Quality/Global Climate Change Analysis* (Appendix C), future development would result in criteria air pollutant emissions from construction. Construction of the proposed Project would result in the addition of pollutants to the local airshed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials and worker vehicle trips. Emissions resulting from construction of the proposed project would occur intermittently over the buildout of the proposed Project, and would cease following buildout of the proposed Project. Construction emissions can vary substantially from day to day depending on the level of activity, the specific type of operation and, for dust, prevailing weather conditions.

Following the completion of construction activities, future development resulting from buildout of the proposed Project could generate VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from Project-related land uses, as well as mobile and stationary sources including vehicular traffic from residents, space heating and cooling, water heating, and fireplace (hearth) use. Air quality violations due to area-wide and mobile source emissions that would exceed established SLTs for VOCs, NO_x, CO, PM₁₀, and PM_{2.5}; refer to Table 2.3-1, Area-Wide and Mobile Source Emissions for the Proposed Project. As a result, the proposed Project could result in potentially significant direct and cumulative impacts regarding an air quality violation. These potentially significant impacts resulting from implementation of the proposed Project would be reduced by the APCD regulations identified in Section 2.3.2 of this SEIR and implementation programs identified as a part of the General Plan Update Goals Policies identified in Section 2.3.4.2 of this SEIR. In addition, APCD Rule 55 – Fugitive Dust Control would require construction associated with buildout of the proposed Project to restrict visible emissions of fugitive dust

beyond the property line and would limit any fugitive dust (PM₁₀ and PM_{2.5}) that may be generated during grading and construction activities. Implementation of 2011 General Plan Goals and Policies and mitigation measures identified in the General Plan Update PEIR, repeated in Section 2.3.4.2 (Air Quality Violations) in this SEIR, would reduce the impacts resulting from proposed Project criteria air pollutant emissions. However, even with these programs in place, the impacts would not be reduced to below a level of significance due to the infeasibility of mitigation measures as discussed in Section 2.3.4.2. As such, implementation of the proposed Project would result in significant and unavoidable direct and cumulative impacts related to air quality violations.

2.3.3.3 Non-Attainment Criteria Pollutants

This section describes potential direct and cumulative impacts associated with the net increase of any non-attainment criteria pollutants as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines, and the County of San Diego Guidelines for Determining Significance, Air Quality, the proposed Project would have a significant impact if it would result in a net increase of any criteria pollutant for which the San Diego Air Basin (SDAB) is non-attainment under applicable federal or State Ambient Air Quality Standards (AAQS) (including emissions which exceed the SLTs for O₃ precursors listed in Table 2.3-1).

Impact Analysis

The General Plan Update PEIR evaluated impacts from the adoption of the goals and policies of the 2011 General Plan countywide, including FCI lands. In addition, the General Plan Update PEIR evaluated buildout of the land use designations applied throughout the unincorporated area with the exception of former FCI lands. The General Plan PEIR determined that buildout under the 2011 General Plan would result in potentially significant direct and cumulative impacts related to non-attainment criteria air pollutant emissions associated with PM₁₀, PM_{2.5}, and O₃ precursors (VOC and NO_x). The discussion of impacts can be found in Chapter 2.3 Air Quality of the General Plan Update PEIR and is hereby incorporated by reference. These impacts would be reduced through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; the adopted 2011 General Plan goals and policies; and, specific mitigation measures/ implementation programs identified in the General Plan Update PEIR; however, even with these programs in place, the impacts would not be reduced to below a level of significance because future development would exceed established SLTs and thereby result in a net cumulatively considerable contribution.

Similar direct and cumulative impacts identified in the General Plan Update PEIR related to air quality violations would occur with the proposed Project. The proposed Project could result in an impact due to the cumulative increase in pollutants for which the SDAB is designated as nonattainment for selected air pollutants under the CAAQS and NAAQS if emissions from the

proposed Project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the 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).

