

## 8.6 Public Health

This subsection presents an assessment of risks to human health potentially associated with operation of the proposed facility, focusing on chemical substances<sup>1</sup> that may be emitted or released into the air. Air pollutants for which California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS) have been established are addressed in Subsection 8.1, Air Quality.

The principal concerns for public health are associated with emissions of chemical substances into the air during routine operation of the proposed facility. Chemical substances in ambient air that potentially pose risks to human health include byproducts from the combustion of natural gas. The combustion byproducts that were addressed in a health risk assessment, included:

- Acetaldehyde
- Acrolein
- Benzene
- Formaldehyde
- Toluene
- Xylene

Substances with established CAAQS or NAAQS, including oxides of nitrogen (NO<sub>x</sub>), carbon monoxide, oxides of sulfur and particulate matter less than 10 microns in diameter (PM<sub>10</sub>) are addressed in the Ambient Air Quality subsection (see Subsection 8.1.3) of this AFC. However, some discussion of the potential health risks associated with these substances is presented in this section. Human health risks potentially associated with accidental releases of used/stored hazardous materials at the proposed facility are also discussed in this section.

Subsection 8.6.1 lists the applicable laws, ordinances, regulations, and standards (LORS); Subsection 8.6.2 describes the affected environment. Subsection 8.6.3, Environmental Consequences, addresses the human health impacts, and Subsection 8.6.4 identifies mitigation measures to reduce health impacts below the level of significance. Subsection 8.6.5 provides the references cited or used in preparing this section.

### 8.6.1 Laws, Ordinances, Regulations, and Standards

An overview of the regulatory process for public health issues is presented in this section. The relevant LORS that affect public health and are applicable to this project are identified in Table 8.6-1. Table 8.6-1 also summarizes the primary agencies responsible for public health, the general category of the public health concern regulated by each of the agencies, and the conformity of the project to each of the LORS applicable to public health. Points of contact with the primary agencies responsible for public health are identified in Table 8.6-2.

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<sup>1</sup> In this section, the term *chemical substances* refers to chemical substances in ambient air that are regulated by either the United States Environmental Protection Agency (USEPA) and/or the State of California. The California Office of Environmental Health Hazard Assessment (OEHHA) and the California Air Resources Board (CARB) use the term Toxic Air Contaminant (TAC), which currently includes 244 chemical substances. The USEPA uses the term Hazardous Air Pollutants (HAP), and has currently identified 188 substances as HAPs, all of which are presently included in California's list of TACs.

TABLE 8.6-1  
Summary of Primary Regulatory Jurisdiction for Public Health

LORS	Public Health Concern	Primary Regulatory Agency	Project Conformance
U.S. Clean Air Act California Clean Air Act California Health and Safety Code Section 39666	Public exposure to air pollutants	USEPA Region IX California Air Resources Board (CARB) South Coast Air Quality Management District (SCAQMD)	Based on results of the human health risk assessment as per California Office of Environmental Health and Hazard Assessment (OEHHA) guidelines, toxic contaminants do not exceed acceptable levels (Section 8.6.3.2). Emissions of criteria pollutants will be minimized by applying Lowest Achievable Emission Rate/Best Available Control Technology to the facility. Increases in emissions of criteria pollutants will be fully offset (Section 8.6.4.1).
Health and Safety Code 25249.5 et seq. (Safe Drinking Water and Toxic Enforcement Act of 1986—Proposition 65)	Public exposure to chemicals known to cause cancer or reproductive toxicity	OEHHA	Based on results of risk assessment as per California Air Pollution Control Officers Association guidelines, toxic contaminants do not exceed thresholds that require exposure warnings (see Section 8.6.3.2).
40 CFR Part 68 (Risk Management Plan)	Public exposure to regulated substances	USEPA Region IX City of Vernon, Environmental Health Department	The facility will not be subject to Title 40 Code of Federal Regulations (CFR) Part 68 requirements because the quantities of regulated substances stored or handled will be below the threshold quantities (Section 8.6.3.4).
Health and Safety Code Sections 25531 to 25541	Public exposure to regulated substances	City of Vernon, Environmental Health Department	An offsite consequence analysis has been performed to assess potential risks from release of regulated substances (Section 8.6.3.4).
Health and Safety Code Sections 44360 to 44366 (Air Toxics “Hot Spots” Information and Assessment Act—AB 2588)	Public exposure to toxic air contaminants from existing sources		Based on results of risk assessment as per OEHHA and CARB guidelines, toxic contaminants do not exceed acceptable levels (Section 8.6.3.3).
SCAQMD Rule 402 Health and Safety Code Section 41700	Public exposure to toxic air contaminants	SCAQMD	Section 8.1.5.5.3 (Air Quality Consistency with Regulatory Requirements).
SCAQMD Rule 1401	Public exposure to toxic air contaminants	SCAQMD	The results of the human health risk assessment are below significance levels (Section 8.6.3.3).
SCAQMD Rule 1404	Prohibits the use of hexavalent chromium as a water treatment chemical in cooling towers	SCAQMD	No hexavalent chromium will be used by the project.

