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4.9 Public Health

4.9.1 Introduction

This section describes the public health effects from PRP. The project area discussed in this section refers to all areas of temporary and permanent disturbance associated with the construction and operation of the new plant and ancillary systems. Other than reconductoring the existing 66-kV gen-tie to the SCE's Ganesha-Simpson transmission line, no new offsite linear facilities are required for the PRP.

Impacts associated with the project's emissions of criteria pollutants (i.e., pollutants for which federal or California AAQSs have been promulgated) are described in Section 4.1, Air Quality. Potential public exposure to accidental releases of hazardous materials during operation is addressed in Section 4.5, Hazardous Materials and Waste. To ensure worker safety during operations and construction, safe work practices will be followed as described in Section 4.15, Worker Safety.

4.9.2 Laws, Ordinances, Regulations, and Standards

The proposed project will be constructed and operated in accordance with all LORS applicable to Public Health. Federal, state, and local LORS applicable to Public Health are discussed below and summarized in Table 4.9-1.

4.9.2.1 Federal

Clean Air Act. The CAA requires large projects (new or modified sources at major stationary sources) to go through a federal permitting process that ensures the project will not cause or contribute to a violation of an NAAQS. The emissions from PRP are below the thresholds for applicability of the federal permitting requirements, and PRP will not be required to obtain a PSD permit.

40 C.F.R. Part 68 (Risk Management Plan). Facilities storing or handling significant amounts of acutely hazardous materials are required to prepare and submit RMPs. PRP will store aqueous ammonia which will be used in the SCR system of the simple-cycle unit. The aqueous ammonia concentration will be limited to no greater than 19 percent by weight. This percentage concentration is below the 40 C.F.R. Part 68, Section 112(r) (Table 1) risk management planning applicability threshold. Therefore, while it appears that the PRP will not store any substance in quantities exceeding the applicability thresholds, the Applicant is in the process of determining whether a RMP will be required.

40 C.F.R. Part 63 – National Emission Standards for Hazardous Air Pollutants. This program establishes national emission standards to limit emissions of HAPs (or air pollutants identified by USEPA as causing or contributing to the adverse health effects of air pollution, but for which NAAQS have not been established) from major sources of HAPs in specific source categories. These standards are implemented at the local level with federal oversight. Only the NESHAPs for gas turbines, which limit formaldehyde emissions from a gas turbine, are potentially applicable to a new power plant project. However, the gas turbine NESHAP is not expected to be applicable to the proposed project, because PRP would not be a major source of HAPs (i.e., less than 10 tpy of one HAP or 25 tpy of all HAPs). Thus, the NESHAP requirements will not be addressed further.

Table 4.9-1. Summary of LORS – Public Health
Small Power Plant Exemption Application for the Pomona Repower Project

LORS	Administering Agency	Applicability	SPPE Section
Federal			
Clean Air Act	USEPA Region 9, ARB, and SCAQMD	Requires large facilities to provide offsets and demonstrate that new emissions will not cause or contribute to violation of a federal AAQS.	Sections 4.9.2.1 and 4.9.4.8
40 Code of Federal Regulations Part 68 (Risk Management Plan)	USEPA Region 9 and Los Angeles County Department of Environmental Health	Requires facilities storing or handling significant amounts of acutely hazardous materials to prepare and submit RMPs.	Sections 4.9.2.1 and 4.9.4.8; Section 4.5, Hazardous Materials
State			
Health and Safety Code 25249.5 et seq. (Safe Drinking Water and Toxic Enforcement Act of 1986—Proposition 65)	California Office of Environmental Health Hazard Assessment (OEHHA)	Activities resulting in doses or carcinogenic risks above specified thresholds require Proposition 65 exposure warnings.	Section 4.9.2.2
Health and Safety Code, Article 2, Chapter 6.95, Sections 25531 to 25541; Cal. Code Regs. Title 19 (Public Safety), Division 2 (Office of Emergency Services), Chapter 4.5 (California Accidental Release Prevention Program)	Los Angeles County Department of Environmental Health	Requires facilities storing or handling significant amounts of acutely hazardous materials to prepare and submitRMPs.	Sections 4.9.2.2; 4.9.4.8, and 4.9.7 Section 4.5, Hazardous Materials
Health and Safety Code Sections 44360 to 44366 (Air Toxics "Hot Spots" Information and Assessment Act—AB 2588)	SCAQMD and ARB	Requires preparation and biennial updating of facility emission inventory of hazardous substances; risk assessments.	Sections 4.9.2.2; 4.9.4.3, and 4.9.4.5
Local			
SCAQMD Rule 1401 (New Source Review Requirements for Air Toxics)	SCAQMD with ARB oversight	Requires units to comply with risk threshold levels.	Section 4.9.2.3

4.9.2.2 State

Health and Safety Code 25249.5 et seq. (safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65). Activities that expose the public to significant levels of chemicals that are carcinogenic or that can cause reproductive harm must provide warnings. Based on an HRA that follows ARB/OEHHA guidelines, non-criteria pollutant emission rates and resulting doses and carcinogenic risks will not exceed thresholds that require Proposition 65 exposure warnings.

Health and Safety Code, Article 2, Chapter 6.95, Sections 25531 to 25541; Cal. Code Regs. Title 19 (Public Safety), Division 2 (Office of Emergency Services), Chapter 4.5 (California Accidental Release Prevention Program, CalARP). Facilities storing or handling significant amounts of acutely hazardous materials are required to prepare and submit RMPs. As indicated above, PRP will not store any substance (other than aqueous ammonia) in quantities exceeding the applicability thresholds.

Health and Safety Code Sections 44360 to 44366 (Air Toxics "Hot Spots" Information and Assessment Act – AB 2588). Under this program, facilities with emissions of TACs are prioritized based on emissions. If the facility's priority score is high enough, the facility is required to prepare an HRA. High-risk facilities

may be required to provide notification to neighbors, or to develop and implement a risk reduction plan. Based on the emission estimates described in this report, PRP will not be a high-priority facility.

4.9.2.3 Local

New Source Review Requirements for Air Toxics. SCAQMD Rule 1401 describes the requirements and standards for evaluating the potential impact of TACs from facilities that emit TACs. The rule requires a demonstration that a new or modified source will not exceed the applicable health risk thresholds.

Based on the results of the HRA described in this section, the project will not exceed the applicable health risk thresholds.

SCQAMD Rule 1401 also describes the requirements, procedures, and standards for evaluating the potential impact of TACs from new sources and modifications to existing sources that are major sources of HAPs. Based on the emissions estimates described in this Petition, PRP will be a minor source of HAPs. Therefore, the project will not be subject to the rule requirements for federal Toxic New Source Review (Federal T-NSR).

4.9.3 Environmental Setting

PRP would replace the existing LM5000 gas turbine at the 44.5 MW San Gabriel Facility with a new state-of-the-art LMS 100PA natural-gas fired simple-cycle CTG and associated auxiliaries. The existing gas turbine will be decommissioned and demolished, and certain existing ancillary facilities either will be removed to accommodate development of PRP, or will be repurposed for future use in connection with the project.

PRP is located east of Los Angeles in the City of Pomona, approximately 1.4 miles northwest of the Pomona city center. The PRP site is a 2-acre parcel located 1.7 miles southeast of the intersection of Interstate 10 and SR 71 encompassing the San Gabriel Facility site. The existing gas turbine will be replaced with a new peaking unit. The location of the project is shown in Section 2, Figure 2-1. The site is bordered by a railroad and industrial facilities to the south, and industrial uses to the west and east. To the immediate north are additional industrial uses, and further north is residential.

