8.11 Soils and Agriculture

This section describes the potential effects of the construction and operation of the WCEP on soils and agriculture. Section 8.11.1 describes the existing environment that could be affected, including agricultural use and soil types. Section 8.11.2 identifies potential environmental effects, if any, from project development. Section 8.11.3 discusses cumulative effects. Section 8.11.4 presents mitigation measures. Section 8.11.5 presents the LORS applicable to agriculture and soils. Section 8.11.6 describes the required permits and provides agency contacts. Section 8.11.7 provides the references used to develop this section.

8.11.1 Environmental Setting

The WCEP is situated within a densely developed industrial and residential area approximately 12 miles east of downtown Los Angeles. The project site lies within an industrial park that is occupied by a warehouse and a truck parking lot. To the west of the project parcel and outside of the project boundary is a small, fenced area containing a drainage channel, wetland vegetation, shrubs, and small trees. This channel conveys storm water runoff from a culvert that extends under the adjacent railroad track toward the San Jose Creek Flood Control Channel to the north of the project site.

Surrounding land uses include industrial uses (large, tilt-up warehouses) to the south and east. To the west, land uses include an electrical transmission easement and the Southern California Edison Walnut Substation. To the north of the site are a transmission right-of-way, flood control channel, and intermodal rail yard. There are densely developed residential areas south of the site in the unincorporated community of Hacienda Heights, and to the north, beyond the rail yard, in the unincorporated community of Puente Hills.

There are no agricultural land uses in the proposed WCEP site or vicinity. The natural gas, water supply (fire suppression, recycled water, potable water), water discharge (sanitary and non-recyclable water), and electrical connections will be made to existing facilities on or adjacent to the WCEP site. The offsite portions of the underground linear features are all relatively short (30 feet or less) and the electrical transmission line will span approximately 200 feet to the Walnut Substation. All linear facilities will be completed within existing developed roadways (potable and reclaim water), railroad rights-of-way (natural gas, sanitary sewer), or transmission easements (electrical transmission).

A description of the soils in the proposed project area was developed from generalized soil mapping information, shown on Figure 8.11-1, taken from the *Report and General Soil Map, Los Angeles County, California* (National Resources Conservation Service [NRCS], 2002). Descriptions of the soil mapping units were developed from the soil mapping publication and from Official Series Descriptions downloaded from the NRCS website.

Soil types for the project area are identified on Figure 8.11-1. The characteristics of soil mapping units identified on Figure 8.11-1 in the areas that will be potentially affected by project construction are summarized in Table 8.11-1. The project area includes the WCEP project site and offsite linear facilities. The table summarizes depth, texture, drainage, permeability, water runoff, and inherent fertility as an indicator of its revegetation potential. Actual soil conditions in the project area could differ from what is described in the

generalized soil descriptions because of the potential for local grading and imported fill in heavily developed, urban areas.

TABLE 8.11-1
Soil Mapping Unit Descriptions and Characteristics

Map Unit	Description
15	**Yolo Association**:
	This soil unit comprises the majority of the project site, along the southern boundary, and in the southeast corner of the site.
	Formation: Alluvial fans between the elevation of 1,175 and 1,200 feet
	Typical profile: Silt loam surface over a silt loam subsoil
	Depth and drainage: Deep soils (over 60 inches deep) and well-drained
	Permeability: Moderate
	Runoff: Slow to medium
	Inherent fertility: High
	Taxonomic class: Fine-silty, mixed, superactive, non-acid, thermic Mollic Xerofluvent
17	**Cropley Association:**
	This soil comprises the northeast portion of the site:
	Formation: Nearly level alluvial plains and valley floors between sea level and 1,250 feet
	Typical profile: Clay surface and clay subsurface
	Shrink-swell capacity: High (i.e., expansive clays)
	Depth and drainage: Deep (over 60 inches deep) and moderately well to well-drained
	Permeability: Slow
	Runoff: Medium to very high
	Inherent fertility: High
	Taxonomic class: Fine, smectitic, thermic Aridic Haploxererts