The SDAB is currently classified as a non-attainment area for the NAAQS and CAAQS for O₃, which is caused by contributions from O₃ precursors NO_x and VOCs. The SDAB is also classified as a non-attainment area for the CAAQS for PM₁₀ and PM_{2.5}. As previously described, the proposed Project would result in construction criteria pollutant emissions soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling construction materials and worker vehicle trips. The amount of criteria pollutant emissions resulting from construction of the proposed Project in any year would also depend on the rate of construction buildout. The proposed Project's construction emissions may not be evenly distributed across each year when construction would occur and could result in years with greater construction emissions or fewer construction emissions. Additionally, due to the uncertainty in construction timing during buildout of the proposed Project there is the potential for construction emissions to exceed the SLT's for the non-attainment criteria pollutants of VOCs, NO_x, PM₁₀, and PM_{2.5}. As such, the construction of the proposed Project could result in potentially significant direct and cumulative impacts from a net increase of any non-attainment criteria pollutants.

Implementation of the proposed Project would result in operational criteria air pollutant emissions from Project-related land uses, as well as mobile and stationary sources including vehicular traffic from residents, space heating and cooling, water heating, and fireplace (hearth) use. As noted in the Project's *Air Quality/Global Climate Change Analysis* (Appendix C), future development from buildout of the proposed Project would result in area-wide and mobile source emissions that would exceed established SLTs for the following non-attainment criteria pollutants: VOCs, NO_x, PM₁₀, and PM_{2.5}. As such, the proposed Project could result in potentially significant direct and cumulative impacts from a net increase of any non-attainment criteria pollutants. These potentially significant impacts resulting from implementation of the proposed Project would be reduced by the same regulations, implementation programs (2011 General Plan goals/policies) and mitigation measures from the General Plan Update PEIR and repeated in Section 2.3.4.3 (Non-Attainment Criteria Pollutants) in this SEIR; however, even with these programs in place, the impacts would not be reduced to below a level of significance due to the infeasibility of mitigation measures as discussed in Section 2.3.4.3. As such, implementation of the proposed Project would result in significant and unavoidable direct and cumulative impacts related to non-attainment criteria pollutants.

2.3.3.4 Sensitive Receptors

This section describes potential direct and cumulative impacts sensitive receptors as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines, and the County of San Diego Guidelines for Determining Significance, Air Quality, the proposed Project would have a significant impact if it would directly impact a sensitive receptor and result in a cancer risk of greater than 1 in one million without implementation of Toxics Best Available Control Technology (T-BACT), 10 in one million with implementation of T-BACT, or health hazard index of one or more, consistent with the APCD's Rule 1210 requirements for stationary sources.

Impact Analysis

The General Plan Update PEIR evaluated impacts from the adoption of the goals and policies of the 2011 General Plan countywide, including FCI lands. In addition, the General Plan Update PEIR evaluated buildout of the land use designations applied throughout the unincorporated area with the exception of former FCI lands. The General Plan Update PEIR determined that buildout under the 2011 General Plan would result in potentially significant direct and cumulative impacts to sensitive receptors. The discussion of impacts can be found in Chapter 2.3 Air Quality and is hereby incorporated by reference. These impacts would be reduced through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; and, specific mitigation measures/ implementation programs identified in the General Plan Update PEIR; however, even with these programs in place, the impacts would not be reduced to below a level of significance because future development would result in increased emissions of diesel particulate matter to an existing impacted air quality basin (SDAB).

Similar direct and cumulative impacts identified in the General Plan Update PEIR related to sensitive receptors would occur with the proposed Project. The greatest potential for TAC emissions during construction would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks. Sensitive receptors including residences, schools, and healthcare facilities could be located in proximity to construction areas resulting from buildout of the proposed Project. Additionally, the Project's *Air Quality/Global Climate Change Analysis* (Appendix C) describes how after construction associated with the proposed Project future development would result in increased vehicle trips and corresponding increases in emissions of diesel particulate matter. The land use changes as a result of the proposed Project are located throughout the unincorporated County and could be in proximity to sensitive receptors.