4.9.3.1 Project Overview as it Relates to Public Health

Air will be the dominant pathway for potential public exposure to non-criteria pollutants released by PRP. Emissions to the air will consist primarily of combustion by-products produced by the gas turbine, evaporative emissions from the wet cooling tower (i.e., PM_{10}/$PM_{2.5}$ from the cooling tower's liquid drift), and fugitive leaks from onsite natural gas compressors. Potential health risks from these emissions will occur almost entirely by direct inhalation. To be conservative, additional pathways for dermal absorption, soil ingestion, mother's milk ingestion and homegrown produce ingestion were part of the health risk modeling.

PRP will use new, efficient simple-cycle technology to minimize emissions of pollutants per unit of electric energy generated, thus minimizing potential effects on public health. It is beyond the scope of this analysis to describe the public health benefits that derive from the generated electric power that is provided to homes, businesses, hospitals, and other societal institutions.

4.9.3.2 Sensitive Receptors

The CEC defines sensitive receptors as infants and children, the elderly, the chronically ill, and any other members of the general population who are more susceptible to the effects of exposure to environmental contaminants than the population at large. For the purpose of this analysis, sensitive receptors are defined as the locations occupied by groups of individuals who may have heightened susceptibility to health risks from chemical exposure: schools (public and private), daycare facilities, convalescent/nursing homes, retirement homes, health clinics, and hospitals. Because sensitive

individuals may be located at any residential site, risk-based standards apply to existing residences and places where residences may be built without a change in zoning, as well as to specific sensitive receptors. If project impacts are protective of sensitive individuals at the point of maximum impact, they are protective at all locations. Identification of sensitive receptors is typically done to ensure that notice of possible impacts is provided to the community.

In accordance with guidance from the CEC, a search was conducted for sensitive receptors within 6 miles of the project site. Based on the EDR *Offsite Receptor Report,* sensitive receptors located within a 6-mile radius of the project area are as follows:

- 612 preschool/daycare centers
- 33 nursing homes
- 207 schools
- 547 hospitals, clinics, and/or pharmacies
- 21 colleges

Daycare, hospital, park, preschool, and school receptors found within 6 miles are shown in Figures 4.9-1 and 4.9-2. The nearest sensitive receptor is the St. Joseph Elementary School, located approximately 1,200 feet east of the project site. The nearest existing residence is approximately 1,000 feet north-northwest of the facility on West Holt Avenue. The names, locations, and receptor numbers for all of the sensitive receptors are listed below in Table 4.9-2.

Table 4.9-2. Sensitive Receptors Within 6-Miles of Project Site - Supplemental (see Figure 4.9-2)
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ID	Name	Address
1	La Verne Science And Technology Charter School	250 W La Verne Ave, Pomona, CA 91767
2	Lopez Elementary School	701 S White Ave, Pomona, CA 91766
3	St Madeleine's School	935 E Kingsley Ave, Pomona, CA 91767
4	Lorbeer Middle School	501 S Diamond Bar Blvd, Diamond Bar, CA 91765
5	Fremont Academy	725 W Franklin Ave, Pomona, CA 91766
6	Pomona Unified School District: Ganesha High School	1151 Fairplex Dr, Pomona, CA 91768
7	Palomares Middle School	2211 N Orange Grove Ave, Pomona, CA 91767
8	Village Academy High School	1444 E Holt Ave, Pomona, CA 91767
9	Dudley's Guest Home	925 N Dudley St, Pomona, CA 91768
10	Hamilton Villa	948 S Hamilton Blvd, Pomona, CA 91766
11	New Horizon Care & Recovery	1470 W Holt Ave, Pomona, CA 91768
12	Miraculous Care Day Preschool	1750 W Holt Ave, Pomona, CA 91768
13	YMCA Child Care Connection	676 N Gibbs St, Pomona, CA 91767
14	Peace Of Mind Preschool	240-250 S Parcels St, Pomona, CA 91766
15	Kids First Christian Day Care	250 S Parcels St, Pomona, CA 91766
16	Rite Medical Clinic Urgent Care	502 W Holt Ave, Pomona, CA 91768
17	East Valley Community Health Center, Inc.	1555 S Garey Ave, Pomona, CA 91766
18	Campus Kids Preschool and Childcare	1102 W Phillips St, Ontario, CA 91762
19	U.S. Colleges of San Bernardino	5050 Palo Verde St #210, Montclair, CA 91763

Table 4.9-2. Sensitive Receptors Within 6-Miles of Project Site - Supplemental (see Figure 4.9-2)
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ID	Name	Address
20	OPARC	9029 Vernon Ave, Montclair, CA 91763
21	Claremont Lincoln University	250 W 1st St #330, Claremont, CA 91711
22	J. Marion Roynon Elementary School	2715 E St, La Verne, CA 91750
23	Bonita High School	3102 D St, La Verne, CA 91750
24	ITT Technical Institute	650 W Cienega Ave, San Dimas, CA 91773
25	Allen Avenue Elementary School	740 E Allen Ave, San Dimas, CA 91773
26	Ramona Intermediate	3490 Ramona Ave, La Verne, CA 91750
27	Oak Knoll Alternative School	1505 S Sunflower Ave, Glendora, CA 91740
28	Charter Oak High School	1430 E Covina Blvd, Covina, CA 91724
29	Glen Oak Elementary School	Covina, CA 91724
30	Sierra Vista Middle School	Covina, CA 91723
31	Las Palmas Middle School	641 N Lark Ellen Ave, Covina, CA 91722
32	Chino Hills KinderCare	13815 Peyton Dr., Chino Hills, CA 91709
33	Badillo Elementary School	1771 E Old Badillo St, Covina, CA 91724
34	American Purlinton University	3179 W Temple Ave # 100, Pomona, CA 91768
35	Southern California Spanish School	1425 W 10th St, Pomona, CA 91766
36	Pilarville Gardens	1259 St Vladimir St, Glendora, CA 91741
37	Park San Dimas Senior Apartments	265 W Foothill Blvd, San Dimas, CA 91773
38	Whispering Oaks Senior Living, LLC	117 Whispering Oaks Dr, Glendora, CA 91741
39	St Matthew's Home For The Elderly Inc.	1004 Nashport St, La Verne, CA 91750
40	Oak Park Manor	501 S College Ave, Claremont, CA 91711
41	Claremont Place Senior Living	120 W San Jose Ave, Claremont, CA 91711
42	Mountain View Centers - Alzheimer's and Memory Care Facilities	715 W Baseline Rd, Claremont, CA 91711
43	Highgate Senior Care	204 Highgate Ave, Pomona, CA 91767
44	La Verne Manor	2555 6th St, La Verne, CA 91750
45	Brookdale San Dimas	1740 San Dimas Ave, San Dimas, CA 91773
46	Whispering Fountains Diamond Bar	23750 Highland Valley Rd, Diamond Bar, CA 91765
47	DBC Children's Center	2335 S Diamond Bar Blvd, Diamond Bar, CA 91765
48	Towne and Country Preschool and Infant Center	21805 Copley Dr, Diamond Bar, CA 91765
49	Child Karousel Pre-School	14546 Violet St, Chino Hills, CA 91709
50	Sproutlets Child Care	3752 Aspen Ln, Chino Hills, CA 91709
51	Ara Day Care	2536 Winchester Way, Chino Hills, CA 91709