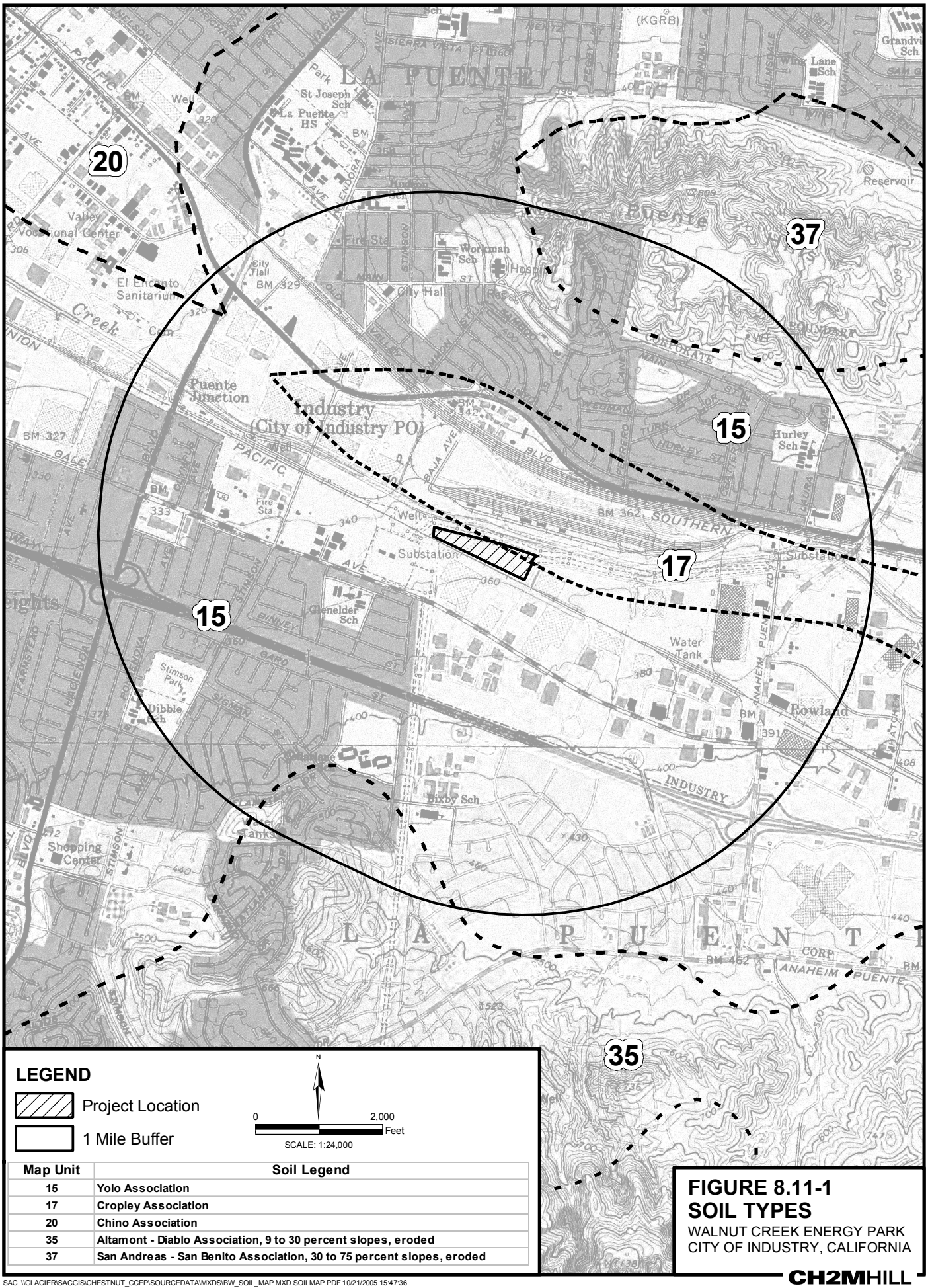
Soil characteristics are based on soil mapping descriptions provided in the published soil survey (NRCS, 2002) and in the NRCS Official Series Descriptions provided on the NRCS website.

Soil descriptions are limited to those soil units that could be affected by the WCEP project. Other soil mapping units, that are well outside of the project area but shown on Figure 8.11-1, include the Chino Association; Altamont-Diablo Association (9 to 30 percent slopes, eroded); and the San Andreas-San Benito Association (30 to 75 percent slopes, eroded).

