8.9 Agriculture and Soils

8.9.1 Introduction

The City of Vernon (City) proposes to develop a power plant (VPP) on a 13.7-acre property at the southeast corner of Fruitland and Boyle avenues. The VPP will be a 914-megawatt (MW) net (at 65 degrees Fahrenheit [°F] with duct burners and evaporative cooling)/943-MW (gross) combined-cycle generating facility configured using three natural-gas-fired combustion turbines and one steam turbine. Two transmission line options are being considered to connect the plant to Southern California Edison's (SCE) Laguna Bell Substation. Natural gas for the facility will be delivered via approximately 2,300 feet of new 24-inch pipeline that will connect to Southern California Gas Company's (SoCalGas) existing gas transmission line (Line 765). Potable water for drinking, safety showers, fire protection, service water, and sanitary uses will be served from the City's potable water system through two 10-inch pipelines connecting to the City's water mains. One would connect in Boyle Avenue and the other in Fruitland Avenue. Recycled water for industrial purposes will be provided by the Central Basin Municipal Water District (CBMWD) through a nominal 16-inch carbon steel (or if using high density polyethylene [HDPE], a 20-inch) water line connecting to its recycled water line in Boyle Avenue, adjacent to the plant site. The blowdown will be sent to Sanitation Districts of Los Angeles County (LACSD) via a new 2,400-foot section of City sanitary sewer line.

This subsection describes the potential environmental effects on agriculture and soils from the construction and operation of the project. Potential impacts are assessed for the proposed VPP site, the sewer line, the natural gas supply pipeline, and two options for connecting into the power transmission system at the Laguna Bell substation: a line that runs northeast from the VPP site and along the east side of the Los Angeles River corridor (River Route); and a line that runs south from the VPP site and east along Randolph Avenue (Randolph Route). It should be noted that limited agricultural activities and products occurs at or near the proposed VPP site. A map of soil types is provided in Figure 8.9-1 and agricultural areas in proximity to the project is provided in Figure 8.9-2 (located at the end of this subsection).

8.9.2 Applicable Laws, Ordinances, Regulations, and Standards

Federal, state, county, and local LORS applicable to agriculture and soils are discussed below and summarized in Table 8.9-1.

8.9.2.1 Federal

8.9.2.1.1 Federal Water Pollution Control Act of 1972 and the Clean Water Act of 1977

The Federal Water Pollution Control Act of 1972, commonly referred to as the Clean Water Act (CWA) following amendment in 1977, establishes requirements for discharge of stormwater or wastewater from any point source that would affect the beneficial uses of waters of the United States. The State Water Resources Control Board (SWRCB) adopted one statewide National Pollution Discharge Elimination System (NPDES) General Permits that would apply to storm water discharges associated with construction, industrial, and municipal activities. The Regional Water Quality Control Board (RWQCB) is the

administering agency for the NPDES permit program; however, the U.S. Environmental Protection Agency (USEPA) may exercise jurisdiction at its discretion. The CWA's primary effect on agriculture and soils within the project area consist of control of soil erosion and sedimentation during construction, including the preparation and execution of erosion and sedimentation control plans and measures for any soil disturbance during construction.

8.9.2.1.2 USDA Engineering Standards

The U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), *National Engineering Handbook*, 1983, Sections 2 and 3 provide standards for soil conservation during planning, design, and construction activities. The project would need to conform to these standards during grading and construction to limit soil erosion.

8.9.2.2 State

8.9.2.2.1 California Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1972 regulates water quality within the state and implements elements of the federal CWA. The statewide general construction stormwater permit issued per the California Water Code requires protection of water quality by appropriate design, sizing, and construction of erosion and sediment controls. The RWQCB, may initiate enforcement actions if soil erosion threatens water quality.

TABLE 8.9-1
Laws, Ordinances, Regulations, and Standards for Agricultural and Soil Resources

LORS	Purpose	Regulating Agency	Applicability (AFC Section Explaining Conformance)
Federal			
Federal Water Pollution Control Act of 1972: Clean Water Act of 1977 (including 1987 amendments).	Regulates stormwater discharge from construction and industrial activities	RWQCB – Los Angeles Region 4 under State Water Resources Control Board. USEPA may retain jurisdiction at its discretion.	Subsections 8.9.2.1 and 8.9.4.2.
Natural Resources Conservation Service (1983), *National Engineering Handbook*, Sections 2 and 3.	Standards for soil conservation	Natural Resources Conservation Commission	Subsections 8.9.2.1 and 8.9.5.
State			
Porter-Cologne Water Quality Control Act of 1972; California Water Code 13260-13269: 23 CCR Chapter 9.	Regulates stormwater discharge	CEC and the Los Angeles Region under State Water Resources Control Board	Subsections 8.9.2.2 and 8.9.4.2.
Local			
City of Vernon Municipal Code	Encroachment Permit and Construction Permit	Department of Community Services	Subsections 8.9.2.3 and 8.9.6.
City of Huntington Park Municipal Code	Franchise Agreement; Encroachment Permit; and Utility Permit	City Attorney, City Council; Planning and Zoning Division, and Building and Safety Division	Subsections 8.9.2.3 and 8.9.6.

TABLE 8.9-1
Laws, Ordinances, Regulations, and Standards for Agricultural and Soil Resources

LORS	Purpose	Regulating Agency	Applicability (AFC Section Explaining Conformance)
City of Bell Municipal Code	Franchise Agreement; Encroachment Permit; and Excavation Permit	City Attorney, Building and Planning Department, and Engineering Department	Subsections 8.9.2.3 and 8.9.6.
City of Maywood Municipal Code	Franchise Agreement; Encroachment Permit; and Excavation Permit	City Attorney, Building and Planning Department, and Engineering Department	Subsections 8.9.2.3 and 8.9.6.
City of Commerce Municipal Code	Plan review required prior to permit submittals to County of Los Angeles	Planning Division	Subsections 8.9.2.3 and 8.9.6.
City of Bell Gardens Municipal Code	Encroachment Permit and Excavation Permit	Department of Public Works	Subsections 8.9.2.3 and 8.9.6.
County of Los Angeles	Encroachment Permit, Construction Permit, and Excavation Permit	Department of Public Works, Construction Division	Subsections 8.9.2.3 and 8.9.6.
Union Pacific Railroad (UPRR) Utility Specifications	Utility encroachments on UPRR rights-of-way	Los Angeles Area office, Real Estate Department	Subsections 8.9.2.3 and 8.9.6.
LA Junction Railroad	Utility encroachment or vehicle access	LA Junction Railroad	Subsection 8.9.2.3

8.9.2.3 Local

The proposed project would require a construction permit for the VPP site and an encroachment permit for linear features that would cross any public rights-of-way within the City of Vernon. The City of Vernon, Department of Community Services is responsible for the permitting while, internally, the Public Works Division is responsible for reviewing plans and for inspecting construction projects while in progress.

As previously mentioned, two different route options are being considered for connection into the electrical transmission system. The River Route, which is about 4.8 miles long, exits the east side of the VPP site and extends to the east side of the Los Angeles Department of Water and Power (LADWP) transmission corridor where it turns to the north. It turns east just between the Leonis substation and Fire Station and extends to the west side of Downey Road where it turns north and then east along District Boulevard where it turns northeast (toward the Los Angeles River). After crossing the river, the transmission line follows the east bank southward to Randolph Avenue where it turns to the east and extends to the Laguna Bell substation.