As a result the proposed Project could result in potentially significant direct and cumulative impacts regarding sensitive receptors. These potentially significant impacts resulting from implementation of the proposed Project would be reduced by the same regulations, implementation programs (2011 General Plan goals/policies), including an Authority to Construct from the APCD that would be required for TAC sources and associated emission control equipment. As part of the permit review, the SDAPCD will evaluate the health impacts associated with any new stationary emission sources (such as gas stations and dry cleaning facilities) and sources must comply with SDAPCD Rule 1200. Additionally, in accordance with

SDAPCD Rule 20, the SDAPCD cannot issue a permit if compliance with Rule 1200 (Toxic Air Contaminants – New Source Review) and all other applicable air quality rules and regulations is not demonstrated. Furthermore, these potential direct and cumulative impacts would be reduced through implementation of the mitigation measures from the General Plan Update PEIR and repeated in Section 2.3.4.4 (Sensitive Receptors) of this SEIR. However, even with these programs in place, the impacts would not be reduced to below a level of significance due to the infeasibility of mitigation measures as discussed in Section 2.3.4.4 of this document. Therefore, implementation of the proposed Project would result in significant and unavoidable direct and cumulative impacts related to sensitive receptors.

2.3.3.5 Odors

This section describes potential direct and cumulative impacts associated with objectionable odors as pertains to the Project areas addressed in this SEIR.

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines, and the County of San Diego Guidelines for Determining Significance, Air Quality, future development under the proposed Project would have a significant impact if it would result in the emission of objectionable odors to a considerable number of persons.

Analysis

The General Plan Update PEIR evaluated impacts from the adoption of the goals and policies of the 2011 General Plan countywide, including FCI lands. In addition, the General Plan Update PEIR evaluated buildout of the land use designations applied throughout the unincorporated area with the exception of former FCI lands. The General Plan Update PEIR determined that buildout under the 2011 General Plan would result in less than significant direct and cumulative impacts related to the production of objectionable odors due to the implementation of a combination of federal, State and local regulations; existing County regulatory processes; and, adopted 2011 General Plan goals and policies. The discussion of impacts can be found in Chapter 2.3 Air Quality and is hereby incorporated by reference.

Similar direct and cumulative impacts identified in the General Plan Update PEIR related to sensitive receptors would occur with the proposed Project. Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed Project could result in agricultural uses as an accessory land use to residences in Project areas. Agriculture as an accessory land use would typically not be in the magnitude required to cause substantial concentrations of odors. Odors would be generated from vehicles and/or equipment exhaust emissions during construction of the proposed project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and architectural coatings. Such odors are temporary and

generally occur at magnitudes that would not affect substantial numbers of people. However, the proposed Project could still result in potentially significant direct and cumulative impacts regarding odors if the source of the odors was in a great enough magnitude and in proximity to an odor sensitive receptor.

However, the proposed Project would be required to comply with a combination of federal, State and local regulations; existing County regulatory processes; and, adopted 2011 General Plan goals and policies related to the production of objectionable odors. Facilities that cause nuisance odors are subject to enforcement action by the APCD. Regarding odor impacts, the California Health and Safety Code Section 41700 and APCD Rule 51 prohibit emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. The APCD responds to odor complaints by investigating the complaint determining whether the odor violates APCD Rule 51. In the event of enforcement action, odor-causing impacts must be mitigated by appropriate means to reduce the impacts to sensitive receptors to less than significant. Such means include shutdown of odor sources or requirements to control odors using add-on equipment. Additionally, APCD Rule 67.0 limits the amount of VOCs from coatings and solvents, which would reduce potential odors during construction of future development resulting from buildout of the proposed Project. Therefore, future development of the Project areas addressed in this SEIR would result in less than significant direct and cumulative impacts related to objectionable odors and no mitigation would be required.