TABLE 8.6-2  
Summary of Agency Contacts for Public Health

LORS	Public Health Concern	Primary Regulatory Agency	Regulatory Contact
U.S. Clean Air Act California Clean Air Act California Health and Safety Code Section 39666	Public exposure to air pollutants	USEPA Region IX  CARB  SCAQMD	Gerardo Rios USEPA Region IX 75 Hawthorne Street San Francisco, CA 94105 (415) 947-3974  Michael Tollstrup Project Assessment Branch California Air Resources Board 2020 L Street Sacramento, CA 95814 (916) 322-6026  John Yee South Coast Air Quality Mgmt District 21865 Copley Drive Diamond Bar, CA 91765 (909) 396-2531
Health and Safety Code 25249.5 et seq. (Safe Drinking Water and Toxic Enforcement Act of 1986—Proposition 65)	Public exposure to chemicals known to cause cancer or reproductive toxicity	OEHHA	Cynthia Oshita or Susan Long Office of Environmental Health and Hazard Assessment 1001 I Street Sacramento, CA (916) 445-6900
40 CFR Part 68 (Risk Management Plan)	Public exposure to acutely hazardous materials	USEPA Region IX  City of Vernon, Environmental Health Department	Gerardo Rios  Lewis Pozzebon Environmental Health Department 4305 Vernon Ave. Vernon, CA 90058 (323) 583-8811 ext. 229
Health and Safety Code Sections 25531 to 25541	Public exposure to acutely hazardous materials	City of Vernon, Environmental Health Department CARB SCAQMD	Lewis Pozzebon  Michael Tollstrup John Yee
Health and Safety Code Sections 44360 to 44366 (Air Toxics “Hot Spots” Information and Assessment Act—AB 2588)	Public exposure to toxic air contaminants from existing sources	CARB  SCAQMD	Mike Tollstrup  John Yee
SCAQMD Rule 402 Health and Safety Code Section 41700	Public exposure to toxic air contaminants	SCAQMD	John Yee
SCAQMD Rule 1401	Public exposure to toxic air contaminants	SCAQMD	John Yee
SCAQMD Rule 1404	Prohibits the use of hexavalent chromium as a water treatment chemical in cooling towers	SCAQMD	John Yee

## 8.6.2 Affected Environment

The City of Vernon proposes to develop a power plant (Vernon Power Plant or VPP). It will be a nominal 610-megawatt (MW) combined-cycle generating facility configured using two natural-gas-fired combustion turbines and one steam turbine. For cooling tower make-up water, the VPP will use recycled water provided by the Central Basin Municipal Water District. Cooling water will be cycled in the cooling tower five times, with blowdown discharged to the Sanitation Districts of Los Angeles County via the City of Vernon's sanitary sewer.

The VPP will be located 5001 Soto Street. The project site is approximately 5.8 acres; an additional 8.9 acres are available for equipment laydown and construction parking at various offsite locations within 0.5 mile from the project site.

There are sensitive receptors (such as schools, daycare facilities, convalescent centers, or hospitals) in the vicinity of the project site. The nearest sensitive receptor is a Lutheran church 0.43 mile to the south of the project site. There is also one residence in the vicinity of the site. Appendix 8.6A details the location, name, and coordinates for the sensitive receptors within a 6-mile radius of the project site. Further description of sensitive receptors within a 6-mile radius of the project site is presented in Hazardous Materials Handling, Subsection 8.12.3.

Figure 8.6-1 shows all terrain areas exceeding the elevation of the stack within a 10-mile radius of the project site.

Appendix 8.6B contains a listing of the publicly available health studies in the project area.

## 8.6.3 Environmental Consequences

Environmental consequences associated with the project that are addressed in this section are limited to human exposure to chemical substances of concern emitted into the air. The human health risks potentially associated with these substances were evaluated in a health risk assessment (see Appendix 8.6C). The chemical substances potentially emitted into the air from the proposed facility include ammonia, volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs) from the combustion turbines and heat recovery steam generators, as well as ammonia and trace metals from the cooling tower. Air emissions from the oil/water separator were not considered due to the negligible emissions expected from the unit, and because no toxic air contaminants are expected to be emitted. The chemical substances potentially emitted into the air are listed in Table 8.6-3.