Table 4.9-2. Sensitive Receptors Within 6-Miles of Project Site - Supplemental (see Figure 4.9-2)
Small Power Plant Exemption Application for the Pomona Repower Project

ID	Name	Address
52	Gateway Academy Child Education Preschool Kindergarten and Daycare Center	12818 East End Ave, Chino, CA 91710
53	Nicole's Kid Care	22 Sundance Dr, Pomona, CA 91766
54	Fuzzy's Lil Angels Family Daycare	1767 S Huntington St, Pomona, CA 91766
55	Above & Beyond Childcare	1566 Waters Ave, Pomona, CA 91766
56	Lovely Family Child Care	288 W 9th St, Pomona, CA 91766
57	Miraculous Care Day Preschool	1750 W Holt Ave, Pomona, CA 91768
58	Kinder Kountry	456 W San Jose Ave, Claremont, CA 91711
59	Wee Care	2770 Grove St, La Verne, CA 91750
60	MARGIE'S DAYCARE	2247 2nd St, La Verne, CA 91750
61	La Verne Wesleyan Preschool	3205 D St, La Verne, CA 91750
62	La Verne KinderCare	3602 Wheeler Ave., La Verne, CA 91750
63	Cherry Blossom Child Care	516 E Bonita Ave, San Dimas, CA 91773
64	Children's Ark Day Care	202 W Nubia St, San Dimas, CA 91773

4.9.3.3 Available Health Studies

The Applicant conducted a search of available health studies concerning the potentially affected populations within a 6-mile radius. The nearest upwind ambient monitor measuring TACs is the Azusa monitoring station, approximately 10 miles to the northwest of PRP. Air quality and health risk data presented by ARB in the *California Almanac of Emissions and Air Quality – 2009 Edition* (ARB, n.d.) for Los Angeles County show that over the period 1990 through 2005, the average concentrations for the "Top 10" TACs[60] have been substantially reduced, and the associated health risks are showing a steady downward trend as well.[61] ARB-estimated emissions inventory values for the top 10 TACs for 2012 for Los Angeles County, and ambient levels and associated potential risks for Los Angeles County in 2014 are presented in Table 4.9-3.

Table 4.9-3. Top 10 TACs Emitted by All Sources in the Project Area
Small Power Plant Exemption Application for the Pomona Repower Project

		2014 Levels and Risks, Azusa Monitor	
TAC	2012 Emissions, Los Angeles County (tons/year)	Annual Average Concentration (ppbv)	Potential Carcinogenic Risk[a] (in 1 million)
Acetaldehyde	1,534	1.32	6
Benzene	1,447	0.27	25
1,3-Butadiene	414	0.043	16

[60] Note that the "Top 10" TACs that are tracked by ARB are those with the highest associated health risk, but are not necessarily those with the highest annual emissions.

[61] Although ARB released an updated issue of the almanac in 2014, with the exception of DPM, the updated version does not contain data on TACs.

Table 4.9-3. Top 10 TACs Emitted by All Sources in the Project Area
Small Power Plant Exemption Application for the Pomona Repower Project

TAC	2012 Emissions, Los Angeles County (tons/year)	2014 Levels and Risks, Azusa Monitor	
		Annual Average Concentration (ppbv)	Potential Carcinogenic Risk[a] (in 1 million)
Acetaldehyde	1,534	1.32	6
Carbon tetrachloride	0.20	0.097	26
Chromium, hexavalent	0.07	0.095 ng/m^3	14
Para-Dichlorobenzene	233	0.15 (2006)	10 (2006)
Formaldehyde	2,233	3.58	26
Methylene chloride	1,681	0.494	2
Perchloroethylene	742	0.042	2
DPM[b]	2,316	2.4 µg/m^3 (2000)	720 (2000)
Total Health Risk[c]	--	--	127

[a] Health Risk represents the number of excess cancer cases per million people based on a 70-year exposure to the annual average concentration. Health risk represents only the compounds listed in this table and only those with data for the year. There may be other significant compounds for which monitoring and health risk information is not available. The para-dichlorobenzene concentration and risk in 2006 are used for 2014. Para-dichlorobenzene was composed of values below the limit of detection for the later years; therefore, ARB stopped monitoring for para-dichlorobenzene in March 2007.

[b] The diesel particulate matter (DPM) concentrations are estimates for the South Coast Air Basin based on receptor modeling and are available only for selected years.

[c] Total Health Risk shown excludes DPM because DPM concentrations are not available for 2014.

Notes:

µg/m^3 = microgram(s) per cubic meter
ARB = California Air Resources Board
CEIDARS = California Emission Inventory Development and Reporting System
ng/m^3 = nanogram(s) per cubic meter
ppbv = part(s) per billion by volume

Source:

Emissions data provided by ARB staff, extracted from the CEIDARS. Air Quality Planning and Science Division, Sacramento, CA - Rundate: September 22, 2014. TAC and Risk data from ARB Annual Toxic Site Summaries, http://www.arb.ca.gov/adam/toxics/toxics.html

A variety of studies have been published regarding cancer and respiratory illnesses and diseases in Los Angeles County and in the broader SCAQMD. In addition, the local public health department, Los Angeles County Department of Public Health, provides information on its website regarding public health issues for county residents. Lifetime asthma prevalence rates in Los Angeles County are slightly lower than average statewide rates for both adults and children; for the period 2011-2012, the percentage of adults who have been diagnosed with asthma was 12.1 percent, compared with 13.7 percent of the statewide population. Los Angeles County and statewide rates for children were 14.5 percent and 15.4 percent, respectively.[62] According to the Centers for Disease Control (CDC),

[62] California Breathing, Los Angeles County Asthma Profile, http://www.californiabreathing.org/asthma-data/county-asthma-profiles/los-angeles-county-asthma-profile, February 2015.

asthma is triggered by a variety of factors including dust, pollen, smoke, smog, and insects such as cockroaches.[63]

Cancer death rates in Los Angeles County fell 1.5 percent annually between 2008 and 2012, averaging 151.3 per 100,000 (age adjusted to the 2000 U.S. standard population) annually during this 5- year period. Cancer death rates statewide over this same period are nearly identical to the statewide average, falling by the same 1.5 percent and averaging 155.1 deaths per 100,000.[64]

An additional respiratory illness for the area is Valley Fever (*coccidioidomycosis*), which is found in six southwestern states including California. Los Angeles County is a suspected endemic area for coccidioidomycosis according to the LA County Department of Public Health, which publishes annual morbidity statistics for Valley Fever in Los Angeles County.[65] According to the most recent report, there has been a substantial increase in the number of cases reported from 2008 to 2013, with 362 confirmed cases in Los Angeles County in 2013 (i.e., 3.85 cases per 100,000 residents)—2 percent of which were fatal. The incidence of coccidioidomycosis cases statewide in 2013 was higher than in Los Angeles County, at 8.61 cases per 100,000 residents.

4.9.4 Impacts

Potential impacts to public health are described below.

4.9.4.1 CEQA Environmental Checklist

The checklist in Table 4.9-4 assesses the significance of potential impacts.