8.11.1.1 Agricultural Use

There are no areas used for agricultural production within 1 mile of the WCEP site or linear appurtenances. While the soils mapped in the WCEP and surrounding areas are known to have a high inherent fertility, the soils have been developed for industrial, commercial, or urban residential uses and are now unsuitable for commercial crop production. No agricultural activities were observed during field visits to the site and surrounding area.

The Farmland Mapping and Monitoring Program (FMMP) of the California Department of Conservation (CDC) provides statistics on conversion of farmland to non-agricultural uses for Los Angeles County where the WCEP 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.



Map Unit	Soil Legend
15	Yolo Association
17	Cropley Association
20	Chino Association
35	Altamont - Diablo Association, 9 to 30 percent slopes, eroded
37	San Andreas - San Benito Association, 30 to 75 percent slopes, eroded

FIGURE 8.11-1
SOIL TYPES
WALNUT CREEK ENERGY PARK
CITY OF INDUSTRY, CALIFORNIA

CH2MHILL

SAC \\GLACIER\SACGIS\CHESTNUT_CCEP\SOURCEDATA\MXDS\BW_SOIL_MAP.MXD SOILMAP.PDF 10/21/2005 15:47:36

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."

8.11.1.2 Soil Types

Table 8.11-1 describes the properties of the soil mapping units that are found in the vicinity of the WCEP site and includes the proposed linear facilities. As indicated, the soil mapping units in the project area are developed on alluvial deposits (fans and valley bottoms). These soils are all moderately well to well drained. The exception to this would be the drainage channel that runs along the west side of the project site, the soils of which are poorly drained. Due to the developed nature of the project area and vicinity, there is a strong possibility that soil conditions could vary significantly from those mapped. Urban development often entails significant mixing of local soils from grading and the import of soils beneath foundations and roadways where existing soils were considered unsuitable for support.

On Figure 8.11-1, most of the project site and laydown area, as well as the majority of the linear features, lie within soil mapping unit [15] Yolo association. A relatively limited portion of the northeast corner of the site (and laydown area) occurs within soil mapping unit [17] (Cropley Association). The tie-ins for the east fire suppression water pipeline, the potable water line, and the recycled water line are also within Cropley Association soils.

8.11.1.3 Potential for 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 WCEP are not steep (the estimated average slope of the site is less than one percent) and while these soils do not have vegetative cover, they are currently paved or otherwise covered by existing facilities. In general, the WCEP soil types, as indicated by the NRCS mapping (2002), are fine grained (silt loam to clay). These soils are expected to have a relatively low water and wind erosion potential for the following reasons:

- There are nearly level conditions at the site, laydown area, and along the linears (which are very short)
- The fine-grained soils are cohesive and would tend to hold moisture well
- The site is surrounded by other developed properties and buildings that will limit locally significant ground-level winds that could lead to excessive wind erosion

8.11.1.4 Other Significant Soil Characteristics

A significant soil characteristic concerning the proposed project is the potential for soils with a high shrink-swell potential, especially near the northeastern portion of the WCEP site. This soil property is associated with the Cropley 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.

8.11.2 Environmental Consequences

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

8.11.2.1 Significance Criteria

The potential for impacts to agricultural and soils resources were 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, because of their location or nature, could result in conversion of Farmland to non-agricultural use
- Impact jurisdictional wetlands
- Result in substantial soil erosion
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (International Code Council, 1997), creating substantial risks to life or property

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

8.11.2.2 Prime and Unique Farmland

The WCEP is not located on or near prime or unique farmland and is not located within or near any areas zoned for agricultural use or areas having a Williamson Act contract.

8.11.2.3 Jurisdictional Wetlands

The WCEP would not impact jurisdictional wetlands. A jurisdictional (water of the United States) drainage feature is present immediately west of the project site, but outside of the project parcel. The project will not make any use of this area, for construction or to collect storm water runoff from the project area, and the area will be maintained in its present state as a drainage channel tributary to San Jose Creek.