TABLE 8.6-3  
Chemical Substances Potentially Emitted to the Air from VPP

Criteria Pollutants	Noncriteria Pollutants (Continued)
Carbon monoxide	PAHs
Oxides of nitrogen	Benzo(a)anthracene
Particulate matter	Benzo(a)pyrene
	Benzo(b)fluoranthene
	Benzo(k)fluoranthene
	Chrysene
	Dibenz(a,h)anthracene
	Indeno(1,2,3-cd)pyrene
<b>Noncriteria Pollutants (Toxic Pollutants)</b>	Naphthalene
Ammonia	Arsenic
Acetaldehyde	Antimony
Acrolein	Barium
1,3-Butadiene	Beryllium
Benzene	Cadmium
Chlorobenzene	Chromium
Ethylbenzene	Cyanide
Formaldehyde	Copper
Hexane	Lead
Hydrogen Chloride	Manganese
Propylene	Mercury
Propylene oxide	Nickel
Toluene	Selenium
Xylene	Silver
	Thallium
	Zinc

### 8.6.3.1 California Environmental Quality Act Significance Criteria for Health Impacts

SCAQMD's California Environmental Quality Act guidelines define significance thresholds for cancer health impacts as equal to or greater than  $10 \times 10^{-6}$  (10 in one million) for the Maximum Exposed Individual (MEI) cancer risk, and the guidelines define significance thresholds for the non-cancer health effects as a project-wide MEI hazard index equal to or greater than 1. The significance thresholds for the Maximum Exposed Individual resident (MEIR) and worker (MEIW) are equal to or greater than 10 in one million.

### 8.6.3.2 Criteria Air Pollutants

Emissions of criteria pollutants will adhere to NAAQS or CAAQS as discussed in the Ambient Air Quality section (see Subsection 8.1, Air Quality). The proposed facility also will include emission control technologies necessary to meet the required emission standards specified for criteria pollutants under SCAQMD rules. Offsets will be required for emissions of criteria pollutants that exceed specified thresholds to ensure that the project will not result in an increase in total emissions in the vicinity. Air dispersion modeling results (presented in the Ambient Air Quality section, Subsection 8.1) show that project emissions will not cause or contribute to the violation of ambient air quality standards (either NAAQS or CAAQS) for those pollutants for which the area is designated as attainment. These standards are intended to protect the general public with a wide margin of safety. Therefore, the project is not anticipated to have a significant impact on public health from emissions of criteria pollutants. For those criteria pollutants (and their precursor pollutants) where the

ambient air quality standards are not in attainment, mitigation will be provided to reduce the impacts to below significant levels.

### 8.6.3.3 Chemical Substances of Potential Concern in Ambient Air

For the purposes of determining the potential maximum ambient concentrations of chemical substances that may be emitted, VPP chemical substance emissions were modeled with the combustion turbines operated at base load at an ambient temperature of 65 degrees Fahrenheit (°F). Duct burner fuel usage was incorporated into the chemical substance emission estimates assuming 8,760 hours of turbine and duct burner operations per year. The emission estimates also assumed the cooling tower was operated at the maximum recirculation rate for 8,760 hours per year. The fire pump was assumed to be operated at its maximum rate for 50 hours per year, which corresponds to the maximum annual duration for testing allowed by the CARB Air Toxics Control Measure. These operating conditions represent the maximum emissions profile (being permitted) for the VPP.

Potential impacts associated with air emissions of chemical substances of potential concern from the proposed facility were addressed in a health risk assessment, presented in Appendix 8.6B. The risk assessment was prepared using guidelines developed under the SCAQMD's July 2005 *Risk Assessments Procedures for Rules 1401 and 212 Version 7* (SCAQMD, 2005a). For detailed risk assessment, such as the assessment prepared in this evaluation, these procedures include the *SCAQMD July 2005 Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB2588)* (SCAQMD, 2005b). Those guidelines supplement the *Air Toxics Hotspots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA, 2003) and the CARB Recommended Interim Risk Management Policy for Inhalation-based Residential Cancer Risk (CARB, 2003). The chemical substances of concern that were addressed in the assessment are listed in Table 8.6-4, along with their respective published OEHHA health-effect values.

Emissions of substances of potential concern that may be associated with the proposed facility (gas-fired turbines and emergency diesel firewater pump) were estimated using emission factors approved by the SCAQMD. Cooling tower emissions of substances of potential concern were estimated based on a mass balance technique using the water supply quality, cooling tower maximum cycles of concentration, water recirculation rate, and mist eliminator drift rate. Emissions from the oil/water separator are not included in this analysis because they are estimated to be negligible. Detailed calculations supporting these negligible emissions are provided in Appendix 8.1A.