The Randolph Route, which is about 4.4 miles long, exits the southeastern corner of the VPP site and runs east to Alcoa Avenue where it turns to the south. At Randolph Avenue, the alignment turns to the east and extends all the way to the Laguna Bell substation.

While the transmission line routes both begin in the City of Vernon, they also traverse other communities depending on the route that is chosen. The following is a brief description of the LORS for the different cities and other agencies that would or could have jurisdiction over the alternative electrical transmission alignment. These include the LORS for the cities of Huntington Park, Maywood, Bell, Commerce, and Bell Gardens, as well as the County of Los Angeles, and the Union Pacific Railroad.

The City of Huntington Park would require a Franchise Agreement for any permanent facility installed within a public right-of-way. These agreements are negotiated with the City Attorney and are voted on by the City Council. The Planning and Zoning Division and Building and Safety Division also review construction plans and issue Encroachment Permits for work in public rights-of-way and Utility Permits for utility projects. The current policy in Huntington Park is that all new utilities (to the degree possible) be constructed below ground (Lynd, pers. comm., 2005).

The cities of Maywood and Bell also require a Franchise Agreement for new utilities that are arranged through the City Attorney and the City Council. Encroachment Permits and Excavation Permits are also required through the Building and Planning Departments. These permits require plan checks by the Engineering Departments along with fees to pay for site inspections during construction (Pagett; Alvarado, pers. comm., 2005). The City of Bell requires new utilities along Randolph Avenue to be located underground. However, because the State of California retains jurisdiction over all electric facilities in excess of 50 kV, including all transmission level facilities, this policy can only pertain to utility lines under the city's jurisdiction, i.e. distribution lines of less than 50 kV. Thus, this policy does not apply to the proposed transmission line. Also, since the new transmission line would be replacing an existing transmission line along the majority of the route, it is assumed that it will be constructed as an overhead line. If Southern California Edison (SCE) facilities (poles or rights-of-way) were used for the VPP transmission line, the City of Bell would also want to see proof of that agreement. (Alvarado, pers. comm., 2005).

The City of Bell Gardens would require an Encroachment Permit and an Excavation Permit from the Department of Public Works. These permits require a plan review (Vahid, pers. comm., 2005). The City of Commerce does not issue any permits (Gomez, pers. comm., 2005). However, the City Engineering Department does provide a required plan review before the requisite permits applications (encroachment, excavation, and construction) are submitted to the County of Los Angeles Department of Public Works, Construction Division (http://www/ladpw.org/prg/business/page_04.cfm).

The Union Pacific Railroad would also require an Encroachment Permit for any utility crossing or running parallel within their right-of-way along Randolph Avenue. This permit is required for either aboveground or belowground utilities. An insurance policy covering the installation is also required.[1] The Los Angeles Junction railroad (LA Junction) near District Boulevard and the Los Angeles River may also require a permit to cross its railroad tracks, depending on whether vehicles need to enter the right-of-way or not (Alexander, pers. comm., 2006).

[1] Union Pacific's website is: http://www.uprr.com/reus/pipeline/install.shtml

8.9.3 Environmental Setting

The proposed VPP will be constructed on 13.7-acres. The adjacent 13.3 acres will be used temporarily for equipment and material laydown and worker parking during construction. The VPP site is currently occupied by a former Alcoa aluminum plant that will be demolished and the site remediated prior to transfer of the site to the City of Vernon. The building demolition is not part of the proposed VPP project. Agricultural production land is very limited as described in the following sections.

The proposed VPP site is located in an urban area of the Los Angeles Basin that is dominated by industrial/commercial land uses and these uses are found on the properties immediately surrounding the proposed VPP site. Densely developed residential areas are located approximately 2,500 to 3,000 feet east and southwest from the proposed VPP site in the cities of Huntington Park and Maywood.

As mentioned previously, two transmission options are being considered and analyzed for the VPP project.

The River Route exits the site to the east between 5151 and 5233 Alcoa Avenue, crosses it and approaches the LADWP right-of-way through the parking lot at 5208 Alcoa Avenue. It continues by crossing the LADWP right-of-way and turning north on an easement on the east side of the LADWP right-of-way. The route turns north on this new easement along the LADWP right-of-way and then proceeds east between the south side of the Leonis substation and the north side of the Fire Station to the west side of Downey Road. Once on Downey the route turns north to the Leonis Boulevard and District Boulevard junction. The route crosses Downey Avenue to the northeastern corner of District Boulevard and continues on the north side of District Boulevard, turning northeast (toward the Los Angeles River) between 4713 and 4717 District Boulevard. The route then crosses the Los Angeles River and railroad facilities, and turns south along the Los Angeles River to Randolph Avenue junction on right-of-way currently occupied by two 66-kV circuits serving Vernon (Laguna Bell-Leonis #2 and Laguna Bell-Ybarra). Finally, the route turns east, crosses the 710 Freeway, and proceeds to the Laguna Bell Substation along Randolph Avenue on right-of-way currently occupied by the Laguna Bell-Container-Pulpgen-Vernon and the Laguna Bell-Leonis-Vernon circuits.

The Randolph Route exits the site east between properties 5233 and 5383 Alcoa Avenue. It crosses Alcoa Avenue and continues south along the eastside of Alcoa Avenue on right-of-way currently occupied by the Laguna Bell-Leonis-Vernon 66-kV circuit. The route continues east, crosses the Century to Velasco 230-kV LADWP transmission line, and proceeds to Laguna Bell along the Randolph Avenue corridor on right-of-way currently occupied by the Laguna Bell-Container-Pulpgen-Vernon and the Laguna Bell-Leonis-Vernon circuits. Finally, the route crosses the Los Angeles River, the LADWP 230-kV circuits from Haynes, and the 710 Freeway, and proceeds to Laguna Bell.

There are no important farmlands (as defined for the Farmland Mapping and Monitoring Program [FMMP]) mapped within a mile of the proposed project area (California Department of Conservation, 2004). Existing agricultural areas in proximity to the project are not FMMP-defined Important Farmlands. The proposed sewer, gas and electrical corridors will follow existing roadway or railroad rights-of-way through urban areas and the recycled and potable water supply pipelines will be connected adjacent to the VPP site.

Soil survey mapping units characterizing the types and distribution of soils within the project area, as shown on Figure 8.9-1, are taken from: *Report and General Soil Map, Los Angeles County, California* (NRCS 2002). These mapping units were scanned from the general soil map. Detailed soil descriptions were developed from the soil survey publication (NRCS, 2002) and from Official Series Descriptions on the NRCS website.

It should be noted that, because of the densely developed, urban nature of the VPP site and vicinity, there is a high probability that actual soil conditions could vary significantly from those described. This could occur because of historic grading (mixing) of locally occurring soils or from imported fill brought in where native soil bearing properties were not sufficient to support building foundations or other facilities.

Data for the affected environment are summarized and presented below:

- Soil types for the project site and along the project linears (gas pipeline, sewer pipeline, and electrical transmission alignment)s are identified in Figure 8.9-1.
- Table 8.9-2 summarizes the characteristics of each of the individual soil mapping units identified on Figure 8.9-1 in the project vicinity including the site boundaries and the project's linear facilities. The table summarizes depth, texture, drainage, permeability, erosion hazard rating, land capability classification, and fertility as an indicator of its revegetation potential.