Table 4.9-4. CEQA Checklist to Assess Potential Impacts
Small Power Plant Exemption Application for the Pomona Repower Project

	Potentially Significant Impact	Less than Significant w/Mitigation	Less than Significant	No Impact
PUBLIC HEALTH – Would the project**:**				
a. Expose sensitive receptors to substantial pollutant concentrations?			**X**	
b. Create objectionable odors affecting a substantial number of people?				**X**

4.9.4.2 Air Toxics Exposure Assessment

This section discusses the sources and different kinds of air emissions associated with the construction and operation of PRP (see also Section 4.1, Air Quality), the methodology used in performing the screening-level HRA, and the results of the assessment of potential health risks from the project. The HRA for PRP was conducted in accordance with the most current guidance established by the OEHHA[66]

[63] CDC, "Common Asthma Triggers," http://www.cdc.gov/asthma/triggers.html.

[64] CDC, "U.S. Cancer Statistics," Statistic is death rate for all cancer sites combined, male and female, all races. http://statecancerprofiles.cancer.gov/index.html.

[65] Los Angeles Department of Public Health, "Acute Communicable Disease Control, 2013 Annual Morbidity Report," http://publichealth.lacounty.gov/acd/Diseases/Cases08-13.pdf.

[66] OEHHA. Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, February 2015.

and the ARB in 2015.[67] The new OEHHA guidance incorporates numerous changes, including age-specific cancer potency factors, breathing rates, and exposure durations. Sensitivity studies performed by SJVAPCD, SCAQMD, and others have indicated that application of the new OEHHA risk guidance results in calculated risks that are two to three times higher than OEHHA's previous methodology for identical sources.

Project emissions to the air will consist of combustion byproducts from the natural-gas-fired gas turbine, evaporative emissions from the wet cooling tower (i.e., PM_{10} from the cooling tower's liquid drift), and fugitive leaks from onsite natural gas compressors. Inhalation is the main pathway by which air pollutants can potentially cause public health impacts. Other pathways, including dermal absorption and ingestion of soil, homegrown vegetables, and mother's milk, are also evaluated for potential exposure. As discussed below, these health impacts will not be significant.

Demolition and construction emissions are presented in detail in Section 4.1, Air Quality, and Appendices 4.1F and 4.1G, along with an air dispersion analysis demonstrating that with the exception of the state annual and 24-hour PM_{10} standards and the annual and 24-hour $PM_{2.5}$ standards (which are already being exceeded without PRP), AAQSs will not be exceeded during demolition and construction activities. The dominant emission with potential health risk is DPM from combustion of diesel fuel in demolition/construction equipment (e.g., cranes, dozers, excavators, graders, front-end loaders, backhoes). The analysis presented in Appendices 4.1.F and 4.1G demonstrates that the potential incremental carcinogenic risk of DPM emissions during demolition/construction of PRP will be less than significant.

To evaluate potential health risks during project operation, the measures of these risks are first described in terms of the types of public health effects and the significance criteria and thresholds for those effects.

4.9.4.3 Significance Criteria

Significance criteria exist for both carcinogenic and non-carcinogenic risks, and are discussed separately.

Incremental Cancer Risk. Cancer risk is the probability or chance of contracting cancer over a human life span (assumed to be 70 years). Carcinogens are assumed to have no threshold below which there would be no human health impact. Any exposure to a carcinogen is assumed to have some probability of causing cancer; the lower the exposure, the lower the cancer risk (i.e., a linear, no-threshold model). For previous power plant projects, the CEC has used an incremental cancer risk greater than 10 in one million as a significance threshold for public health. The 10-in-one-million risk level is also used in SCAQMD Rule 1401 and by the Air Toxics "Hot Spots" (AB 2588) program and California's Proposition 65 as the public notification level for air toxic emissions from existing sources.

Animal studies or human epidemiological studies (often based on workplace exposures) are used to estimate the relationship between the dose of a particular carcinogen and the resulting excess cancer risk. The cancer potency factor for that carcinogen is the slope of that dose-response relationship. Cancer risk is estimated by multiplying the dose of a particular carcinogen by its cancer potency factor. The dominant exposure pathway is inhalation; however, additional exposure pathways are considered in this screening HRA.

[67] ARB. Consolidated Table of OEHHA/ARB-Approved Risk Assessment Health Values, May 15, 2015, http://www.arb.ca.gov/toxics/healthval/contable.pdf.

Non-Cancer Health Risk. Non-cancer health effects can be either long-term (chronic) or short-term (acute). In determining potential non-cancer health risks from air toxics, it is assumed there is a dose of the TAC below which there would be no impact on human health. The air concentration corresponding to this dose is called the Reference Exposure Level (REL). A non-cancer health risk is measured in terms of a health hazard quotient, which is the modeled maximum annual concentration of each TAC divided by its REL. Health hazard quotients for TACs affecting the same target organ are typically summed, with the resulting totals expressed as health hazard indices for each organ system. A health hazard index of less than 1.0 is considered by the regulatory agencies to be a less-than-significant health risk. For this HRA, as a conservative assumption that will tend to overpredict risk, all hazard quotients were summed regardless of target organ. This methodology leads to a conservative (upper-bound) assessment. RELs used in the hazard index calculations were those published in the ARB/OEHHA listing, updated as of May 13, 2015 (ARB, 2015).

Chronic toxicity is defined as adverse health effects from prolonged chemical exposure, caused by chemicals accumulating in the body. Because chemical accumulation to toxic levels typically occurs slowly, symptoms of chronic effects usually do not appear until long after exposure commences. The lowest no-effect chronic exposure level for a non-carcinogenic air toxic is the chronic REL. Below this threshold, the body is capable of eliminating or detoxifying the chemical rapidly enough to prevent its accumulation. Chronic RELs have been established for 8-hour and 1-year periods. The chronic health hazard indices were calculated as the sum of the chronic health hazard quotients, each of which is calculated as the chronic TAC concentration for the appropriate averaging period, divided by the chronic REL of the TAC.

Acute toxicity is defined as adverse health effects caused by a brief chemical exposure of no more than 24 hours. For most chemicals, the air concentration required to produce acute effects is higher than the level required to produce chronic effects because the duration of exposure is shorter. Because acute toxicity is predominantly manifested in the upper respiratory system at threshold exposures, all acute health hazard quotients are typically summed to calculate the acute health hazard index. This method leads to an upper-bound assessment.

The maximum 1-hour average concentrations of each TAC with acute health effects is divided by the specific TAC's acute 1-hour REL, to obtain the 1-hour health hazard quotient for health effects caused by relatively high, short-term exposure to air toxics. RELs used in the hazard index calculations were those published in the most recent ARB/OEHHA listing (ARB, 2015).

Valley Fever. Valley Fever is primarily encountered in the southwestern states, especially Arizona and California. It is caused by the inhalation of spores of the fungus *Coccicioides immities*, which are released during soil disturbing activities (i.e., construction activities or mudslides) or wind erosion. Typically, trenching, excavation, and construction workers will have the highest exposure due to increased contact with spores during earth-disturbing activities. Symptoms of Valley Fever are similar to the flu. The disease usually affects the lungs, and people with weakened immune systems, pregnant women, and the elderly may be at a higher risk. There is currently no vaccine available for Valley Fever, and treatment typically consists of anti-fungal medications and rest. Valley Fever is difficult to prevent; however, certain mitigation measures (soil wetting) can reduce the chance of infection (CDC, 2016). Currently, no significance criteria exist for Valley Fever.