8.11.2.4 Soil Erosion During Construction

Construction impacts on soil resources can include increased soil erosion and soil compaction. Soil erosion causes the loss of topsoil and can increase the sediment load in surface receiving waters downstream of the construction site. The magnitude, extent, and duration of construction-related impact depends on the erodibility of the soil; the proximity of the construction activity to the receiving water; and the construction methods, duration, and season.

Because the conditions that could lead to excessive soil erosion are not present at the site and laydown area, very little soil erosion is expected during the construction period. In addition, BMPs will be implemented during construction. The CEC also requires that project owners develop and implement an erosion and sediment control plan to reduce the impact of runoff from the construction site. Therefore, impacts from soil erosion are expected to be less than significant. Monitoring will involve inspections to ensure that the BMPs described in the erosion and sediment control plan are properly implemented and effective.

Despite the low potential for soil erosion in the WCEP project area, estimates of erosion by water and wind are provided in the following sections.

8.11.2.4.1 Water Erosion

An estimate of soil loss during construction by water erosion is found below in Table 8.11-2. This estimate was developed using the Revised Universal Soil Loss Equation (RUSLE2) program using the following assumptions:

- The WCEP site is a total 11.48 acres of which approximately 1.89 acres will be used as a construction for laydown area. Active soil grading would occur over a 6-month period within the project site and laydown area. The soil in both these areas would then be exposed for an additional 12-month construction period. The total offsite area for 5-foot-wide linear trenches is 0.016 acre within existing roadways. Active grading and exposed soils were estimated for these segments for a maximum 2-month period before they would be re-paved (Bixby Drive) or regravelled (railroad).
- Estimates of soil loss (in tons) were made for loam (Soil Mapping Unit 15) and clay (Soil Mapping Unit 17). The estimated percent of disturbed soil in each unit is 91 percent in Soil Mapping Unit [15] and 9 percent in Soil mapping Unit [17].
- RUSLE2 rainfall erosivity conditions were estimated for the site using the nearest profile location, San Diego.
- Assumes a 100-foot slope length with a 1.0 percent average slope.
- Soil losses are estimated for construction conditions (approximated using 'bare ground, smooth surface' soil conditions); for active grading conditions (approximated using 'bare ground, rough surface' soil conditions); and for implementation of construction BMPs (approximated using 'tall fescue, not harvested' ground cover conditions). No contouring or other surface management conditions are assumed.

With the implementation of appropriate BMPs that will be required under the National Pollutant Discharge Elimination System (NPDES) permits, the total project soil loss of 0.0085 ton (Yolo soils) or 0.0010 ton (Cropley soils) is a negligible amount and would not constitute a significant impact. It should also be recognized that the estimate of accelerated soil loss by water is very conservative (overestimate of soil loss) because of the worst-case assumptions noted above.

TABLE 8.11-2
Estimated Soil Loss by Water Erosion Using RUSLE2 Model for the Project Construction Phase

Soil Loss Conditions Soil Unit 15	Soil Loss (tons/acre/year)	Duration in Months (Site/Linears)	Estimated Soil Loss (tons)			
			Site (9.05 ac)	Laydown (1.42 ac)	Linears (0.156 ac)	Total
During Construction	0.56	12 / 2	5.07	0.80	0.015	5.88
During Active Grading	1.4	6 / 2	6.34	0.99	0.11	7.44
With Implementation of Construction BMPs	0.0008	Not applicable	0.0072 tons/yr	0.0011 tons/yr	0.00012 tons/yr	0.0085 tons/yr

TABLE 8.11-2
Estimated Soil Loss by Water Erosion Using RUSLE2 Model for the Project Construction Phase

Soil Loss Conditions Soil Unit 17	Soil Loss (tons/acre/year)	Duration in Months (Site/Linears)	Site (0.54 ac)	Laydown (0.47ac)	Linears (0.007 ac)	Total
During Construction	0.64	12 / 2	0.35	0.30	0.00074	0.65
During Active Grading	1.6	6 / 2	0.43	0.38	0.00184	0.81
With Implementation of Construction BMPs	0.001	Not applicable	0.0054 tons/yr	0.00047 tons/yr	6.9E-6 tons/yr	0.0010 tons/yr

Estimate of Total Soil Loss During Construction: 6.53 tons

Estimate of Total Soil Loss During Active Grading: 8.25 tons

Estimate of Total Soil Loss Using Construction BMPs: 0.0095 ton

RUSLE2 Model Assumptions:

Slope length = 100 feet; Average slope = 1 percent

Soil disturbance for linear installation was estimated as the offsite areas for following tie-ins : two fire suppression water loops, one recycled water line, one potable water line, one natural gas supply line, one non-recyclable (brine) line, one sanitary water drain line and one transmission pole (10-foot by 10-foot area).