2.3.4 Mitigation

2.3.4.1 Air Quality Plans

The proposed Project would not result in significant direct and cumulative impacts related to consistency with air quality plans through the implementation of a combination of federal, State and local regulations; existing County regulatory processes; or adopted 2011 General Plan Goal COS-14 and Policies COS 14.1 through 14.13. Therefore, mitigation is not necessary.

2.3.4.2 Air Quality Violations

Direct and cumulative impacts associated with air quality violations would be reduced with implementation of the same applicable 2011 General Plan policies and mitigation measures as identified in the General Plan Update PEIR, and repeated in this section, although these impacts would not be reduced to below a level of significance because the County determined that implementation of the additional measures listed below would be infeasible for the following reasons:

- Require all construction activities to use equipment that is California Air Resources Board (CARB) certified Tier 3 or better. This measure could not be accomplished because it would require all construction contractors working within the County to turn over their existing equipment which remains usable, and would require a more stringent

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emissions standard than implemented by CARB. The CARB is currently implementing regulations that will require turnover of equipment to meet its regulatory standards for large vehicle fleets. The measure would limit which construction contractors would be allowed to work within the County and could result in undue costs to project applicants.

- Prohibit new development that would result in emissions from new vehicle trips that would exceed the screening level thresholds. This measure would result in restrictions on future development in areas identified for increased growth under the proposed Project because, with current vehicle emissions standards, it would severely limit development densities. This would conflict with the project's objective to support a reasonable share of projected regional population growth, because it would prohibit new development in the unincorporated County. In addition, if vehicle trips exceed screening level thresholds but a project is not proposing densities greater than what was expected by the general plan, those trips are accounted for in the RAQS and does not automatically mean the actual ambient air quality standards will be exceeded.
- Prohibit use of architectural coatings or other building materials that may result in emissions of VOCs. Only zero-VOC coatings and building materials would be allowed for use in the County. This measure would result in undue hardship on the entitlement process because most architectural coatings contain some VOCs and the measure would restrict the types of coatings that could be used to a limited type and number of formulations that may not be feasible for all applications. The VOC content in architectural coatings is regulated by the APCD, which has established a phase-in schedule for reduction of VOCs in accordance with the SIP requirements. The measure would also require the County to monitor and enforce the use of architectural coatings at all construction projects within its jurisdiction, which it does not have the funding or staffing available to accomplish.
- Encourage the construction of new development that would result in a reduction of vehicle trips because developers are able to demonstrate that they tie into an existing or planned alternative transportation network, such as transit (bus, train, trolley), bicycle network, walkways, and trails. This measure would result in restrictions on future development in areas identified for increased growth under the proposed Project because not all areas of planned growth have an existing or planned alternative transportation network that new development could tie into. Implementation of this mitigation measure would conflict with the Project objective to reinforce the vitality, local economy and individual character of existing communities by restricting future development to areas with existing alternative transportation networks, which excludes many rural areas.
- Require all applicants to provide on-site renewable energy systems, including solar, wind, geothermal, low-impact hydro power, biomass, and bio-gas. This measure would not be feasible because all applicants may not be able to provide renewable energy systems at all proposed locations. In addition, some energy systems may trigger additional regulatory

requirements from the California Public Utilities Commission (CPUC) or California Energy Commission (CEC) that would make individual projects infeasible to construct. Implementation of this measure would potentially increase infrastructure costs, which would conflict with the Project objective to minimize public costs of infrastructure and services; however, in circumstances where feasible, applicants will be encouraged to provide on-site renewable energy systems.

- Install vegetated roofs that cover at least 50 percent of roof area. This measure would be infeasible because residential and commercial buyers may find vegetated roofs to be undesirable, and it places the burden of developing the vegetated roof on the project applicant. The measure may also add additional monitoring requirements on the County to verify that vegetated roofs are properly maintained.
- Provide a spur at nonresidential projects to use nearby rail for goods movement. This measure would not be feasible because it would depend on the rail system and the availability of rail transit to individual projects, most of which would not be located near railroad networks. Implementation of this measure would conflict with the Project objective to ensure that development accounts for physical constraints, since much of the unincorporated County has limited access to the existing rail system.
- Require the use of locally made building materials for construction projects. This measure would not be feasible because it would severely limit development projects, as some specialized building materials for projects may not be available locally. The measure would also require the County to monitor and enforce building material purchases at construction projects within its jurisdiction, which it does not have the funding or staffing available to accomplish.