TABLE 8.6-4  
Risk Assessment Health Values for Substances of Potential Concern

Compound	Cancer Risk		Non-cancer Effects	
	Inhalation Cancer Potency (mg/kg-day)	Oral Slope Factor ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Chronic Inhalation Reference Exposure Level ( $\mu\text{g}/\text{m}^3$ )	Acute Inhalation Reference Exposure Level ( $\mu\text{g}/\text{m}^3$ )
Acetaldehyde	1.0 E-2	--	9.00E+00	--
Acrolein	--	--	6.0 E-02	1.9E-01
Ammonia	--	--	2.0E+02	3.2E+03

TABLE 8.6-4  
Risk Assessment Health Values for Substances of Potential Concern

Compound	Cancer Risk		Non-cancer Effects	
	Inhalation Cancer Potency (mg/kg-day)	Oral Slope Factor ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Chronic Inhalation Reference Exposure Level ( $\mu\text{g}/\text{m}^3$ )	Acute Inhalation Reference Exposure Level ( $\mu\text{g}/\text{m}^3$ )
Antimony	--	--	2.0E-01	--
Arsenic*	1.2E+01	1.5 E+00	3.0E-02	1.9E-01
Benzene	1.0E-01		6.0E+01	1.3E+03
Beryllium*	8.4E+00		7.0E-03	
1,3-Butadiene	6.0E-01		2.0E+01	--
Cadmium*	1.5E+01		2.0E-02	--
Chromium VI*	5.1E+02		2.0E-1	--
Chlorobenzene	--	--	1.0E+03	--
Copper	--	--	2.4E+00	1.0E+02
Ethylbenzene	--	--	2.0E+03	--
Formaldehyde	2.1E-02		3.0E+00	9.4E+01
Hexane	--	--	7.0E+03	--
Hydrochloric Acid	--	--	9.0E+00	2.1E+03
Lead	4.2E-02	8.5E-03	--	--
Manganese	--	--	9.0E-01	--
Mercury*	--	--	9.0E-02	1.8E+00
Naphthalene	1.2E-01	--	9.0E+00	--
Nickel	9.1E-01		5.0E-02	6.0E+00
PAHs	3.9E+00	1.2E+01	--	--
Propylene	--	--	3.0E+03	--
Propylene oxide	1.3E-02		3.0E+01	3.1E+03
Selenium	--	--	2.0E+01	--
Toluene	--	--	3.0E+02	3.7E+04
Xylene	--	--	7.0E+02	2.2E+04
Zinc	--	--	3.5E+01	--

Source: OEHHA/CARB, 2005

\* These compounds are also listed, and were evaluated, for oral non-cancer health effects

Concentrations of these substances in ambient air associated with the potential emissions were estimated using the SCAQMD-approved HARP software package. HARP includes the USEPA's ISCST3 dispersion model, which estimates both short-term and long-term average ambient concentrations at receptor locations for use in a risk assessment. To estimate ambient concentrations, ISCST3 accounts for site-specific terrain, meteorological conditions and emissions parameters (such as stack exit velocities and temperatures). Health risks potentially associated with the estimated concentrations of chemical substances in ambient

air were characterized in terms of excess lifetime cancer risks (for substances listed by OEHHA as cancer causing), or comparison with reference exposure levels for non-cancer health effects (for substances listed by OEHHA with non-cancer causing effects).

The term MEI<sup>2</sup> is taken from OEHHA risk assessment guidelines (OEHHA, 2003) and refers to an MEIR or MEIW that is located at the point where the highest ambient concentrations of modeled chemical substances associated with facility emissions are predicted. Cancer risk and non-cancer health hazard were estimated for both the MEIR and MEIW based on the modeled ambient concentrations of substances of potential concern.

Potential receptor locations were evaluated as residential or industrial based on aerial photographs of the area around the facility. Where the zone of impact, including the region surrounding the modeled facility, shows a potential maximum added lifetime cancer risk (all pathways, 70-year exposure) of one in one million or greater, OEHHA risk assessment guidelines (OEHHA, 2003) require that cancer risk and non-cancer health hazard values at each sensitive receptor within the zone of impact be estimated. For non-carcinogens, the zone of impact is defined as the area surrounding the modeled facility that has a potential hazard index of greater than or equal to one half.