The current state of the site is fully paved, so soil loss from a 'No Project' alternative is assumed to be negligible. The final site conditions during operations will be completely paved or otherwise covered, so soil erosion loss at that point would also be negligible.

It was assumed that the onsite laydown area would be cleared of the existing pavement or building slab prior to construction.

Soil losses during construction are estimated using 'bare ground, smooth surface' soil conditions; soil losses during grading are estimated using 'bare-ground, rough surface' soil conditions; and soil losses for fully implemented BMPs are estimated using 'tall fescue, not harvested' soil cover conditions.

8.11.2.4.2 Wind Erosion

The potential for wind erosion of surface material was estimated by calculating the total suspended particulates that could be emitted as a result of grading and the wind erosion of exposed soil. The total site area and grading duration were multiplied by emission factors to estimate the TSP matter 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; also in Table 11.9-4 in BAAQMD, 2005).

Table 8.11-3 summarizes the mitigated TSP predicted to be emitted from the site from grading and the wind erosion of exposed soil. Without mitigation, the maximum predicted erosion of material from the site is estimated at 14.8 tons over the course of the project construction cycle. This estimate is reduced to approximately 7.4 tons by implementing basic mitigation measures such as water application (see mitigation measures, below). These estimates are extremely conservative because these estimates make use of emission rates for a generalized soil rather than for specific soil properties. These likely provide a reasonable estimate for the onsite Yolo Association soils (silt loam texture) but probably overestimate the emission factors for the Cropley Association soils (clay texture).

TABLE 8.11-3
Total Suspended Particulate Emitted from Grading and Wind Erosion with and without Mitigation

Emission Source	Duration (months)	Unmitigated TSP (tons) [a]	Mitigated TSP (tons)[b]
Grading Dust:			
Site Area (9.59 acres)	6	10.5	5.27
Laydown Area (1.89 acres)	6	2.1	1.05
Linear Trench Areas (0.016 acre)	2	0.0059	0.0029
Wind-Blown Dust:			
Site Area (9.59 acres)	10	1.8	0.91
Laydown Area (1.89 acres)	10	0.36	0.18
Linear Trench Areas (0.016 acre)	2	0.0010	0.0005
Total		**14.8**	**7.4**

Notes:

[a] Emission Factor Source: URBEMIS2002 User's Guide, May 2003. The PM_{10} emission factor for grading dust is 0.11 ton/acre/month and the TSP emission factor for wind-blown dust is 0.38 ton/acre/year.

It is assumed that active site grading will last approximately 6 months for the project site and the laydown area. All linears will be completed within a two month period. It is assumed the pipeline trench width will be 5 feet and that completed segments will be paved or otherwise covered after the 2-month period. It is assumed that the area disturbed for the construction of the electrical transmission line will be affected for a 2-month period.

The assumptions for wind erosion on bare soil surfaces are that erosion would occur on half of the project site and laydown area for the duration of plant construction (estimated at 18 months). It was further assumed that exposed soil conditions for the linear segments would last for 2 month duration.

[b] According to the South Coast Air Quality Management District (SCAQMD) CEQA Handbook, Table 11-4 (1993), the range in reduction of PM_{10} with standard mitigation measures (water spraying, etc.) applied is 30 to 74 percent. This analysis assumes an average efficiency of 50 percent, applied to TSP.

8.11.2.5 Expansive Soils

Soils of the Cropley Association at the project site are expansive (have high clay content and a relatively high shrink-swell potential). These soils occupy only the northeastern corner of the WCEP site, however, and would not be subsoils for the foundations of major structures. Therefore, the project would not be subject to hazards posed by expansive soils. The geotechnical report prepared for the project (Appendix 10G) involves a detailed examination of the soil and geological conditions and will be the basis for project design.