Because the measures listed above have been found to be infeasible, impacts would remain significant and unavoidable.

2011 General Plan Policies

Implementation of the following policies would reduce the proposed Project impacts associated with air quality violations, but not to below a level of significance for the reasons stated above.

COS-14.1 Land Use Development Form. Require that development be located and designed to reduce vehicular trips (and associated air pollution) by utilizing compact regional and community-level development patterns while maintaining community character.

COS-14.2 Villages and Rural Villages. Incorporate a mixture of uses within Villages and Rural Villages that encourage people to walk, bicycle, or use public transit to reduce air pollution and GHG emissions.

COS-14.8 Minimize Air Pollution. Minimize land use conflicts that expose people to significant amounts of air pollutants.

COS-14.9 Significant Producers of Air Pollutants. Require projects that generate potentially significant levels of air pollutants and/or GHGs such as quarries, landfill operations, or large land development projects to incorporate renewable energy, and the best available control technologies and practices into the project design.

COS-14.10 Low-Emission Construction Vehicles and Equipment. Require County contractors and encourage other developers to use low-emission construction vehicles and equipment to improve air quality and reduce GHG emissions.

COS-15.1 Design and Construction of New Buildings. Require that new buildings be designed and constructed in accordance with “green building” programs that incorporate techniques and materials that maximize energy efficiency, incorporate the use of sustainable resources and recycled materials, and reduce emissions of GHGs and toxic air contaminants.

COS-15.3 Green Building Programs. Require all new County facilities and the renovation and expansion of existing County buildings to meet identified “green building” programs that demonstrate energy efficiency, energy conservation, and renewable technologies.

COS-15.4 Title 24 Energy Standards. Require development to minimize energy impacts from new buildings in accordance with or exceeding Title 24 energy standards.

COS-15.5 Energy Efficiency Audits. Encourage energy conservation and efficiency in existing development through energy efficiency audits and adoption of energy saving measures resulting from the audits.

COS-16.2 Single-Occupancy Vehicles. Support transportation management programs that reduce the use of single-occupancy vehicles.

COS-16.3 Low-Emissions Vehicles and Equipment. Require County operations and encourage private development to provide incentives (such as priority parking) for the use of low- and zero-emission vehicles and equipment to improve air quality and reduce GHG emissions. [Refer also to PolicyM-9.3 (Preferred Parking) in the Mobility Element.]

COS-20.3 Regional Collaboration. Coordinate air quality planning efforts with federal and State agencies, SANDAG, and other jurisdictions.

These policies encourage mixed uses and alternative transportation to reduce emissions, reduce land use conflicts that expose people to air pollutants, and apply renewable energy and energy-efficiency practices to future development and to County facilities. Adherence to these policies will further reduce impacts associated with air quality violations from future development.

Mitigation Measures

Implementation of the following mitigation measures would reduce the proposed Project impacts associated with air quality violations, but not to below a level of significance for the reasons stated above.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