The evaluation of potential non-cancer health effects from exposure to short-term and long-term concentrations in air was performed by comparing modeled concentrations at the MEIR and MEIW with reference exposure levels (RELs). The REL is a concentration in ambient air at or below which no adverse health effects are anticipated. Potential non-cancer effects were evaluated by calculating a ratio of the modeled concentration in air and the REL. This ratio is the hazard quotient. Inhalation cancer potency, oral slope factor values, and RELs used to characterize health risks associated with modeled impacts were obtained from the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* (OEHHA/CARB, 2005).

This health risk assessment included potential health impacts from inhalation, skin contact, and oral pathways, as required by OEHHA guidelines. Additionally, this assessment included highly-conservative assumptions such as a 70-year exposure duration for residential receptors and a 40-year exposure duration for commercial/industrial receptors. Additional conservative assumptions included extremely high exposure rates such as the 95th percentile breathing rate of 393 liters of air/kg-day were included.

#### 8.6.3.3.1 Potential Health Risks Associated with Chemical Substances in Ambient Air

Modeling showed that the MEIR excess lifetime cancer risk was 0.0867 in one million, and the MEIW excess lifetime cancer risk was 0.341 in one million. Excess lifetime cancer risks less than (10 in one million) are unlikely to represent public health impacts that require additional controls of facility emissions.

For residential receptors, PAH emissions from the diesel fire pump have the highest potential to contribute to the cancer impact; however, the contribution is less than 0.1 in one million. The dominant exposure pathway for PAHs is inhalation. All other substances from other sources contribute less than 0.01 in one million at the MEIR.

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<sup>2</sup> The terms MEI, MEIR, and MEIW refer to a receptor location of maximum ambient exposure and do not incorporate a reference to cancer risk or to non-cancer acute or chronic exposures. In the SCAQMD, Rules 1401 and 1402 refer to Maximum Individual Cancer Risk which, by OEHHA terminology, would be termed the MEI for Cancer effects.

The hazard index for acute noncarcinogenic substances was 0.401. The hazard indices for chronic non-carcinogenic substances were 0.0154 for both the MEIR and MEIW.

To assess the potential combined public health impacts from the VPP and the Malburg Generating Station (MGS), the MEIR, MEIW, and hazard index from both projects were added together<sup>3</sup> to identify the maximum public health impacts. Assessing the combined operation of the MGS and VPP projects using the highest impacts from both facilities results in a conservative assessment as it is unlikely that the MEIRs and MEIWs occur at the same locations. The resulting assessment indicated a maximum combined acute MEIR of 0.46, a chronic MEIR and MEIW of 0.047, a combined acute MEIW of 0.49, a total occupational excess lifetime cancer risk of 1.3 in one million, and a total residential lifetime cancer risk of 0.7 in one million. The total excess lifetime cancer risk is below the significance threshold of 10 in a million; therefore, the combined operation of VPP and MGS is not expected to have significant public health impacts.

HARP results that detail the health risks associated with emissions to the air are presented in Appendix 8.6C.

#### 8.6.3.4 Hazardous Materials

Hazardous materials will be used and stored at the facility. The quantities of hazardous materials proposed to be stored onsite and a description of their uses are presented in Subsection 8.12, Hazardous Materials Handling. Use of hazardous materials at the proposed facility will be in accordance with standard practices for their storage and management. Normal use of hazardous materials, therefore, will not pose significant impacts to public health. While mitigation measures will be in place to prevent releases, accidental releases that migrate offsite could result in potential impacts to the public.

The California Health and Safety Code Sections 25531 to 25541 and Title 40 CFR Part 68 under the Clean Air Act establish emergency response planning requirements for some of the hazardous materials to be used and stored at the facility. The hazardous materials regulated under these LORS are termed "regulated substances." These regulations require preparation of a Risk Management Plan (RMP), which is a comprehensive program to identify hazards and predict the areas that may be affected by a release of a regulated substance. The only regulated substance to be used at the facility above California regulatory thresholds is aqueous ammonia. This regulated substance when released may generate hazardous gases that could migrate offsite.

A offsite consequence analysis (OCA) was performed to assess potential risks to humans at various distances from the site if a release of aqueous ammonia were to occur. The results of the OCA showed that the offsite concentrations at the southern fenceline (the closest publicly accessible area) would not exceed either the California Energy Commission's stringent 75 parts per million (ppm) ammonia significance level, or the Emergency Response Planning Guideline, Level 2 (ERPG 2) level of 200 ppm. Therefore, no public health impacts are expected from the storage and use of regulated substances at the VPP.

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<sup>3</sup> Public health data for Malburg Generating Station were taken from the MGS Final Staff Assessment, Public Health Table 2, page 4.7-13. MGS Final Staff Assessment, September 2002 (01-AFC-25).