4.9.4.4 Demolition/Construction Impacts

Demolition of the existing equipment at the site is expected to occur over approximately a 3-month period. Following this phase, the construction of the PRP will begin. The construction period is expected to occur over approximately a 16-month period with an additional 5 months for commissioning/testing activities.

No significant public health effects are expected during demolition/construction. Strict demolition/construction practices that incorporate safety and compliance with applicable LORS will be followed. In addition, mitigation measures to reduce air emissions from demolition/construction impacts will be implemented as described in Appendices 4.1F and 4.1G.

Valley Fever spores have the potential to be released into the air as a result of grading and excavating activities during construction. Because the spores disperse similarly to dust, mitigation measures used to control dust would be effective to control spore dispersal. Dust mitigation measures are identified in Appendices 4.1F and 4.1G.

Temporary air emissions from demolition/construction are presented in detail in Appendices 4.1F and 4.1G, followed by a criteria pollutant air dispersion analysis demonstrating that AAQS will not be exceeded during demolition/construction of the project, with the exception of the 24-hour and annual state PM_{10} standards and the annual $PM_{2.5}$ standard. For these pollutants and averaging periods, existing background concentrations already exceed state standards.

The dominant emission with potential health risk is DPM from combustion of diesel fuel in demolition/ construction equipment (e.g., cranes, dozers, excavators, graders, front-end loaders, backhoes). DPM emissions from onsite demolition/construction are summarized in Appendices 4.1F and 4.1G.

The detailed HRA calculations in Appendices 4.1F and 4.1G demonstrate that the potential cancer risk of DPM emissions during demolition and construction will not exceed the significance threshold of 10 in one million. This HRA was performed in accordance with OEHHA (2015) guidance, which requires adjusting the 30-year lifetime exposure risk for the actual exposure period.

Ambient air modeling for PM_{10}/$PM_{2.5}$, CO, sulfur dioxide (SO_2), and NO_2 was performed as described in Appendices 4.1F and 4.1G. Demolition and construction-related criteria pollutant emission impacts are temporary and localized, resulting in no long-term significant health impacts to the public.

Small quantities of hazardous waste may be generated during demolition/construction of the project. Hazardous waste management plans will be in place so the potential for public exposure is minimal. Refer to Section 4.5, Hazardous Materials and Waste Management, for more information. No acutely hazardous materials will be used or stored onsite during construction (see Section 4.5, Hazardous Materials and Waste Management). To ensure worker safety during construction, safe work practices will be followed (see Section 4.15, Worker Health and Safety).

4.9.4.5 Operations Impacts

Potential human health impacts associated with the project stem from exposure to air emissions from operation of the new CTG and wet cooling tower. The non-criteria pollutants emitted from the proposed project include certain VOCs and polycyclic aromatic hydrocarbons (PAHs) from the combustion of natural gas and ammonia from the SCR oxides of nitrogen control system. These pollutants are listed in Table 4.9-5, and the detailed emission summaries and calculations are presented in Appendix 4.1B.

Table 4.9-5. Pollutants Emitted to the Air from the Project
Small Power Plant Exemption Application for the Pomona Repower Project

Criteria Pollutants	
Carbon monoxide	Oxides of sulfur
Oxides of nitrogen	Volatile organic compounds
Particulate matter	
Noncriteria Pollutants	
Acetaldehyde	Hexane
Acrolein	Naphthalene
Ammonia	PAHs
Benzene	Propylene
1,3-Butadiene	Propylene Oxide
Ethylbenzene	Toluene
Formaldehyde	Xylene

For criteria pollutants, the proposed project will use BACT, as required under SCAQMD rules. Emissions of criteria pollutants will not cause or contribute significantly to violations of the national or CAAQS, as discussed in Section 4.1, Air Quality.

Air dispersion modeling results (see Section 4.1.6.4) indicate that PRP will not interfere with the attainment or maintenance of the applicable air quality standards or cause additional violations of any standards, with the exception of PM_{10}/$PM_{2.5}$ for which the state standards are already exceeded (the project area is also classified as a nonattainment area for the federal $PM_{2.5}$ standards). For these pollutants, the maximum modeled 24-hour and annual average PM_{10} and $PM_{2.5}$ impacts for the project are below the 24-hour and annual average federal significant impact levels (SILs) and below the SCAQMD PM_{10} SILs. The primary purpose of federal SILs is to identify a level of ambient impact that is sufficiently low relative to an AAQS such that the impact can be considered *de minimis*. Hence, USEPA considers a source whose individual impact falls below a SIL to have a *de minimis* impact on air quality concentrations that already exist. If a project's impacts are below a federal SIL, these impacts are not considered to cause or contribute to a violation of an AAQS and/or increment.[68] Consequently, since PMP's PM_{10}/$PM_{2.5}$ impacts are below federal SILs, the Applicant does not believe the impacts will cause or contribute to a violation of the 24-hour or annual PM_{10}/$PM_{2.5}$ AAQSs.[69] As such, the PM_{10}/$PM_{2.5}$ impacts for project operation will be less than significant. These standards are intended to protect the general public with a wide margin of safety. Therefore, the proposed project will not have a significant impact on public health from emissions of criteria pollutants.

[68] 75 Fed. Reg. 64864, 64891 (Oct. 20, 2010): "Accordingly, a source that demonstrates that the projected ambient impact of its proposed emissions increase does not exceed the SIL for that pollutant at a location where a NAAQS or increment violation occurs is not considered to cause or contribute to that violation."

[69] In January 2013, USEPA sought and the U.S. Court of Appeals for the District of Columbia Circuit granted remand and vacatur of these SILs as they apply for purposes of avoiding a cumulative impacts analysis under federal PSD requirements (40 C.F.R. Section 51.166(k)(2) and Section 52.21(k)(2)). However, USEPA has retained these SILs for purposes of demonstrating whether a source locating in an attainment/unclassifiable area will be deemed to cause or contribute to a violation in a downwind nonattainment area. See Sierra Club v. EPA, No. 10-1413 (D.C. Cir. 2013), slip op. 9. Accordingly, application of these SILs for purposes of satisfying the SCAQMD's requirement to assure that a new or modified facility does not interfere with the attainment or maintenance of an AAQS (SCAQMD Rule 1303) is appropriate.

The screening HRA for operational impacts was prepared using the latest version of ARB's Hotspots Analysis and Reporting Program, Version 2 (HARP2) model (ARB, 2015), the ARB May 2015 health database (OEHHA/ARB, 2015), and the OEHHA Hot Spots Program Guidance Manual (OEHHA, 2015).

4.9.4.6 Public Health Impact Study Methods

Emissions of non-criteria pollutants from the project were analyzed using emission factors previously approved by ARB and USEPA. Included in Appendix 4.1I are the detailed non-criteria pollutant emission calculations for the proposed new CTG and cooling tower. In addition to an analysis of the acute/chronic/cancer risk impacts during the normal operation of the new equipment (CTG/cooling tower), the CEC requires an analysis of the acute impacts during CTG startups/shutdowns and during the commissioning phase of a new CTG. Therefore, the detailed non-criteria pollutant calculations in Appendix 4.1I include separate non-criteria emission calculations for each of these three cases (normal operation, startups/shutdown, commissioning).