- Air-2.1** Provide incentives such as preferential parking for hybrids or alternatively fueled vehicles such as compressed natural gas (CNG) vehicles or hydrogen- or electric-powered vehicles. The County shall also establish programs for priority or free parking on County streets or in County parking lots for hybrids or alternatively fueled vehicles.
- Air-2.2** Replace existing vehicles in the County fleet as needed with the cleanest vehicles commercially available that are cost-effective and meet vehicle use needs.
- Air-2.3** Implement transportation fleet fueling standards to improve the number of alternatively fueled vehicles in the County fleet.
- Air-2.4** Provide incentives to promote the siting or use of clean air technologies where feasible. These technologies shall include, but not be limited to, fuel cell technologies, renewable energy sources, and hydrogen fuel.
- Air-2.5** Require that the following measures be implemented on all construction projects where project emissions are above the SLTs:
- Multiple applications of water during grading between dozer/scrapper passes
 - Paving, chip sealing or chemical stabilization of internal roadways after completion of grading
 - Use of sweepers or water trucks to remove “track-out” at any point of public street access
 - Termination of grading if winds exceed 25 miles per hour
 - Stabilization of dirt storage piles by chemical binders, tarps, fencing, or other erosion control
 - Use of low-sulfur fuels in construction equipment
 - Use of low-VOC paints
 - Projects exceeding SLTs will require 10% of the construction fleet to use any combination of diesel catalytic converters, diesel oxidation catalysts, diesel particulate filters and/or CARB certified Tier I, II, III, IV equipment. Equipment is certified if it meets emission standards established by the EPA for mobile non-road diesel engines of almost all types. Standards have been established for hydrocarbons, oxides of nitrogen (NO_x), carbon monoxide, and particulate matter. Tier I standards are for engines over 50 hp (such as bulldozers) built between 1996 and 2000, and engines under 50 hp (such as lawn tractors) built between 1999 and 2000. Tier II standards are for all engine sizes from 2001 to 2006, and

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Tier III standards are for engines rated over 50 hp from 2006 to 2008 (EPA 1998). Tier IV standards apply to engines of all sizes built in 2008 or later. Standards are increasingly stringent from Tier I to Tier IV (EPA 2004).

- Air-2.6** Use “County Guidelines for Determining Significance for Air Quality” to identify and mitigate adverse environmental effects on air quality.
- Air-2.7** Implement County APCD regulations for air emissions from all sources under its jurisdiction.
- Air-2.8** Require New Source Review (NSRs) to prevent permitting projects that are “major sources.”
- Air-2.9** Implement the Grading, Clearing, and Watercourses Ordinance by requiring all clearing and grading to be conducted with dust control measures.
- Air-2.10** Revise Board Policy F-50 to strengthen the County’s commitment and requirement to implement resource-efficient design and operations for County-funded renovation and new building projects. This could be achieved by making the guidelines within the policy mandatory rather than voluntary.
- Air-2.11** Implement County RAQS to attain State air quality standards for O₃.
- Air-2.12** Revise Board Policy G-15 to require County facilities to comply with Silver Leadership in Energy and Environmental Design (LEED) standards or other equivalent Green Building rating systems.
- Air-2.13** Revise Board Policy G-16 to require the County to:
- Adhere to the same or higher standards it would require from the private sector when locating and designing facilities concerning environmental issues and sustainability; and,
 - Require government contractors to use low emission construction vehicles and equipment.

Implementation of mitigation measure Air-2.1 would encourage use of low-emission vehicles by increasing the benefits of such use for the public. Air-2.2 would ensure that on-going County municipal operations result in minimal carbon emissions associated with vehicle usage. Air-2.3 would ensure County municipal operations result in minimal carbon emissions from vehicle usage. Air-2.4 provides incentives to promote the siting or use of clean air technologies where feasible. By increasing the benefits to using or developing such alternatives, potential impacts from pollutants will be substantially reduced. Application standards listed in Air-2.5 will prevent release of construction-related pollutants, thereby substantially reducing the potential for air

quality violations from new development. Air-2.6 will ensure that discretionary projects under the 2011 General Plan identify and mitigate significant impacts to air quality. Air-2.7 ensures that development will not violate air quality standards. The purpose of the New Source Reviews as required by Air-2.8 will ensure that new and modified sources do not aggravate existing air quality problems and/or negate emissions reductions from other sources. Implementation of Air-2.9 minimizes particulate matter emissions from construction and prevents nuisance to nearby persons or public or private property. Air-2.10 will substantially reduce emissions associated with County operations. Air-2.11 involves the implementation of County RAQS to attain State air quality standards for O₃. Air-2.12 encourages promotes LEED Silver standards or other equivalent Green Building rating systems into County facilities. Air-2.13 requires the County to adhere to high standards when locating and designing facilities concerning environmental issues and sustainability.