### 8.6.3.5 Operation Odors

Small amounts of ammonia used to control NO<sub>x</sub> emissions may escape up the exhaust stack but would not produce operational odors. The expected exhaust gas ammonia concentration, known as ammonia "slip," will be less than 5 ppm. After mixing with the atmosphere, the concentration at ground level will be far below the detectable odor threshold of 5 ppm that the Compressed Gas Association has determined to be acceptable. Therefore, potential ammonia emissions are not expected to create objectionable odors.

## 8.6.4 Mitigation Measures

### 8.6.4.1 Criteria Pollutants

Emissions of criteria pollutants will be minimized by applying Best Available Control Technology (BACT) to the emission sources, which will include the use of only natural gas in the combustion turbines.

The proposed project location is in an area that is designated by the state as nonattainment for ozone, carbon monoxide<sup>4</sup>, and particulate matter. Therefore, all increases in emissions of NO<sub>x</sub>, VOCs, carbon monoxide, PM<sub>10</sub>, and oxides of sulfur must be fully offset if emissions exceed specified trigger limits. The combination of using BACT and providing emission offsets will result in no net increase in criteria pollutants. Therefore, further mitigation of emissions is not required to protect public health.

### 8.6.4.2 Chemical Substances of Potential Concern in Ambient Air

Emissions of chemical substances of potential concern into the air will be minimized through the use of natural gas as the only fuel at the proposed facility. As a result of the HARP analysis, no significant public health risk is expected. Therefore, no mitigation is proposed.

### 8.6.4.3 Hazardous Materials

Mitigation measures for hazardous materials are presented below and discussed in more detail in Subsection 8.12. Potential public health impacts from the use of hazardous materials are only expected to occur as a result of an accidental release. The VPP has many safety features designed to prevent and minimize impacts from the use and accidental release of hazardous materials. The VPP will include the following design features:

- Curbs, berms, and/or concrete pits will be provided where accidental release of chemicals may occur.
- A fire protection system will be included to detect, alarm, and suppress a fire, in accordance with applicable LORS.
- Construction of the aqueous ammonia storage system will be in accordance with applicable LORS.

An RMP for the facility will be prepared prior to commencement of facility operations. The RMP will estimate the risk presented by handling aqueous ammonia at the facility. The

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<sup>4</sup> A request for redesignation from nonattainment to attainment was issued by the SCAQMD in July 2005.

RMP will include a hazard analysis, offsite consequence analysis, seismic assessment, emergency response plan, and training procedures. The RMP process will accurately identify and propose adequate mitigation measures to reduce the risk to the lowest possible level.

A safety program will be implemented and will include safety training programs for contractors and operations personnel, including instructions on: (1) the proper use of personal protective equipment, (2) safe operating procedures, (3) fire safety, and (4) emergency response actions. The safety program will also include programs on safely operating and maintaining systems that use hazardous materials. Emergency procedures for VPP personnel will include power plant evacuation, hazardous material spill cleanup, fire prevention, and emergency response.

Areas subject to potential leaks of hazardous materials will be paved and bermed. Incompatible materials will be stored in separate containment areas. Containment areas will be drained to either an oily waste collection sump or to the wastewater neutralization tank. Also, piping and tanks exposed to potential traffic hazards will be protected by traffic barriers.

### 8.6.5 References

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Office of Environmental Health and Hazard Assessment (OEHHA). 2003. Air Toxics Hotspots Program Guidance Manual for Preparation of Health Risk Assessments.