8.9.3.1 Agricultural Use On and Around the Proposed VPP Site

The types of land use surrounding the proposed VPP site are presented and discussed in Section 8.4, Land Use. A review of project-specific and web-based aerial photographs and biological surveys, confirmed that the site and immediately surrounding land uses are not used to support livestock. However, some agricultural production is supported within the LADWP transmission line right-of-way between Fruitland Avenue and East 50th Street (see Figure 8.9-2).

The land parcel within the LADWP transmission corridor just north of Fruitland Avenue is used to produce edible cactus plants, unspecified row crops, and unspecified crops within plastic hot houses. The proposed electrical transmission line will run along the east side of this parcel for approximately 300 feet. It is expected that construction of the overhead transmission facilities in this area can be completed without significantly impacting agricultural activities at this location. This will be done by placing pole foundations along existing roadways, adjacent to agricultural production areas, or along the asphalt area to the east and by timing construction of the electrical line connections to avoid crop harvesting periods. Because the proposed natural gas supply pipeline would pass to the north of this parcel within the East 50th Street right-of-way, there would be no direct impacts from that linear facility.

The soils mapped at the VPP and surrounding areas are indicated to be of the soil capability subclass IVec-1 (without irrigation) indicating that these soils have severe limitations for choice of plants or management (or both) due to potential for soil erosion and dry climate.

TABLE 8.9-2
Soil Mapping Unit Descriptions and Characteristics

Map Unit	Description
13	**Tujunga-Soboba association; 0 to 5 percent slopes:** This soil comprises a portion of the proposed electrical transmission line linear as follows: approximately 1.55 miles of the River Route or 1.14 miles of the Randolph Route. On the River Route, this soil is found on the west side of the channelized Los Angeles River. On the Randolph Route, it is found on both side of (and beneath) the Los Angeles River. The soils of this association are formed in parent materials on nearly level and gently sloping alluvial fans. They occur between Sea level and 3,700 feet of elevation. The Land Capability Classification for non-irrigated soils is VIIe-4 (indicating soils unsuited to commercial crop production and severe limitations due to erosion hazard caused by sandy soil textures). **Tujunga** soils make up about 60 percent of this soil mapping unit. They are deep soils (> 60 inches) and have sand or loamy fine sand surface layers under lain by similar soil textures in the substratum. **Tujunga** soils are somewhat excessively or excessively drained. Flooding may never occur or it may occur frequently depending on the location. **Tujunga** soils have a rapid permeability and negligible or very low runoff. **Tujunga** soils have a low inherent fertility. Taxonomic Class: Mixed, thermic Typic Xeropsamments **Soboba** soils make up about 30 percent of this soil mapping unit with the remaining 10 percent composed of unnamed sandy and cobbly material in the beds if intermittent streams. **Soboba** soils are deep (> 60 inches) and have very fine sandy loam surface soils underlain by very cobbly loamy coarse sand in the substratum. **Soboba** soils are excessively drained. Occasional flooding of these soils may occur. **Soboba** soils have a very rapid permeability and very slow runoff. **Soboba** soils have a very low inherent fertility. Taxonomic Class: Sandy-skeletal, mixed, thermic Typic Xerofluvents
14	**Hanford association; 2 to 5 percent slopes:** This soil unit comprises the entire site and area containing the proposed sewer and gas supply linears in proximity to the site. It is also the major soil mapping unit along the electrical transmission line, as follows: about 2.61 miles of the River Route including portions near the site and along the Los Angeles River; and about 2.65 miles of the Randolph Route mostly south of and east of the VPP site and a small portion on the east side of the Los Angeles River along Randolph Avenue. The soils of this association are formed in parent materials on gently sloping alluvial fans. They occur between Sea level and 3,500 feet in elevation. The Land Capability Classification for non-irrigated soils is IVec-1 (indicating soils with severe limitations for choice of plants because of problems with erosion and dry climate). **Hanford** soils make up about 85 percent of this soil mapping unit with the remaining soils comprised of Yolo (10 percent) and Hesperia (5 percent) soils. **Hanford** soils are deep (> 60 inches) and have sandy loam surface and gravelly loamy coarse sand substratum. **Hanford** soils are well-drained; they have moderately rapid permeability and negligible to low runoff. **Hanford** soils have a moderate fertility. Taxonomic Class: Coarse-loamy, mixed, superactive, nonacid, thermic Typic Xerorthents

TABLE 8.9-2
Soil Mapping Unit Descriptions and Characteristics

Map Unit	Description
15	**Yolo association:** This soil mapping unit would not be affected by the VPP project but the information is included because this could be a considerable component (up to 10 percent) of the Hanford association. Soils are formed in alluvial fans between the elevation of 1,175 and 1,200 ft. Typical profile: Silt loam surface over a silt loam subsoil. Deep soils (> 60 inches) and well-drained. Permeability is moderate; Runoff is slow to medium. Inherent fertility is high. Taxonomic class: Fine-silty, mixed, superactive, non-acid, thermic Mollic Xerofluvent
21	**Ramona-Placentia association, 2 to 5 percent slopes:** This soil comprises approximately 0.61 mile of the proposed electrical transmission line linear along Randolph Avenue (for both the River and Randolph Routes) on the east side of the Los Angeles River near the Laguna Bell Station. The soils of this association are formed in parent materials on gently sloping terraces. They occur between Sea level and 1,300 feet of elevation. The Land Capability Classification is not given for non-irrigated soils. For the Ramona soils, the irrigated Land Capability Classification is IIIe-1 (indicating soils with severe limitations for choice of plants because of problems with erosion). For the Placentia soils, the irrigated Land Capability Classification is IVe-3 (indicating soils with severe limitations for choice of plants or management because of problems with erosion due to clayey soil or slow permeability). **Ramona** soils make up about 80 percent of this soil mapping unit. They are deep (>60 inches) and have heavy loam, loam, or sandy loam surface layers with dense clay loam or clay subsoil. **Ramona** soils are well drained; they have moderately slow to slow (subsoil) permeability; and slow to rapid runoff. **Ramona** soils have a moderate inherent fertility. **Ramona** soils have a high shrink/swell capacity. Taxonomic Class: Fine-loamy, mixed, superactive, thermic Typic Haploxeralfs **Placentia** soils make up about 15 percent of this soil mapping unit with Hanford soils making up the remaining 5 percent. **Placentia** soils moderately deep (> 18 inches) over a clay subsoil. They have a loam or sandy loam surface texture over a dense clay loam subsoil. **Placentia** soils are moderately well drained; they have very slow permeability; and very rapid runoff. **Placentia** soils have a low inherent fertility. **Placentia** soils have a high shrink/swell capacity. Taxonomic Class: Fine, smectitic, thermic Typic Natrixeralfs

Notes:
Soil characteristics are based on soil mapping descriptions provided in the published soil survey (NRCS, 2002) and in the NRCS Official Series Descriptions provided on the NRCS website.

Soil descriptions are limited to those soil units that could be affected by the VPP project. Other soil mapping units that are outside of the project area, but shown on Figure 8.9-1 include the Yolo association and the Chino association. While the Yolo association map unit is outside of the project area, a brief description is provided because these soils could comprise up to 10 percent of the Hanford association soil mapping unit in which the majority of the VPP project occurs.

Of the mapped soils, only the Hanford soils are associated with prime agricultural land or other important farmland classifications. However, none of the important farmland terms apply to the VPP site or vicinity because those lands have been developed for urban (industrial, commercial, or residential) uses, and remaining agricultural lands in transmission corridors are not considered Important Farmlands (as per FMMP definition).

The Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation (CDC) provide statistics on conversion of farmland to non-agricultural uses for Los Angeles County where the VPP site is located (CDC, 2005). In the year 2004, Los Angeles County had approximately 44,051 acres of Important Farmlands (including Prime Farmland, Farmland of Statewide and Local Importance and Unique Farmlands) and an additional 233,399 acres of grazing land. In the period from 2002 to 2004, Important Farmlands had shown a net increase of almost 1,599 acres (3.8 percent) within the county. In the prior review period (2000-2002), there was only a net change (loss) of 79 acres within the county. A review of the "Important Farmlands" mapping by the FMMP shows that the project site and surrounding areas to be designated as "Urban and Built-Up Land."

8.9.3.2 Agricultural Uses Along the VPP Linear Features

Based on a site visit and a review of available aerial photographs, there is a single parcel of land that is used for agricultural production that would be directly impacted by one of the proposed VPP linears. Agricultural land parcels in the VPP vicinity are depicted on Figure 8.9-2 and described in Subsection 8.9.3.1. Another parcel where agricultural activities occur is located north of the Laguna Bell substation within the SCE transmission right-of-way. There is no figure to show this parcel because the VPP project would not result in any impacts.

8.9.3.2.1 Transmission Line

Based on a site visit and a review of available aerial photographs, there are four parcels of land in current use for agricultural production within the existing north-south trending LADWP transmission corridor between Alcoa Avenue and Downey Road. Two of these parcels are used to grow cactus (*Opuntia* spp.*)* and unspecified row crops and two are used solely for row crop production. One of the parcels used for cactus and row crops (approximately 475 by 90 feet in size) is located just north of Fruitland Avenue. The second parcel (approximately 1,000 by 100 feet in size) is located about 700 feet south of Fruitland Avenue and extends southward to the railroad right-of-way. The cactus growers are located within the southern 475 feet of that parcel, while row crops are grown in the northern portion and along the eastern edge. The third parcel, used solely for unspecified row crops, extends north from Slauson Avenue and is approximately 900 feet by 120 feet in size. Access roadways appear to run the entire length of the LADWP corridor between Fruitland Avenue and Slauson Avenue. The fourth parcel, used solely for unspecified row crops, is located along the LADWP corridor between Slauson Avenue and Randolph Avenue and is approximately 1,500 feet by 100 feet in size.

The proposed River Route transmission line would run for approximately 300 feet along the east side of the parcel just north of Fruitland Avenue. At this time, planned construction activities will not impact row crop or cactus production activities at any of these locations. Impact avoidance can be accomplished by timing the tower wiring around the crop harvest period. If new transmission poles are required, direct impacts can be avoided by locating the

new poles along existing access roadways or adjacent to agricultural production areas rather than within them.

Another agricultural parcel, identified within the SCE transmission corridor, was being used for a plant nursery for a wide variety of landscape plants such as palms trees, hedges (privet); and vines (jasmine and honeysuckle). Again, because the Randolph Route transmission line for the VPP would run to the south of this area along Randolph Avenue, there would be no direct impacts to this agricultural parcel from the VPP project.

No other impacts to agricultural lands would occur along the proposed transmission line routes.

8.9.3.2.2 Sewer Line

An 18-inch sanitary sewer line would exit the plant site from the southeast corner, follow the east edge of the parcel and along the railroad right-of-way to Alcoa Avenue, turning south on Alcoa Ave the line would be 21 inches in diameter to the point where it connects to the Sanitation Districts of Los Angeles County's 24-inch line at Alcoa and Slauson Avenues. The total length of the sewer line would be about 2,400 feet (See Figures 8.9-1 and 8.9-2). The sewer line will not cross any areas under agricultural production.

8.9.3.2.3 Natural Gas Line

The 24-inch natural gas supply pipeline will extend eastward from the plant site along Fruitland Avenue, then north along Alcoa Avenue, then east along East 50th Street about 2,300 feet to the SoCalGas Line 765 in South Downey Road. The natural gas line trench will be about 3 feet wide and between 5 to 10 feet deep (depending on location of utilities in the street), with a minimum cap of 3 feet.

Construction of the gas line will not directly impact agricultural activities within the LADWP transmission line corridor.

8.9.3.2.4 Recycled and Potable Water Lines

The source of process water for the VPP site will be from a recycled water pipeline located within Boyle Avenue adjacent to the west side of the site. Similarly, the plant will also connect to potable water mains in Boyle and Fruitland avenues. Since these lines are in the street adjacent to the plant site, their construction will have no impact on agricultural land uses.

8.9.3.3 Soil Types within the Study Area and Prime Farmlands

Table 8.9-2 provides a description of the properties of the soil mapping units that are found in the vicinity of the proposed VPP site, laydown area, and along the proposed linear routes. As indicated, the soil mapping units in the project area are located within the Hanford association soil mapping unit and have a relatively low capability to support commercial crop production (soil capability class IVec-1). The proposed VPP project will not affect any Prime Farmlands or other important farmlands because the site and surrounding areas have already been developed for urban land uses (industrial, commercial, and residential). As previously mentioned, the proposed project construction activities may occur near some parcels that are currently used for agricultural production (i.e., cactus plants or row crops) that occur near the proposed gas supply or beneath the transmission utility right-of-way.

However, the proposed construction activities will be executed in a manner that does not directly affect production activities in these parcels (see Subsection 8.9.2.1).

The soil drainage class information does not reveal the presence of somewhat-poorly or poorly drained soils that would indicate a potential for jurisdiction wetlands in the project area.

8.9.3.4 Soil Loss and Erosion

The factors that have the largest effect on soil loss include steep slopes, lack of vegetation, and erodible soils composed of large proportions of fine sands. The soils found in the VPP site, laydown area, and along the linear features are nearly level (or very slightly sloped). While these soils do not have vegetative cover, they are currently paved or otherwise covered by existing facilities.

In general, the soil types at the VPP site and along the linear features, as indicated by the NRCS mapping (2002), have surface soil conditions that are relatively coarse grained (sand, loamy sand, sandy loam, or very fine sandy loam). These conditions could have a relatively high potential for water and wind erosion. However, the erosion potential is somewhat mitigated by the fact that the proposed areas where construction activities will occur is surrounded by other developed properties and buildings that will limit locally significant ground-level winds that could lead to excessive wind erosion, and steep slopes are not present.

Best management practices (BMPs) will be used to minimize erosion at the site during construction in accordance with general construction stormwater permit requirements, which requires control of both water- and wind-related erosion. These measures will include controls such as mulching, physical stabilization, dust suppression, berms, ditches, and sediment barriers. Water erosion will be mitigated through the use of sediment barriers and wind erosion potential will be reduced significantly by keeping soil moist or by covering soil piles with mulch or other wind protection barriers. These temporary measures would be removed from the site after the completion of construction and the site will be paved or completely covered. The final state of the site during operations will be completely paved or otherwise covered so soil erosion loss at that point would be negligible.

8.9.3.4.1 Water Erosion

Despite the low potential for soil erosion in the VPP project area, an estimate of erosion by water is provided below (Table 8.9-3). This estimate of soil loss by water erosion was developed using the Revised Universal Soil Loss Equation (RUSLE2) program using the following assumptions:

- The 13.7-acre VPP site is currently being cleared of structures. If necessary, the site will be graded at the beginning of construction to ensure proper drainage. To be conservative, it was assumed that active soil grading on the plant site would occur over a 2-month period with one month of active grading for the laydown, fabrication, and construction parking area (13.3 acres). It was then assumed that the soil for the site would be disturbed for an additional 22-month construction period (for a total grading/construction period of 24 months).