2.3.4.3 *Non-Attainment Criteria Pollutants*

Direct and cumulative impacts associated with non-attainment criteria pollutants would be reduced with implementation of the same applicable 2011 General Plan policies and mitigation measures identified in Section 2.3.4.2; however, not below a level of significance. As described in Section 2.3.4.2, the County determined that the implementation of the additional measures to reduce impacts associated with air quality violations to a less than significant level would be infeasible to implement for the reasons outlined. Therefore, the infeasible mitigation measures identified in Section 2.3.4.2 would not be implemented, and impacts would remain significant and unavoidable from the proposed Project standpoint.

2.3.4.4 *Sensitive Receptors*

The 2011 General Plan does not include policies relating specifically to sensitive receptors. Impacts would not be reduced to below a level of significance because the County determined that implementation of the additional measures listed below would be infeasible for the following reasons:

- Require that all off-road or non-road diesel engines, such as those associated with construction or extraction operations, be replaced by an alternative power source, such as electricity. This measure would limit which construction contractors would be allowed to work within the County because not all contractors have alternative power source equipment available and the measure could result in undue costs to the project applicant. Limiting the construction contractors allowed to work within the County would conflict with the Project objective to reinforce the vitality, local economy, and individual character of existing communities while balancing housing, employment and recreational opportunities. In addition, the County cannot monitor and enforce all construction activities within its jurisdiction due to funding and staffing deficiencies and ultimately because CARB has the responsibility of regulating emissions from off-road construction equipment.

SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

- Require all diesel trucks that travel on County roads to be equipped with filters or other devices that would limit diesel emissions to below a significant level. This measure is considered to be infeasible because the County cannot monitor all diesel traffic within its jurisdiction due to funding and staffing deficiencies and ultimately because CARB has the responsibility of regulating emissions from vehicles. Implementing this measure would result in increased public costs, which would conflict with the Project objective to minimize public costs of infrastructure and services.

Because the measures listed above have been found to be infeasible, impacts would remain significant and unavoidable.

Mitigation Measures

Implementation of the following mitigation measure would reduce Project impacts to sensitive receptors, but not to below a level of significance for the reasons stated above.

Air-4.1 Use the policies set forth in the CARB’s Land Use and Air Quality Handbook (CARB 2005) as a guideline for siting sensitive land uses. Implementation of this measure will ensure that sensitive land uses such as residences, schools, day care centers, playgrounds, and medical facilities are sited appropriately to minimize exposure to emissions of toxic air contaminants (TACs).

Implementation of this measure will ensure that sensitive land uses such as residences, schools, day care centers, playgrounds, and medical facilities are sited appropriately to minimize exposure to emissions of TACs.

2.3.4.5 Objectionable Odors

The proposed Project would not result in significant direct and cumulative impacts related to objectionable odors through the implementation of a combination of federal, State and local regulations and existing County regulatory processes. Therefore, no policies are identified and mitigation is not necessary.

TABLE 2.3-1. AREA-WIDE AND MOBILE SOURCE EMISSIONS FOR THE PROPOSED PROJECT

	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Tons/day (tons/year), Annual Average						
<i>Proposed Project Unmitigated Emissions</i>	232.76	1,561.66	311.29	4.74	64.46	35.45
<i>Proposed Project Mitigated Emissions</i>	220.24	1,556.67	306.84	4.74	64.45	35.43
County of San Diego SLT¹	13.7	40	100	40	15	10
Is threshold exceeded after mitigation?	Yes	Yes	Yes	No	Yes	Yes

Source: Air Quality/Global Climate Change Analysis (see Appendix C).

¹ SLTs in the General Plan Update Final PEIR are presented as tons/year and have been converted to tons/day for purposes of comparison with the County of San Diego and APCD emissions standards.

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