As shown in the calculations in Appendix 4.1I, compared to normal operating levels, the hourly non-criteria pollutant emission levels will be higher during CTG startups/shutdowns and during the commissioning period. Hourly non-criteria pollutant emissions will be elevated during these two operating cases because the oxidation catalyst system (which controls organic compounds, including non-criteria pollutants) may not be operating at all times during these periods. During a CTG startup/ shutdown, the oxidation catalyst system may not be fully functional during the entire startup/shutdown event because the proper catalyst operating temperature was not reached for a portion of the event. During the commissioning phase of the new CTG, there will be test runs performed prior to the installation/operation of the oxidation catalyst system. The HRA performed for the proposed project includes an analysis of the impacts during gas CTG startups/shutdowns and the commissioning period.

Air-dispersion modeling combines the emissions with site-specific terrain and meteorological conditions to analyze short-term and long-term arithmetic mean concentrations in air for use in the HRA. The USEPA-recommended air dispersion model, AERMOD, was used along with 5 years (2008–2012) of representative meteorological data as described in Section 4.1.6.2. The HRA for PRP was performed using the HARP2 model using the option where the ambient impact modeling was performed with the AERMOD model outside of ADMRT program. The post file outputs of AERMOD were used as inputs in the risk calculation portion of the ADMRT program. The HARP2 model was used to assess cancer risk, as well as non-cancer chronic and acute health hazards. In addition to inhalation, the HARP2 modeling included the additional pathways for dermal absorption, soil ingestion, mother's milk ingestion, homegrown produce ingestion, and fish ingestion.

Risk Analysis Method. The HRA analysis was performed using the AERMOD and HARP2 models, the 5-year meteorological data set described above, specific receptor grids, and the stack parameters for the combustion equipment (see Section 4.1, Air Quality). Receptors were also placed at the locations of the sensitive receptors shown below in Figures 4.9-1 and 4.9-2. The highest annual, 8-hour, and 1-hour average concentrations were used to determine cancer risk and chronic health hazard index, chronic 8-hour health hazard index, and acute 1-hour health hazard index, as appropriate. Health risks potentially associated with the estimated concentrations of pollutants in air were characterized in terms of potential lifetime cancer risk (for carcinogenic substances), or comparison with RELs for non-cancer health effects (for non-carcinogenic substances). The HRA modeling files are included on the DVD submitted to SCAQMD and CEC as part of this SPPE Application.

Health risks were evaluated for a hypothetical Maximum Exposed Individual (MEI) at the Point of Maximum Impact (PMI), as well as risks to the MEI at residential locations (MEIR). The cancer risk to the MEI at the PMI is referred to as the Maximum Incremental Cancer Risk (MICR). Human health risks associated with emissions from the project are unlikely to be higher at any other location than at the PMI. If there is no significant impact associated with concentrations in air at the PMI, it is unlikely that there would be significant impacts in any other location. Health risks were also evaluated at the nearest

residence. The PMI (and therefore the MICR) is not necessarily associated with actual exposure to a residential location because in many cases the PMI is in an uninhabited area. Therefore, the MICR is generally higher than the cancer risk to the nearest resident. Both risks are based on 24-hour-per-day, 365-days-per-year, 30-year-lifetime exposure, consistent with the new OEHHA guidance.

Health risks potentially associated with concentrations of carcinogenic pollutants in air were calculated as estimated excess lifetime cancer risks. The total cancer risk at any specific location is found by summing the contributions from each carcinogen.

The inhalation cancer potency factors and RELs used to characterize health risks associated with modeled concentrations in air are taken from the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* (ARB, 2015) and are presented in Table 4.9-6.

Table 4.9-6. Risk Assessment Health Values for Air Toxic Substances
Small Power Plant Exemption Application for the Pomona Repower Project

Compound	Inhalation Cancer Potency (mg/kg-d) $^{-1}$	Chronic Inhalation REL (µg/m^3)	Acute Inhalation REL (µg/m^3)
Acetaldehyde	0.010	140	470 (1-hour) 300 (8-hour)
Acrolein	—	0.35	2.5 (1-hour) 0.7 (8-hour)
Ammonia	—	200	3,200
Benzene	0.10	3.0	27 (1-hour) 3.0 (8-hour)
1,3-Butadiene	0.60	2.0	660 (1-hour) 9.0 (8-hour)
Ethylbenzene	0.0087	2,000	—
Formaldehyde	0.021	9	55 (1-hour) 9 (8-hour)
Hexane	—	7,000	—
Naphthalene	0.12	9.0	—
PAHs (as BaP)	3.9	—	—
Propylene	—	3,000	—
Propylene oxide	0.013	30	3,100
Toluene	—	300	37,000
Xylenes	—	700	22,000
Diesel particulate matter	1.1	5.0	--

Notes:

µg/m^3 = microgram(s) per cubic meter
mg/kg-d = milligram(s) per kilogram per day

4.9.4.7 Characterization of Risks from Toxic Air Pollutants

The estimated potential maximum cancer risks associated with the operation of the proposed project are shown in Table 4.9-7. The maximum carcinogenic risk is well below the CEC's 10–in-one-million threshold of significance used for recent projects.

Table 4.9-7. Summary of Estimated Maximum Potential Health Risks
Small Power Plant Exemption Application for the Pomona Repower Project

Receptor	Carcinogenic Risk (per million)	Cancer Burden	Acute Health Hazard Index	Chronic Health Hazard Index	
				8-hour	Annual
New Equipment Normal Operation					
Maximally Exposed Individual (MEI) at PMI	5.6×10^{-2}[a]	0[c]	1.5×10^{-3}	3.2×10^{-4}	4.8×10^{-4}
Maximally Exposed Individual Resident (MEIR)	4.3×10^{-2}[a]	0[c]	1.2×10^{-3}	2.5×10^{-4}	3.7×10^{-4}
Maximally Exposed Individual Worker (MEIW)	3.7×10^{-3}[b]	0[c]	1.5×10^{-3}	3.2×10^{-4}	N/A[d]
New Equipment Startup/Shutdown					
MEI (acute impact only)	N/A	N/A	7.4×10^{-3}	N/A	N/A
New Equipment Commissioning					
MEI (acute impact only)	N/A	N/A	4.9×10^{-3}	N/A	N/A
Significance Level[e]	**10**	**0.5**	**1.0**	**1.0**	**1.0**

[a] Based on High Point Method, which results in the maximum cancer risk.

[b] The worker is assumed to be exposed at the work location 8 hours per day, instead of 24; 245 days per year, instead of 365; and for 25 years, instead of 30.

[c] Cancer burden is zero because offsite cancer risk is less than 1.0 per million.

[d] Because of the exposure correction discussed in footnote b, a 30-year-based chronic health hazard index is not applicable to a worker.

[e] Based on SCAQMD Rule 1401.d (cancer risk significance level for units equipped with T-BACT).

Notes:

N/A = not applicable

Cancer risks potentially associated with the project also were assessed in terms of cancer burden. Cancer burden is a hypothetical upper-bound estimate of the additional number of cancer cases that could be associated with emissions from the project. Cancer burden is calculated as the maximum product of any potential carcinogenic risk greater than 1 in one million, and the number of individuals at that risk level. As shown above, the MICR is significantly less than 1 in one million, therefore there is no cancer burden as a result of PRP.

The maximum potential acute non-cancer health hazard index associated with operation of the proposed project is shown in Table 4.9-7. The acute non-cancer health hazard index for all target organs falls below 1.0, the CEC threshold of significance used for recent projects.