8.11.2.6 Compaction During Construction and Operation

Construction of the proposed project would result in soil compaction during the construction of foundations and paved roadway and parking areas. Soil compaction would also result from vehicle traffic along temporary access roads and in equipment staging (laydown) areas. 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.

Prior to use as the construction laydown area, minimal grading is expected since the site is flat. After the existing building and roadway facilities are removed from the site, runoff from the site and laydown area will either runoff as overland flow or percolate to groundwater. However, the laydown area will likely be graveled to provide all weather use and further minimize soil erosion potential. Heavy equipment stored onsite will be placed on dunnage to protect it from ground moisture. Once construction is completed, the gravel will either be removed from the site or incorporated into the site paving.

Since the site and project linears will be constructed in previously developed areas that will be repaved or otherwise protected after construction, the overall anticipated effects of compaction during construction are considered to be less than significant.

Operation of the WCEP plant 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 graveled or paved, and standard operational activities should not involve the disruption of soil. Therefore, impacts to soil from project operations would be less than significant.

8.11.2.7 Effects of Emissions on Soil-Vegetation Systems

There is a concern in some areas that emissions from a generating facility, principally NO_x from the combustors or drift 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 the serpentine habitats in the project area are all developed for industrial, commercial, or residential uses. The addition of small amounts of nitrogen to the industrial and commercial areas would be insignificant 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.

8.11.3 Cumulative Effects

As previously described, the project would have no effect on agriculture, because there are no agricultural uses nearby. The project's effects on soil erosion, sedimentation, and compaction would be minor to negligible and insignificant, particularly with the application of Onsite. The surrounding area is heavily developed and so further development is not likely to contribute significantly to soil loss and erosion. Therefore, the potential for cumulative impacts of the proposed WCEP combined with other projects would be insignificant.

8.11.4 Mitigation Measures

BMPs will be used to minimize erosion at the site during construction. These measures typically include 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 paved or completely covered and, therefore, soil erosion loss at that point should be negligible.

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.

8.11.4.1 Temporary Erosion Control Measures

Temporary erosion control measures would be implemented before construction begins, and would be evaluated and maintained during construction. These measures typically include revegetation, mulching, physical stabilization, dust suppression, berms, ditches, and sediment barriers. These measures would be removed from the site after the completion of construction.

The project linear features will be constructed within the rights-of-way associated with Bixby Drive and Chestnut Street (reclaimed and potable water) or the adjacent railroad right-of-way to the south (natural gas, sanitary sewer, non-reclaimable wastewater). Temporary erosion control might include asphalt patching in the streets until permanent paving can be completed. If required on non-paved areas in the railroad right-of-way 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 loss of soil from the site. Water of a quality equal to or better than existing surface runoff would be sprayed on the soil in construction areas to control dust during revegetation.

Sediment barriers slow runoff and trap sediment. Sediment barriers include straw bales, sand bags, straw wattles, and silt levees. They are generally placed below disturbed areas, at the base of exposed slopes, and along streets and property lines below the disturbed area. Sediment barriers are often placed around sensitive areas; such as wetlands, creeks, or storm drains; to prevent contamination by sediment-laden water.

The site will be constructed on relatively level ground; therefore, it is not considered necessary to place barriers around the property boundary. However, some barriers would be placed in locations where offsite drainage could occur to prevent sediment from leaving the site. If used, sediment barriers 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, including sediment barriers around the base of the stockpiles, would be stabilized and covered. These methods can also be employed during trenching operations for the recycled water supply line.

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 SCAQMD CEQA Handbook (1993) and were used to estimate the effectiveness of the mitigation measures. Table 8.11-4 summarizes the mitigation measures and PM_{10} reduction efficiencies.

TABLE 8.11-4
Mitigation Measures for Fugitive Dust Emissions

Mitigation Measure	PM_{10} Emission Reduction Efficiency (%)
Water active sites at least twice daily	34-68
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

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

8.11.4.2 Permanent Erosion Control Measures

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

8.11.5 Applicable Laws, Ordinances, Regulations, and Standards

Federal, state, county, and local LORS applicable to agriculture and soils are discussed below and summarized in Table 8.11-5.