- The laydown, fabrication, and parking areas would be covered with gravel after grading so that additional soil losses during construction would become negligible.
- The total offsite area for the approximately 0.44-mile-long natural gas supply pipeline trench (assuming a 3-foot width) is 0.154 acres. It is conservatively estimated that the pipeline area would be exposed for a 6-month period before being repaved.
- The total offsite area for the approximately 2,400-foot-long sanitary sewer trench (assuming a 3-foot width) is 0.167 acres. For the purpose of estimating soil loss, a similar approach to that described for the natural gas pipeline above was used with a construction duration estimated at 5 months.
- For the two options considered for the 230-kV transmission line, it was assumed that only overhead towers would be used along the River Route or the Randolph Route. The overhead transmission impact areas are estimated using an assumed spacing of 150 feet between poles and a disturbed footprint of 3 by 3 feet for each pole for a total impact area of 0.035 acre (River Route) or 0.032 acre (Randolph Route). The time to complete either transmission line option is assumed to be 7 months.
- RUSLE2 rainfall erosivity conditions were estimated for the VPP site coordinates using specific rainfall estimates from on-line National Weather Service data
- Assumes a 100-foot slope length. Estimated soil unit slope is the midpoint of the minimum and maximum of the unit slope class.

Soil losses are estimated using the following RUSLE2 conditions:

- **Construction** soil losses were approximated using Management as "bare ground, smooth surface;" Contouring: None, rows up and down hill; Diversion/terracing: None; and Strips and Barriers: None.
- **Active grading** soil losses were approximated using Management as "bare ground, rough surface" soil conditions; Contouring: None, rows up and down hill; Diversion/terracing: None; and Strips and Barriers: None.
- **Construction** soil losses **with implementation of construction BMPs** was approximated using Management as "Silt fence;" Contouring: Perfect, no row grade; Diversion/terracing: None; and Strips and Barriers: 2 fences, one at end of RUSLE2 slope.
- A **"No Project"** soil loss estimate was also approximated using Management as "Dense grass – not harvested;" Contouring: None, rows up and down hill; Diversion /terracing: None; and Strips and Barriers: None.

As shown in Table 8.9-3, the estimated total soil loss over the 24-month construction period (with BMPs employed) was 4.3 tons for the entire project with either the River Route transmission line or the Randolph Route transmission line option. Soil losses are expected to be negligible after the construction phase because the land would then be covered with VPP facilities (power plant, paved roadways, or parking areas) or with permanent landscaping. It should be noted that the estimate of accelerated soil loss by water is conservative because of the assumptions noted above. Furthermore, the full implementation of construction BMPs to reduce soil erosion will likely reduce soil losses to near negligible levels.

TABLE 8.9.3
Estimate of Soil Loss by Water Erosion Using Revised Universal Soil Loss Equation (RUSLE2)

Feature (acreage)[b]	Activity	Duration (months)[c]	Estimates Using Revised Universal Soil Loss Equation[a]: Soil Loss (tons) without BMPs	Soil Loss (tons) with BMPs	Soil Loss (tons/yr) No Project
Site (13.7 acres)	Grading	2	25.12	0.34	0.49
	Construction	22	133.12	3.77	---
Laydown Area (13.3)	Grading	1	12.19	0.17	0.48
Gas Pipeline (0.154 acres)	Grading/excavation	6	0.85	0.012	0.006
Sewer Line (0.167 acres)	Grading/excavation	5	0.76	0.01	0.006
OH Transmission Line (River Route) (0.035 acre)	Grading/excavation	7	0.23	0.003	0.001
OH Transmission Line (Randolph Route) (0.032 acres)	Grading/excavation	7	0.22	0.003	0.001
Total Project Soil Loss Estimates[d]					
Site, Gas, Sewer Line, and OH Transmission Line (River Route)	All activities listed above	24	172.267	4.3013	0.9849
Site, Gas, Sewer Line, and OH Transmission Line (Randolph Route)	All activities listed above	24	172.257	4.3012	0.9848

Notes:

[a] Soil losses (tons/acre/year) are estimated using RUSLE2 software available on line at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_index.htm.

- The RUSLE2 model used site-specific mapped soil characteristics included in the RUSLE2 soil data files.
- Soil loss (R-factors) were estimated using a 2-year, 6-hour point precipitation frequency amount for the nearest National Weather Service station to the VPP site (on line at http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html).
- Estimates of actual soil losses use the RUSLE2 soil loss times the duration and the affected area. The No Project Alternative estimate does not have a specific duration, so loss is given as tons/year.

[b] The area for all pipelines was estimated by assuming a 3-foot wide trench times the length of the proposed linear. Overhead transmission lines acreages were estimated by determining the number of poles (length divided by a 150-foot average spacing) and estimating a 3 by 3-foot footprint for each pole.

[c] The estimate of project time to complete each feature is derived from VPP construction schedule shown in Table 8.8-8.

[d] The number of significant digits shown in the total project soil loss estimate has been increased to reveal the slight differences between the estimates for the Randolph and the River Routes. However, it should be noted that these two estimates are essentially identical.

Project Assumptions as follows:

The entire VPP site (13.7 acres) will be disturbed.

The 13.3-acre laydown area will be graded in 1 month and then covered with gravel at which point the soil losses will become negligible.

RUSLE2 Assumptions as follows:

100-foot slope length. Estimated soil unit slope is the midpoint of the minimum and maximum of the unit slope class. Rock cover percent estimated to be zero throughout project area.

Construction soil losses assume the following inputs: Management - Bare ground; Contouring - None, rows up and down hill; Diversion/terracing - None; Strips and Barriers - None.

Grading soil losses assume the following inputs: Management - Bare ground/rough surface; Contouring - None, rows up and down hill; Diversion/terracing - None; Strips and Barriers - None.

Construction with BMP soil losses assume the following inputs: Management - Silt fence; Contouring - Perfect, no row grade; Diversion/terracing - None; Strips and Barriers - 2 fences, 1 at end of RUSLE slope.

No Project soil losses assume the following inputs: Management - Dense grass, not harvested; Contouring - None, rows up and down hill; Diversion/terracing - None; Strips and Barriers - None.

8.9.3.4.2 Wind Erosion

The potential for wind erosion of surface material at the VPP was estimated by calculating the total suspended particulates that could be emitted from active grading activities and the wind erosion of exposed soil. The total site area and grading duration were multiplied by emission factors to estimate the total suspended particulate matter (TSP) emitted from the site. Fugitive dust from site grading was calculated using the default particulate matter less than 10 microns in equivalent diameter (PM_{10}) emission factor used in URBEMIS2002 and the ratio of fugitive TSP to PM_{10} published by the Bay Area Air Quality Management District (BAAQMD, 2005). Fugitive dust resulting from the wind erosion of exposed soil was calculated using the emission factor in AP-42 (USEPA, 1995 and in Table 11.9-4 in BAAQMD, 2005).

Mitigation measures, such as watering exposed surfaces, are used to reduce PM_{10} emissions during construction activities. The PM_{10} reduction efficiencies are taken from the South Coast Air Quality Management District (SCAQMD) CEQA Handbook (1993) and were used to estimate the effectiveness of the mitigation measures. Table 8.9-4 summarizes the mitigation measures and PM_{10} efficiencies applied to the emission calculations.