Similarly, the maximum potential chronic and 8-hour chronic non-cancer health hazard indices associated with operation of PRP are also shown in Table 4.9-7. These chronic non-cancer health hazard indices fall below 1.0, the CEC threshold of significance used for recent projects.

The estimates of cancer and non-cancer risks associated with chronic or acute exposures are below thresholds used for regulating emissions of TACs to the air. Historically, exposure to any level of a carcinogen has been considered to have a finite risk of inducing cancer. There is no threshold for carcinogenicity. Because risks at low levels of exposure cannot be quantified directly by either animal or epidemiological studies, mathematical models have estimated such risks by extrapolation from high to low doses. This modeling procedure is designed to provide a highly conservative estimate of cancer risks

based on the most sensitive species of laboratory animal for extrapolation to humans (i.e., the assumption being that humans are as sensitive as the most sensitive animal species). Therefore, the risk is not likely to be higher than risks estimated using inhalation cancer potency factors, and is most likely lower, and could even be zero (USEPA, 1991).

The analysis of potential cancer risk described in this section employs methods and assumptions generally applied by regulatory agencies for this purpose. Given the importance of assuring public health, this analysis uses highly conservative methods and assumptions, meaning they tend to overpredict the potential for adverse effects.

Conservative methodology and assumptions include those summarized below.

- The analysis includes representative weather data over a period of 5 years to ensure that the least favorable conditions producing the highest ground-level concentration of power plant emissions are included. The analysis then assumes that these worst-case weather conditions, which in reality occurred only once in 5 years, will occur continuously for 30 years.
- The project is assumed to operate at hourly, daily, and annual emission conditions that produce the highest ground-level concentrations.
- The location of the highest ground-level concentration of project emissions is identified, and the analysis then assumes that a sensitive individual resides at this location 24 hours a day, 7 days a week over the entire 30-year period, even though these assumptions are physically impossible.

Taken together, these methods and assumptions create a scenario that is more potentially adverse to human health than conditions that exist in the real world. For example, if the worst-case weather conditions could occur only on a winter evening, but the worst-case emission rates could occur only on a summer afternoon, the analysis nonetheless assumes that these events occur at the same time. The point of using these conservative assumptions is to consciously overstate the potential impacts of the project. No one individual will experience exposures as great as those assumed for this analysis. By determining that even this highly overstated exposure will not be significant, the analysis provides a high degree of confidence that the much lower exposures that actual persons will experience will not result in any significant increase in cancer risk. In short, the analysis ensures that there will not be any significant public health impacts at any location, under any weather condition, under any operating condition.

4.9.4.8 Hazardous Materials

The CalARP Program regulations and 40 C.F.R. Part 68 under the CAA establish emergency response planning requirements for acutely hazardous materials. These regulations require, among other things, preparation of an RMP, which is a comprehensive program to identify hazards and predict the areas that may be affected by a release of a program-listed hazardous material. With the exception of aqueous ammonia, PRP will not store any substance in quantities exceeding the applicability thresholds in 40 C.F.R. Part 68.

4.9.4.9 Operation Odors

The fuel used at PRP will be natural gas. Combustion contaminants and other exhaust constituents, including ammonia, will not be present at concentrations that could produce a significant odor.

4.9.4.10 Electromagnetic Field Exposure

Onsite at PRP will be electric power-handling transformers and associated equipment, which are discussed in more detail in Section 3, Transmission Line Safety and Nuisance. Based on findings of the National Institute of Environmental Health Sciences (NIEHS, 1999), EMF exposures from the electric power generating and handling equipment and associated transmission lines will not result in a significant impact on public health. The NIEHS report to the U.S. Congress found that “the probability

that EMF exposure is truly a health hazard is currently small. The weak epidemiological associations and lack of any laboratory support for these associations provide only marginal scientific support that exposure to this agent is causing any degree of harm." (NIEHS, 1999).

4.9.4.11 Summary of Impacts

Results from the HRA based on emissions modeling indicate that there will be no significant incremental public health risks from demolition/construction or operation of the project. Results from criteria pollutant modeling for routine operations indicate that potential ambient concentrations of NO_2, CO, SO_2, and PM_{10}/$PM_{2.5}$ would not exceed AAQSs, with the exception of the state annual and 24-hour average PM_{10} standard and the federal annual and 24-hour $PM_{2.5}$ standards. For these pollutants, existing background concentrations already exceed applicable standards, although the project would not add a significant contribution (project PM_{10} and $PM_{2.5}$ impacts would be below federal significant impact levels). The AAQS protect public health with a margin of safety for the most sensitive subpopulations (Section 4.1).

4.9.5 Cumulative Effects

As discussed in Section 4.1.8.1, a cumulative impact analysis was performed for criteria pollutants. This analysis examined regional and localized criteria pollutant cumulative impacts, including the impacts for existing, new, and reasonably foreseeable projects in the area. In contrast with the approach used to estimate impacts for criteria pollutants, the significance thresholds developed for TACs are set with sufficient stringency to preclude the potential for any significant cumulative impacts. Therefore, a separate cumulative impacts analysis for TACs is not required.

4.9.6 Mitigation Measures

The project has been designed to minimize TAC emissions and impacts. No mitigation measures are needed for the project TAC emissions because the potential air quality and public health impacts are less than significant.

Because Valley Fever spores may be spread as a result of dust emissions, a variety of dust mitigation measures will be in place during the construction of the project to minimize potential risk during soil disturbance. A summary of the demolition/construction dust mitigation measures and BMPs is provided in Appendices 4.1F and 4.1G.

4.9.7 Agencies and Agency Contacts

There are no State or local agencies having specific jurisdiction over public health.

4.9.8 Permits and Permit Schedules

Agency-required permits related to public health are the RMP for hazardous materials and the SCAQMD Final Determination of Compliance (FDOC). Upon approval of the SPPE Application by the CEC, the FDOC will be converted in to a SCAQMD PTC. These requirements are discussed in detail in Sections 4.1 (Air Quality) and 4.5 (Hazardous Materials and Waste Management).