TABLE 8.11-5
Laws, Ordinances, Regulations, and Standards for Agricultural and Soil Resources

Jurisdiction	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 storm water discharge from construction and industrial activities	RWQCB Los Angeles Region, Region 4 under State Water Resources Control Board. USEPA may retain jurisdiction at its discretion.	Section 8.11.2.4
	Natural Resources Conservation Service (1983), *National Engineering Handbook*, Sections 2 and 3	Standards for soil conservation	Natural Resources Conservation Commission	Section 8.11.2.4
State	Porter-Cologne Water Quality Control Act of 1972; Cal. Water Code 13260-13269: 23 CCR Chapter 9	Regulates storm water discharge	CEC and the Los Angeles Region, under State Water Resources Control Board	Section 8.11.2.4
Local	Excavation Permit	Excavation of utility trenches in a public right of way	City of Industry Planning Department	Sections 8.11.2.4 and 8.11.4.5.3
	Construction Permit	Permit for all constructed site approaches from public rights-of-way	City of Industry Planning Department	Sections 8.11.2.4 and 8.11.4.5.3
	Grading and Drainage Permit	Required for construction on a private parcel	City of Industry Planning Department	Sections 8.11.2.4 and 8.11.4.5.3

8.11.5.1 Federal LORS

8.11.5.1.1 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 following an amendment in 1977, establishes requirements for discharges of storm water or wastewater from any point source that would affect the beneficial uses of waters of the United States. The CWA effectively prohibits discharges of storm water from construction sites unless the discharge is in compliance with a NPDES permit. The State Water Resources Control Board (SWRCB) is the permitting authority in California and has adopted a statewide general permit for storm water discharges associated with construction activity (General Construction Permit; SWRCB, 1999) that applies to projects resulting in one or more acres of soil disturbance. The proposed project would result in disturbance of more than one acre of soil. Therefore, the project will require the preparation of a storm water management plan. The requirements are described in greater detail in Section 8.15, Water Resources.

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.

8.11.5.1.2 U.S. Department of Agriculture Engineering Standards

The U.S. Department of Agriculture, NRCS, *National Engineering Handbook*, 1983, Sections 2 and 3, provides 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.

8.11.5.2 State LORS

8.11.5.2.1 California Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1972 is the state equivalent of the federal CWA, and its effect on the WCEP would be similar. The California Water Code requires protection of water quality by appropriate design, sizing, and construction of erosion and sediment controls. The discharge of soil into surface waters resulting from land disturbance may require filing a report of waste discharge (see Water Code Section 13260a). The Regional Water Quality Control Board (RWQCB), which controls surface water discharges, may become involved indirectly if soil erosion threatens water quality.

8.11.5.3 Local Laws, Ordinances, Regulations, and Standards

The City of Industry Planning Department has established standards and permits for excavation, grading, and drainage. The Planning Department is responsible for approving excavation permits for projects involving trenching in public rights-of-way, as well as for the construction of driveway approaches from public rights-of-way. A 1- to 2-week review period is required for both the Excavation and Construction Permits. A Grading and Drainage Permit is required for any construction on privately owned land and includes a 2-week plan review period (Marcellin, personal communication 2005).

8.11.6 Permits and Agency Contacts

Permits required for the project, the responsible agencies, and proposed schedule are shown in Table 8.11-6. A construction permit, including a grading permit, will be obtained from the City of Industry before construction begins. Other required permits include an Industrial Wastewater Discharge Permit, as discussed in Section 8.15, Water Resources.

TABLE 8.11-6
Permits and Agency Contacts for WCEP Soils

Permit or Approval	Schedule	Agency Contact	Applicability
Approval of excavation, grading and drainage; and construction permits	Minimum 2 weeks prior to construction	Troy Helling City of Industry Planning Department 15651 East Stafford Street City of Industry, CA, 91744 (626) 333-2211	Onsite grading and drainage, excavation for utility installations, and construction for site approaches from public rights-of-way

8.11.7 References

Bay Area Air Quality Management District (BAAQMD). 2005. http://www.baaqmd.gov/pmt/handbook/s12c03fr.htm.

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