TABLE 8.9-4
Mitigation Measures for Fugitive Dust Emissions

Mitigation Measure	PM_{10} Emission Reduction Efficiency	Efficiency Applied
Water active sites at least twice daily	34-68%	50%
Enclose, cover, water twice daily, or apply non-toxic soil binders, according to manufacturer's specifications, to exposed piles (i.e., gravel, sand, dirt) with 5 percent or greater silt content	30-74%	50%

Source: SCAQMD CEQA Handbook, Table 11-4. (1993)

Table 8.9-5 summarizes the mitigated TSP predicted to be emitted from the site from grading and the wind erosion of exposed soil. Without mitigation, the predicted erosion of material from the site with implementation of mitigation measures is estimated at 12.6 tons over the course of the project construction cycle (for either the Randolph Route or the River Route transmission line option. This estimate is reduced to about 6.3 tons by implementing basic mitigation measures.

These estimates for soil losses by wind are conservative because they make use of emission rates for a generalized soil rather than for specific soil properties and assume the worst-case for blowing conditions. It should be noted that this wind loss estimate does not use a process-driven method (i.e., one that uses a schedule of planned activities, equipment, and duration). That type of analysis is prepared separately as part of the detailed air quality evaluations. It is also expected that actual wind erosion would be much lower than what is estimated in this section because of the developed urban nature of the project area. Existing buildings surrounding the construction areas would be likely to significantly reduce erosive winds at ground level.

TABLE 8.9-5
Estimate of Total Suspended Particulates Emitted from Grading and Wind Erosion

Emission Source	Area	Duration (months)	Unmitigated TSP (tons)	Mitigated TSP (tons)
Grading Dust				
Project Site	13.7 acres	2	5.023	2.512
Laydown Area	13.3 acres	1	2.438	1.219
Gas Pipeline	0.154 acre	6	0.170	0.085
Sewer Line	0.167 acre	5	0.153	0.076
River Route Transmission Line	0.035 acre	7	0.044	0.022
Randolph Route Transmission Line	0.032 acre	7	0.041	0.020
Wind Blown Dust				
Project Site	13.7 acres	11	4.772	2.386
Estimated Total	(Project with OH transmission along River Route)		12.600	6.300
	(Project with OH transmission along Randolph Route)		12.597	6.298

Assumptions:

- Assumes grading for entire site will be completed in a 2-month period and the laydown area in a 1 month period.
- Assumes bare soil at half the project site is exposed for 22 months after grading during construction phase.
- The natural gas and sewer pipelines will be trenched within or adjacent to existing paved roadways and that a 3-foot-wide trench will be adequate.
- The transmission lines along both option routes would be installed as overhead (OH) lines using an estimated 168 poles (River Route) or 154 poles (Randolph Route) with an assumed 150-foot spacing.

Data Sources:

- PM_{10} Emission Factor Source: URBEMIS2002 User's Guide, May 2003
- PM_{10} to TSP Conversion Factor Source: http://www.baaqmd.gov/pmt/handbook/s12c03fr.htm
- SCAQMD CEQA Handbook (1993) Table 11-4 for mitigation efficiency rates (as summarized in Table 8.9-4)

8.9.3.5 Other Significant Soil Characteristics

A significant soil characteristic concerning the proposed project is the potential for soils with a high shrink/swell potential, especially at the far eastern end of the alternative electrical transmission line, near the Laguna Bell Substation. This soil property is associated with the Ramona-Placentia association soils. Expansive clays have the potential to be unsuitable for use as bearing surfaces for foundations and pipelines due to their potential to heave or collapse with changing moisture content.

With the River Route transmission line, it is also expected that gravelly or cobbly substrates could exist in the vicinity of the channelized Los Angeles River where the Tujunga-Soboba association soils are mapped. This could pose a problem if an underground installation is required and horizontal directional drilling or jack-and-bore techniques are required to cross this area for the electrical transmission line.

The presence of somewhat poorly- or poorly-drained soils was not revealed by soil survey information in the project area that would indicate a potential for jurisdictional wetlands.

8.9.4 Environmental Analysis

The following subsections describe the potential environmental effects on agricultural production and soils during the construction and operation phases of the project.

The potential for impacts to agriculture and soil resources was evaluated with respect to the criteria described in the Appendix G checklist of CEQA. An impact is considered potentially significant if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps for the Farmland Mapping and Monitoring Program by the California Resources Agency to non-agricultural use
- Conflict with existing zoning for agricultural use or a Williamson Act contract
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use
- Impact jurisdictional wetlands
- Result in substantial soil erosion

The following subsections describe the anticipated environmental impacts on agricultural production and soils during plant construction and operation.

8.9.4.1 Impacts on Agricultural Soils or Wetland Soils

As previously indicated, the VPP site and associated linear features are located within an urban area of Los Angeles County. This area is already developed for industrial, commercial, and residential land uses and there are only a few small-scale agricultural uses near some of the proposed linear features (i.e., cactus and other small farming operations within the LADWP transmission line right-of-way and the plant nursery within the SCE transmission line corridor north of the Laguna Bell Substation). The mapped soils in these areas are not well suited for commercial crop production and the proposed VPP will not have any direct impact on agricultural soils or important farmlands. For this reason, the VPP will not affect any properties currently under a Williamson Act contract or conflict with existing zoning for agricultural use.

Based on an assessment of the soil survey information and knowledge of the site conditions, the proposed VPP will not affect wetland soils.

8.9.4.2 Construction

Construction activities can potentially impact soil resources by increasing soil erosion and soil compaction. The effect of soil erosion would be that soil lost during or after construction could increase the sediment load in surface receiving waters downstream of the construction site. The magnitude, extent, and duration of this construction-related impact depend on the erodibility of the soil (discussed above), the proximity of the construction activity to receiving waters, and the construction methods, duration, and season.

There is some potential for erosion associated with the soil types at the VPP and surrounding areas. Per the requirements of the statewide general construction storm water permit require implementation of a combination of erosion and sediment controls meeting the technology-based Best Conventional Pollutant Control Technology (BCT) Standard. During construction BMPs (described in Subsection 8.9.5) will be implemented to reduce or prevent erosion, to meet the BCT standard, and to ensure that discharges from the construction site will not cause or contribute to exceedances of water quality standards in the downstream receiving waters. The BMPs implemented during construction will be site-specific, will be modified as necessary to reflect changing weather conditions, and will be implemented to meet the goal of the permit that there is not a net increase of erosion compared with pre-project conditions. By requiring the use of BMPs during construction, the impacts from soil erosion are expected to be less than significant. BMPs that will be used are outlined in Subsection 8.9.5.

Construction of the proposed project would result in soil compaction during the construction of foundations, pump station, pipelines, and paved roadway and parking areas. Soil compaction would also result from vehicle traffic along temporary access roads. Soil compaction increases soil density by reducing soil pore space. This, in turn, reduces the ability of the soil to absorb precipitation and transmit gases for respiration of soil microfauna. Soil compaction can result in increased runoff, erosion, and sedimentation. The incorporation of BMPs during project construction will result in less than significant impacts from soil compaction during construction.

Since the site and project linears will be constructed in currently developed areas that will be repaved or otherwise protected from erosion with buildings or landscaping after construction, the overall anticipated effects of construction are considered to be less than significant with mitigation incorporated.

8.9.4.3 Operation

Operation of the VPP would not result in impacts to the soil from erosion or compaction. Routine vehicle traffic during plant operation will be limited to existing roads, all of which will be paved, and standard operational activities should not involve the disruption of soil. Therefore, impacts to soil from project operations would be less than significant.