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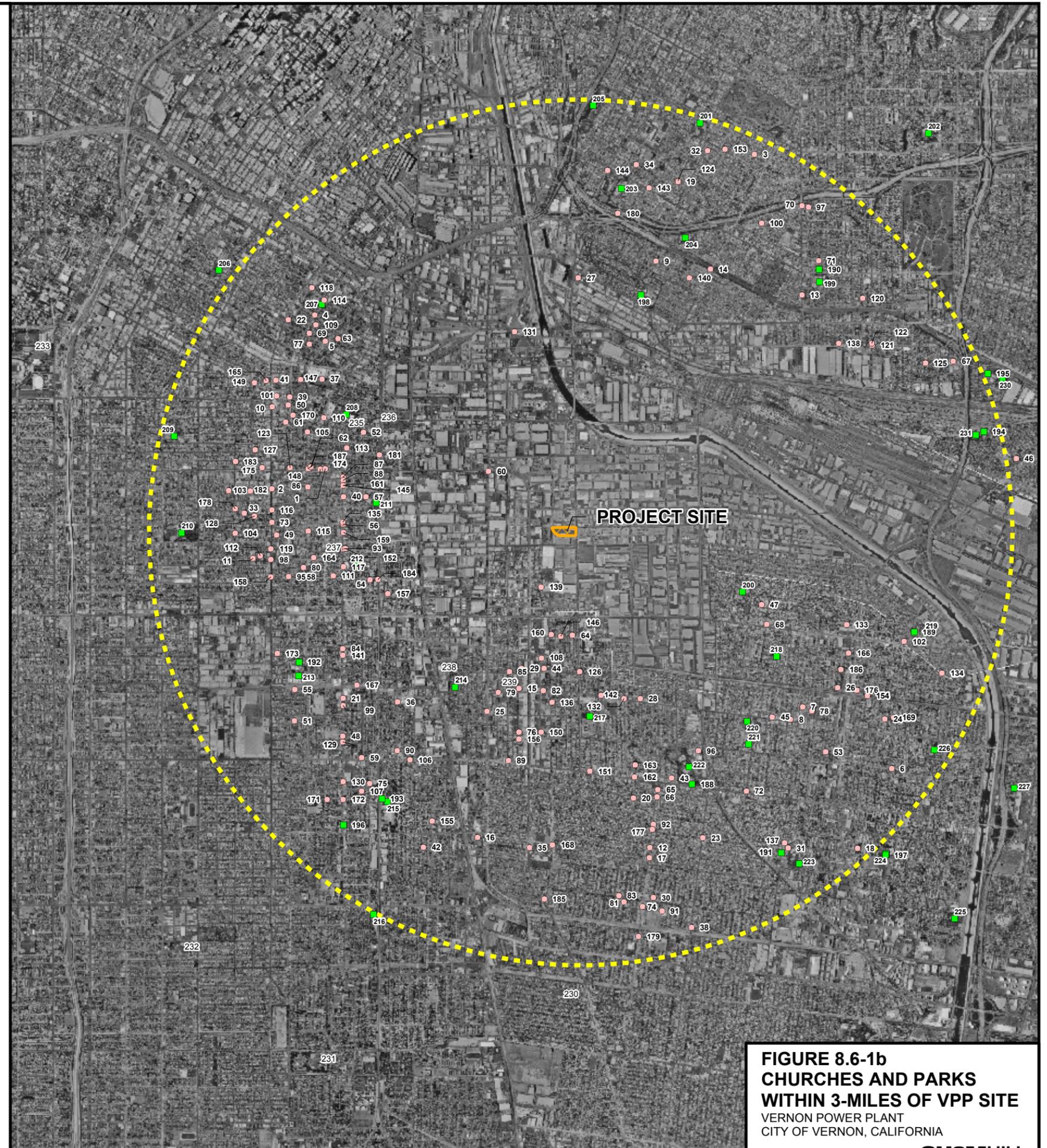
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74	Iglesia De Dio Companerismo	156
75	Iglesia Del Cuerpo De Cristo	157
76,77	Iglesia Del Dios Vivo	158
78	Iglesia Del Senor	159
79	Iglesia El Buen Pastor	160
80	Iglesia Fuente De Agua Viva	161
81	Iglesia Fundamental La Gran	162
82	Iglesia Metodista Unida De	163
83	Iglesia Monte Sinai	164
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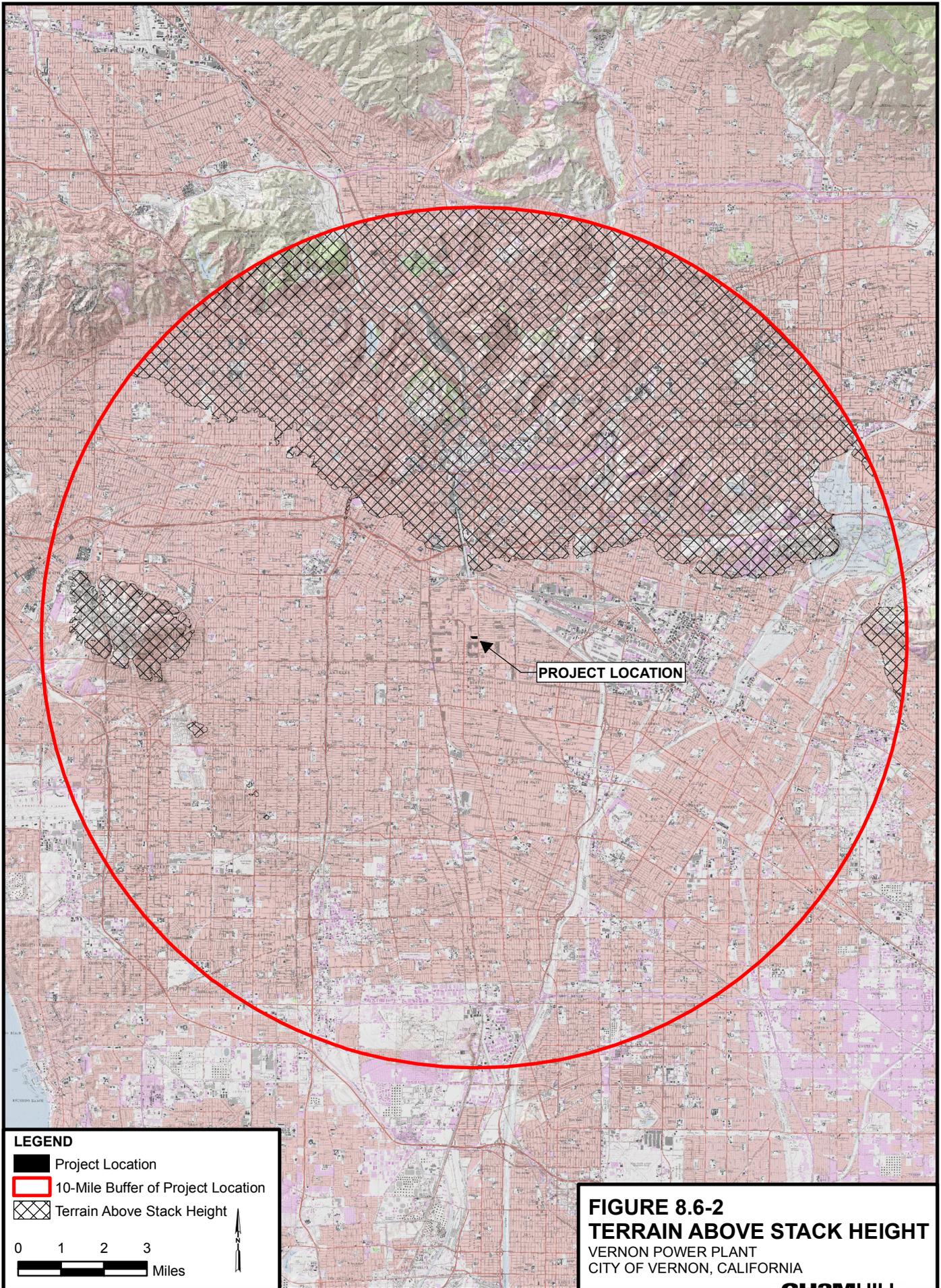
PARKS		
188	Huntington Park Parks & Rec	
189	Maywood Parks & Recreation	
190	Salazar Park	
191	Lugo Park	
192	Bethune Park	
193	Roosevelt Park	
194	Bandini Park	
195	Bristow Park Branch Library	
196	Los Angeles Parks & Recreation	
197	Clara Street Park	
198	Hostetter Playgroud	
199	Salazar Park	
200	Pixley Park	
201	Evergreen Recreation Center	
202	Obregon Park	
203	Boyle Heights Sports Center Park	
204	Ramon Garcia Recreation Center	
205	Hollenbeck Park	
206	Inrinity Recreation Center	