4.9.9 References

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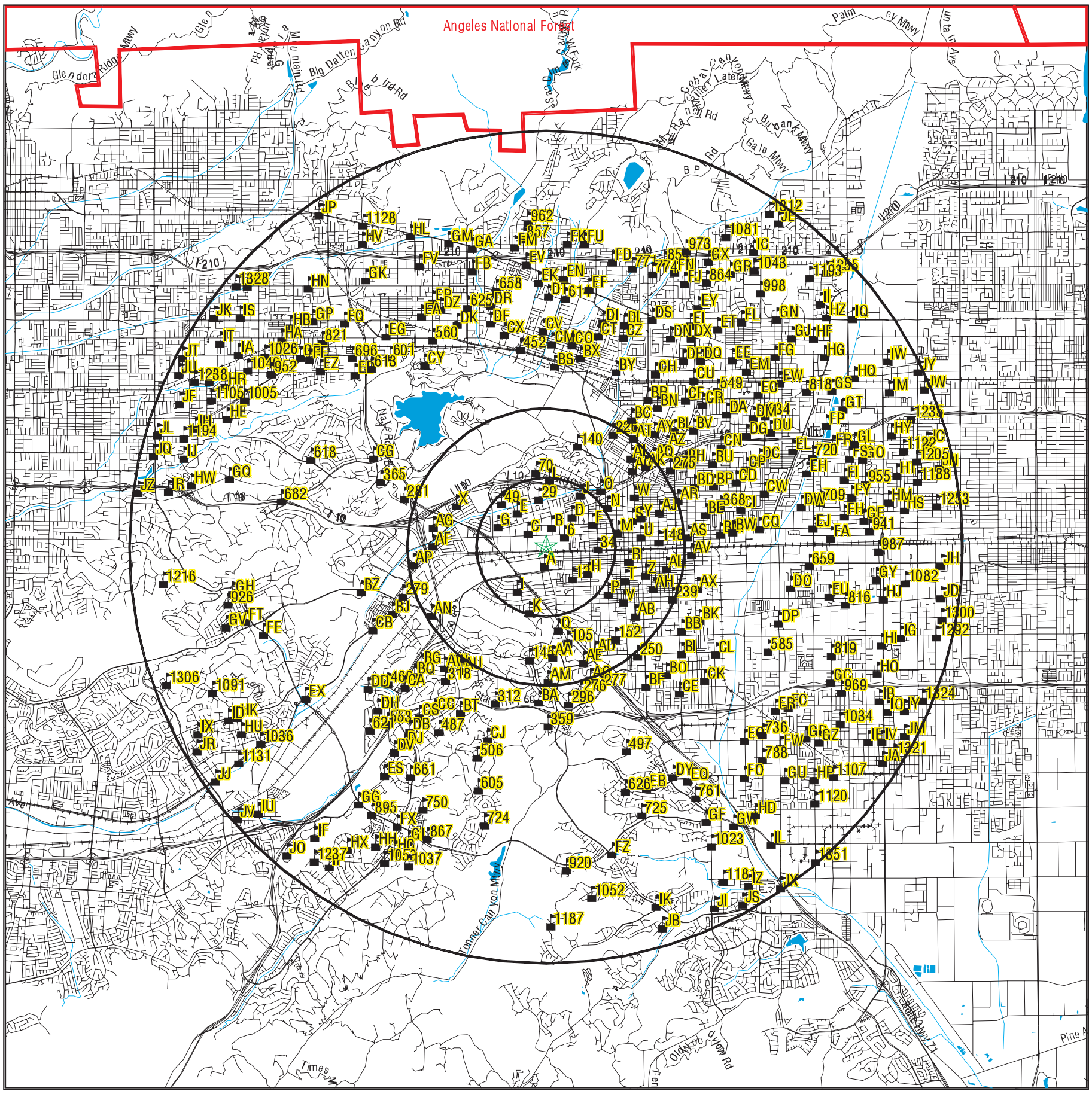
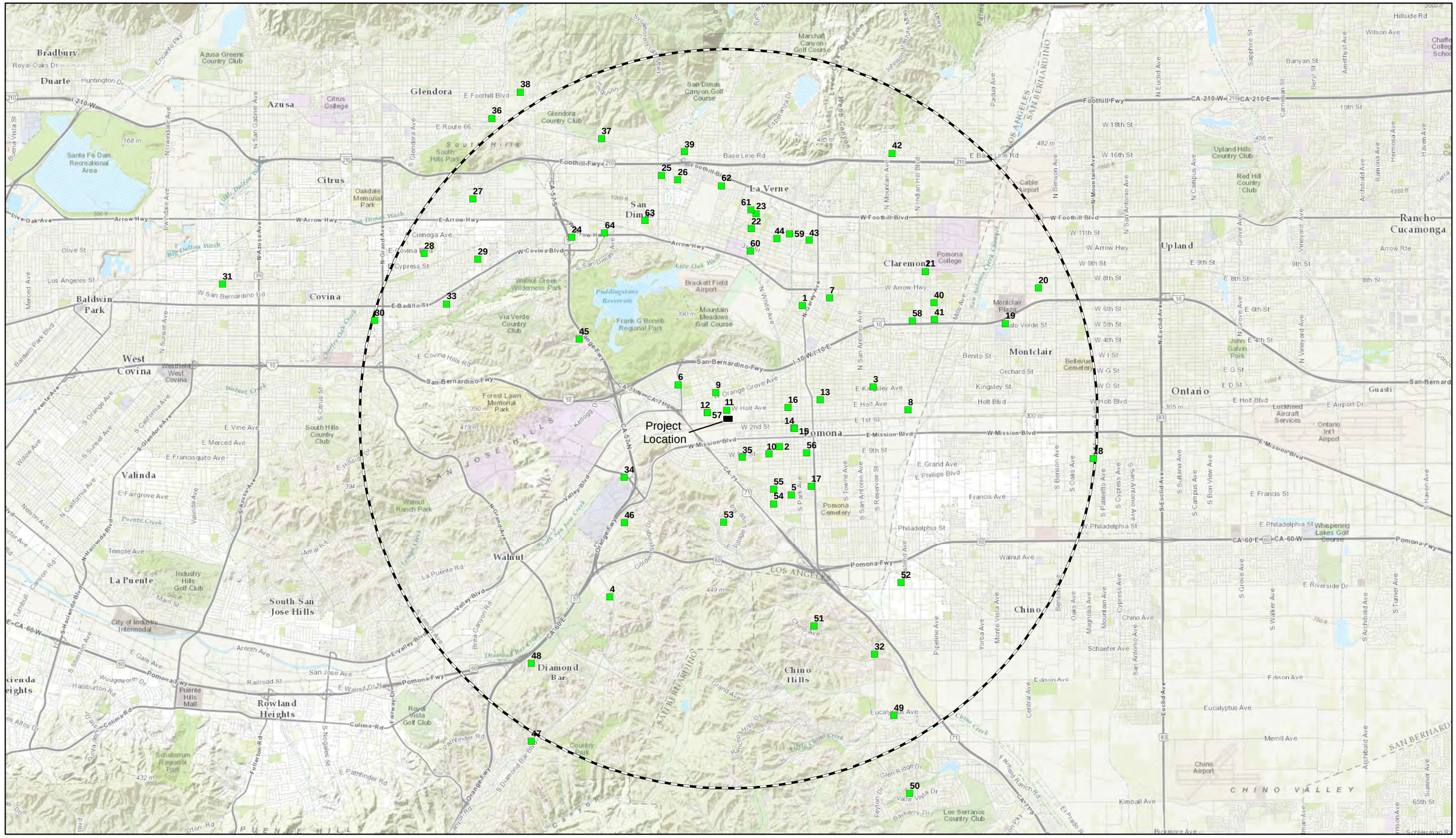
RECEPTOR MAP - 4431343.1s



TARGET PROPERTY:	1507 Mount Vernon Avenue	CUSTOMER:	Sierra Research
ADDRESS:	1507 Mount Vernon Avenue	CONTACT:	Tom Andrews
CITY/STATE/ZIP:	Pomona CA 91768	INQUIRY #:	4431343.1s
LAT/LONG:	34.0593 / 117.7742	DATE:	October 07, 2015 12:36 pm

FIGURE 4.9-1
Offsite Receptors
Pomona Repower Project
Pomona, California



Legend

- Project Location
- 6-mile Project Buffer
- Sensitive Receptor Location

0 1.5 Miles

N

FIGURE 4.9-2
Sensitive Receptors Within 6 Miles - Supplemental
Pomona Repower Project
Pomona, California

ch2m