8.9.4.4 Effects of Generating Facility Emissions on Soil-Vegetation Systems

There is a concern in some areas that emissions from the generating facility, principally oxides of nitrogen (NO_x) from the combustors or particulate matter from the cooling towers, would have an adverse effect on soil-vegetation systems in the project vicinity. This is principally a concern where environments that are highly sensitive to nutrients or salts, such as serpentine habitats, are downwind of the project.

In this case, the dominant land use around the project is urban and there are no serpentine habitats in the project area. The addition of small amounts of nitrogen to the industrial and commercial areas would be a less than significant impact because of the paucity of vegetation in these areas. Within the more vegetated residential areas, the addition of small amounts of nitrogen would be insignificant within the context of fertilizers, herbicides, and pesticides typically used by homeowners.

8.9.4.5 Cumulative Effects

As previously described, the effects on soil erosion, sedimentation, and compaction associated with the VPP are not considered to be significant. Concurrent projects within the drainage basin have not been identified; however, if they exist, they would also be subject to the same requirements to limit impacts on soil erosion and sedimentation. In addition, the existing urban nature of the project area means that any soil compaction that might have taken place with development has already occurred. Therefore, the cumulative impacts of the proposed VPP would be negligible.

8.9.5 Mitigation Measures

Erosion control measures would be required during construction to help maintain water quality, protect property from erosion damage, and prevent accelerated soil erosion or dust generation that destroys soil productivity and soil capacity. Temporary erosion and sediment control measures including those specified in Subsection 8.9.5.1 will be implemented before construction begins, would be maintained and evaluated during construction, and would be removed from the site after the completion of construction.

8.9.5.1 Temporary Erosion Control Measures

Temporary erosion control measures would be implemented before construction begins, and would be evaluated and maintained during construction. These measures would be described in detail in a stormwater pollution prevention plan (SWPPP) that would be prepared and approved prior to initiation of site activities. The SWPPP will include a menu of BMPs to be selected and implemented based upon site conditions, phase of construction, and weather conditions. Revegetation, mulching, physical stabilization, dust suppression, berms, ditches, and sediment barriers would be included among the BMPs listed. An administrative draft Construction SWPPP is provided in Appendix 8.14B.

The natural gas supply pipeline is anticipated to be constructed within the right-of way associated with Fruitland Avenue, Alcoa Avenue, and East 50th Street. With either of the transmission line linear options, temporary erosion control will include (as necessary) asphalt patching until permanent paving can be completed. If required on non-paved areas disturbed by the pipeline construction, revegetation would be accomplished using locally prevalent, fast-growing plant species compatible with adjacent existing plant species.

During construction of the project and the related linear facilities, dust erosion control measures would be implemented to minimize the wind-blown erosion of soil from the site. Water would be sprayed on the soil in active construction areas to control dust during revegetation. Soil stockpiles will be covered or controlled with soil binder materials as necessary to guard against wind or water erosion.

Sediment barriers, such as straw bales, sand bags, or silt fences, slow runoff and trap sediment. Sediment barriers will be placed at the downgradient perimeter of disturbed areas, at the base of exposed slopes, and along streets and property lines downgradient of the disturbed area. Sediment barriers are often placed around sensitive areas, such as wetlands, creeks, or storm drains, to reduce or prevent contamination by off-site transport of sediment.

Perimeter barriers will be used during rainy season and during other parts of the year, some barriers would be placed in locations where offsite drainage could occur to reduce or prevent sediment from leaving the site. If used, straw bales would be properly installed (staked and keyed), then removed or used as mulch after construction. Runoff detention basins, drainage diversions, and other large-scale sediment traps are not considered necessary due to the level topography and surrounding paved areas. Any soil stockpiles would be stabilized and covered if left onsite for long periods of time or if weather conditions warrant, including placement of sediment barriers around the base of the stockpile. These methods will also be employed during trenching operations for the recycled water supply line.

8.9.5.2 Permanent Erosion Control Measures

Permanent erosion control measures on the site will include graveling, paving, drainage systems, building construction, and landscaping.

A Construction Drainage, Erosion and Sedimentation Control Plan (CDESCP) will be developed in conjunction with California Energy Commission (CEC) staff to set performance standards and monitor the effectiveness of soil loss mitigation measures. This plan will address the timing and methods for monitoring plant establishment, as well as reporting and response requirements.

8.9.6 Permits and Agency Contacts

Permits required for the project, the responsible agencies, and proposed schedule are shown in Table 8.9-6.

TABLE 8.9-6
Permits and Agency Contacts for VPP Soils

Permit or Approval	Schedule	Agency Contact	Applicability
Erosion and Sediment Control Plan	Prior to construction	Contact Not Yet Established California Energy Commission (CEC) 1516 Ninth Street, MS-2000 Sacramento, CA 95814	Regulation of drainage and erosion associated with site and linear facilities during construction
Approval of Grading Plan; issuance of construction, grading, and encroachment permits	Minimum of 30 days prior to construction	Mr. Pepe Reynoso City of Vernon Department of Community Services 4305 Santa Fe Avenue Vernon, CA 90058 (323) 583-8811 ext 243 Ehab Maximous,Civil Engineer Department of Community Services 4305 Santa Fe Avenue Vernon, CA 90058 (323) 583-8811 ext 221	Site grading, and excavation at site or along linears within public rights-of-way
Construction Activity, Stormwater and NPDES Permit	Prior to construction	Kristie Chung Los Angeles RWQCB 320 West 4th Street, Suite 200 Los Angeles, CA 90013 (213) 620-2283	Regulation of stormwater discharge from site and linear facilities during construction

TABLE 8.9-6
Permits and Agency Contacts for VPP Soils

Permit or Approval	Schedule	Agency Contact	Applicability
Encroachment Permit	Approximately 6 months prior to construction	Joan M. Preble, Real Estate Manager for LA County, Union Pacific Railroad 1400 Douglas, Mail Stop 1690 Omaha, NE 68179 (402) 544-8535 http://www.uprr.com/reus/pipeline/install.shtml	Utility encroachments that run parallel or across the UPRR alignment along Randolph Avenue
Encroachment Permit	Approximately 1 week prior to construction	Marion Alexander, Trainmaster Los Angeles Junction Railway Co. 4433 Exchange Avenue Los Angeles, CA 90058 (323) 277-2008 Office (323) 228-6311 Cell	Utility encroachments that run parallel or across the LA Junction alignment
Franchise agreement, Encroachment Agreement, and Excavation Permit	Approximately 3 months prior to construction	Carlos Alvarado, City of Bell Engineer Building and Planning Department 6330 Pine Avenue Bell, CA 90201 (323) 588-6211 Wes Lynd, Engineer (contractor) Building and Safety Division City of Huntington Park (626) 447-4274 ext 210 Adrian Gallo, Assistant Planner Planning and Zoning Division City of Huntington Park (323) 584-6250 Bill Pagett, Engineer (contractor) (562) 908-6214 Julia Gomez, Assistant Planner City of Maywood Building and Planning Department 4319 East Slauson Avenue Maywood, CA 90270 (323) 562-5722	Installation of electrical transmission facilities within public rights-of-way
Plan Check	Two weeks prior to submittal of permits to County of Los Angeles, Department of Public Works	Victor San Lucas, City Engineer City Hall 2535 Commerce Way Commerce, CA 90040 (323) 722-4805	Installation of electrical transmission facilities within public rights-of-way
Encroachment Permit and Excavation Permit	Minimum 1 week prior to construction	Hormoz Vahid City Engineer 7100 South Garfield Avenue Bell Gardens, CA 90201 (562) 806-7770	Installation of electrical transmission facilities within public rights-of-way
Encroachment Permit and Construction Permit	Minimum 2 months prior to construction	Wu Tan Construction Division, Permit Section County of Los Angeles Department of Public Works P.O. Box 1460 Alhambra, CA 91802 (626) 458-4937	Installation of electrical transmission facilities within City of Bell public rights-of-way

8.9.6.1 Site and Water, Gas, and Sewer Linears

An encroachment permit will be obtained from the City of Vernon before construction begins at the VPP site or along the linear features. Once the project is licensed and starts into final design, grading and construction plans for the proposed project would be first approved by a Certified Building Official (CBO) as required by the CEC Compliance group. Plans approved by the CBO are then submitted to the City of Vernon.