207	Central Recreation Center Park	
208	Ross Snyder Recreation Center	
209	Theresa Lindsay Park	
210	South Park	
211	Fred Roberts Recreation Center	
212	Slauson Recreation Center	
213	Bethune Park	
214	Westside Park	
215	Roosevelt Park	
216	Colonel Leon H Washington Park	
217	Miles Park	
218	Corona Park	
219	Maywood Park	
220	Debs Park	
221	Little Bear Park	
222	Municipal Park	
223	Lugo Park	
224	Clara Park	
225	Cudahy Park	
226	Veterans Park	
227	Marlow Park	
235	Church of God & Saints - Christ	
236	Bethel Trim	
237	Emmanuel Ame Church	
238	El Manatual De Agua Pura	
239	Good Shepherd Family Bible Church	

●	CHURCH
■	PARK
⊠	VERNON POWER PLANT
⋄	3-MILE BUFFER



**FIGURE 8.6-1b**  
**CHURCHES AND PARKS**  
**WITHIN 3-MILES OF VPP SITE**  
 VERNON POWER PLANT  
 CITY OF VERNON, CALIFORNIA



**LEGEND**

- Project Location
- 10-Mile Buffer of Project Location
- Terrain Above Stack Height



**FIGURE 8.6-2**  
**TERRAIN ABOVE STACK HEIGHT**  
 VERNON POWER PLANT  
 CITY OF VERNON, CALIFORNIA