8.9.6.2 Transmission Line

Prior to construction of the Randolph Route electrical transmission line, the required permits would be sought from the City of Huntington Park that includes a Franchise Agreement, Encroachment Permit, and a Utility Permit. Additional permits would be sought from the cities of Maywood, Bell, Commerce, and Bell Gardens. Those permits could include Franchise Agreements, Encroachment Permits, and Excavation Permits. The Franchise Agreements, if required for permanent installed facilities are typically arranged through the City Planning Departments, City Councils, and City Attorneys. The Encroachment Permits and Excavation Permits require a plan review by local staff and may also require a traffic control plan.

Prior to construction of the River Route electrical transmission line, the required permits would be sought from the cities of Bell and Commerce. Those permits could include Franchise Agreements, Encroachment Permits, and Excavation Permits. The Franchise Agreements, if required for permanent installed facilities are typically arranged through the City Planning Departments, City Councils, and City Attorneys. The Encroachment Permits and Excavation Permits require a plan review by local staff and may also require a traffic control plan.

An encroachment permit will also be obtained for the 230-kV electrical transmission line where it crosses the railroad tracks near the Los Angeles River and where it crosses the Union Pacific Railroad alignment in order to reach the Laguna Bell Substation.

8.9.7 References

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Vahid, Hormoz. 2005. Inspector, Public Works Department, City of Bell Gardens, personal communication with Steve Long of CH2M HILL on September 6.

PROJECT LOCATION

LEGEND

- 13 — Tujunga - Soboba association, 0 to 5 percent slopes
- 21 — Ramona-Placentia association, 2 to 5 percent slopes
- 14 — Hanford association 2 to 5 percent slopes
- 15 — Yolo association
- 20 — Chino association
- PROPOSED NATURAL GAS LINE
- PROPOSED SEWER LINE
- TRANSMISSION LINE - RANDOLPH ROUTE
- TRANSMISSION LINE - RIVER ROUTE
- VERNON POWER PLANT
- LAGUNA BELL SUBSTATION
- LAYDOWN AREA
- 1-MILE BUFFER

SOURCE: NRCS, 2002

0 2,000 4,000 Feet

SCALE IS APPROXIMATE

FIGURE 8.9-1
SOILS
VERNON POWER PLANT
CITY OF VERNON, CALIFORNIA

CH2MHILL

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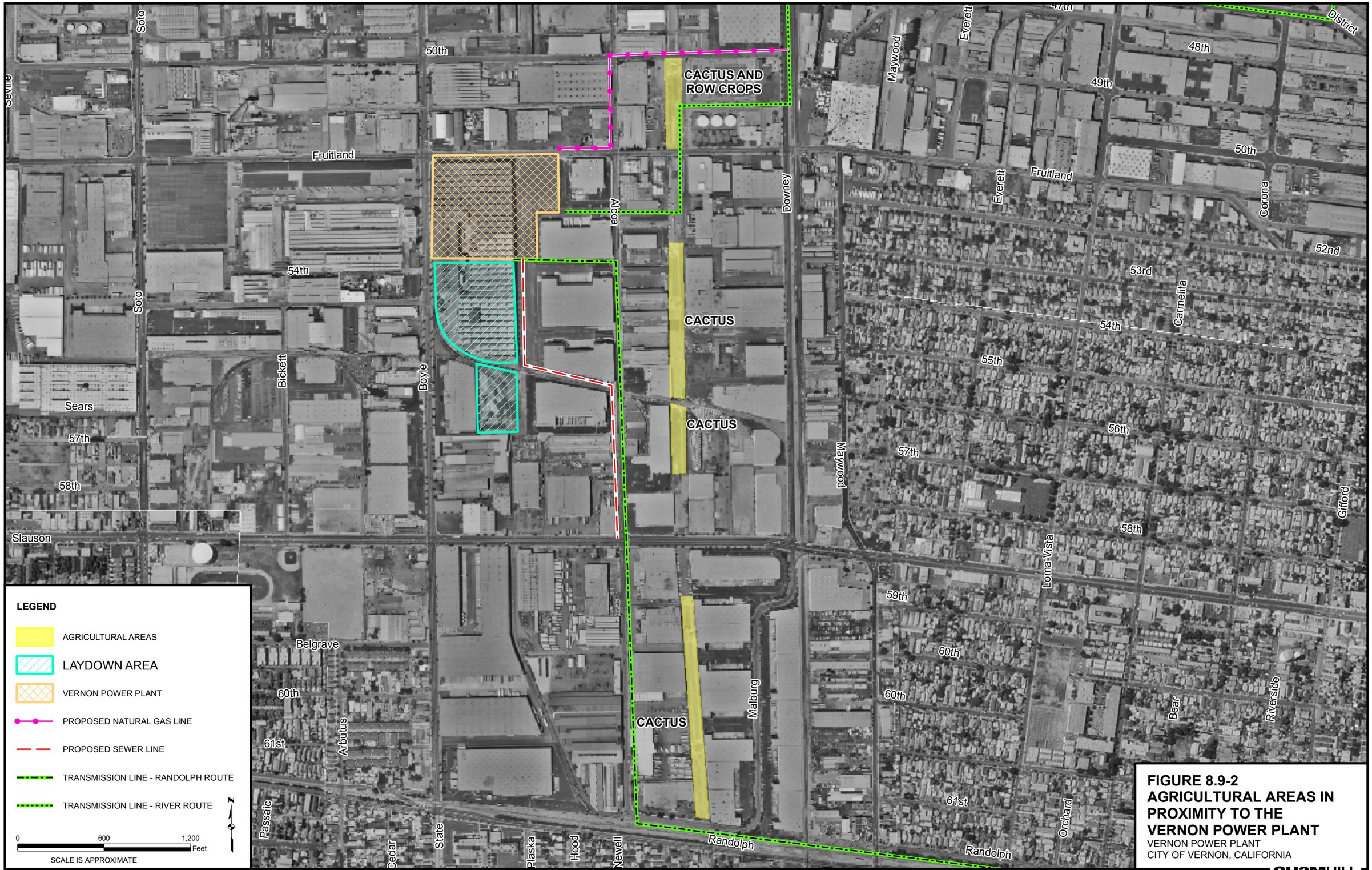

FIGURE 8.9-2
AGRICULTURAL AREAS IN PROXIMITY TO THE VERNON POWER PLANT
VERNON POWER PLANT
CITY OF VERNON, CALIFORNIA

CH2MHILL

RDD \\LOKI\PROJECTS\RDDGIS\VERNON\MXDS\VPP3\VPP3_AG.MXD 6/1/2006 15:20:01