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DATE	JUL 02 2010
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July 2, 2010

Mr. Rod Jones
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Lodi Energy Center (08-AFC-10)
Amendment 1 - Request for Additional Laydown Areas

Dear Mr. Jones:

Attached please find one hard copy and one electronic copy of Northern California Power Agency's Amendment 1, Request for Additional Laydown Areas. If you have any questions about this matter, please contact me at (916) 286-0249 or Andrea Grenier at (916) 780-1171.

Sincerely,

CH2M HILL

A handwritten signature in black ink, appearing to read "Sarah Madams".

Sarah Madams
AFC Project Manager

Attachment

cc: A. Grenier
E. Warner/NCPA

*Amendment 1
Request for Additional Laydown Areas*



**LODI
ENERGY CENTER**
(08-AFC-10)

EY062008001SAC

July 2010

Submitted by



Submitted to

California Energy Commission

With Technical Assistance by

CH2MHILL

Request for Additional Laydown Areas

Amendment 1
for the
Lodi Energy Center
Lodi, California
(08-AFC-10C)

Submitted to the
California Energy Commission

June 2010

Prepared by



With Technical Assistance by

CH2MHILL
Sacramento, CA

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SECTION 1

Introduction

Background

On April 21, 2010, the California Energy Commission (CEC) approved and licensed Northern California Power Agency's (NCPA) Lodi Energy Center (LEC). The LEC project is a nominal 296-megawatt (MW) combined-cycle power plant located in the City of Lodi. The LEC is proposed for a site parcel of approximately 4.4 acres adjacent to the City of Lodi's White Slough Water Pollution Control Facility (WPCF) to the east, treatment and holding ponds associated with the WPCF to the north, the existing 49-MW NCPA Combustion Turbine Project #2 (STIG plant¹) to the west, and the San Joaquin County Mosquito and Vector Control facility to the south. The project site is on land owned and incorporated by the City of Lodi, and is approximately 6 miles west of the Lodi city center. The city of Stockton is approximately 2 miles south.

The LEC will receive recycled water provided by the WPCF via a pipeline in the utility corridor connecting the LEC and the WPCF. Construction water will be supplied from the WPCF. The existing 230-kilovolt (kV) switchyard will be shared by the existing NCPA Combustion Turbine Project #2 (STIG) and LEC facilities. An additional high-voltage circuit breaker and other equipment will be added to the existing switchyard to accommodate the LEC. Natural gas for the project will be supplied from a new Pacific Gas and Electric (PG&E) 2.7-mile-long natural gas pipeline. Construction of the project will begin in the second quarter of 2010 and commercial operation is expected to commence in the second quarter of 2012.

Description of Proposed Amendment

The purpose of this filing is to request the CEC's approval to amend the LEC project description to include an additional 9.4 acres of laydown area adjacent to the LEC site. As shown in Figure 1, this additional area includes a 2.6-acre triangular piece along the western border of the switchyard (referred to as Area F), a 6.1-acre area near the Frontage Road adjacent to I-5 (referred to as Area E), and the extension of Area A to the north, an increase from 3.1 acres to 3.8 acres. The construction laydown and parking areas approved in the CEC Final Decision, totaled 9.8 acres. The additional 9.4-acre areas proposed for laydown increases the total construction laydown and parking area to 19.2 acres. More detailed information on these proposed changes is provided in Section 2.

Necessity of Proposed Changes

Sections 1769 (a)(1)(A), (B), and (C) of the CEC Siting Regulations require a discussion of the necessity for the proposed revisions to the LEC project and whether the revisions are based on information known by the petitioner during the certification proceeding. These proposed

¹ "STIG plant" refers to the NCPA Combustion Turbine Project, which is a steam turbine injected gas turbine (STIG) plant

changes were not known by the Applicant until after certification and are necessary to facilitate construction and reduce costs associated with construction of the new transmission facilities; described in further detail in Section 2.

Summary of Environmental Impacts

Section 1769 (a)(1)(E) of the CEC Siting Regulations requires that an analysis be conducted to address impacts the proposed revisions may have on the environment and proposed measures to mitigate significant adverse impacts. Section 1769 (a)(1)(F) requires a discussion of the impacts of proposed revisions on the facility's ability to comply with applicable laws, ordinances, regulations, and standards (LORS). Section 3 discusses the potential impacts of the proposed changes on the environment, as well as the proposed revisions' consistency with LORS.

Consistency of Changes with License

Section 1769 (a)(1)(D) of the CEC Siting Regulations requires a discussion of the consistency of each proposed project revision with the assumptions, rationale, findings, or other bases of the Final Decision and whether the revision is based on new information that changes or undermines the bases of the final decision. Also required is an explanation of why the changes should be permitted. As set forth in the following sections, the proposed revisions do not undermine the assumptions, rationale, findings, or other basis of the Final Decision for the project.

SECTION 2

Location for the Additional Laydown Area

Figure 1 shows the additional locations for the laydown areas to be used for supplementary staging of equipment (Figure 1 is provided at the end of the document). The additional laydown areas total approximately 9.4 acres. These additional areas will include a triangular piece along the western border of the switchyard (referred to as Area F), an area near the entry to the site on the Frontage Road adjacent to Interstate 5 (I-5) (referred to as Area E), and the extension of Area A to the north. The additional Laydown Areas E and F historically have been disturbed by agricultural activities. Laydown Area A previously has been disturbed during construction and operation of the WPCF.

Necessity of Proposed Changes

Sections 1769 (a)(1)(B) and 1769(a)(1)(C) of the CEC Siting Regulations require a discussion of the necessity for the proposed changes to the project and whether this modification is based on information that was known by the petitioner during the certification proceeding.

The need for additional laydown areas was not known to NCPA during the LEC licensing process. It was only discovered during the recently completed public bidding process that occurred after the certification, in that all of the construction contractors indicated in their bids that additional laydown area would be needed to complete construction of the LEC in a cost-effective manner. In addition, the City of Lodi has indicated that some of the original laydown areas allocated to the LEC project need to be reserved for its own projects. As a result, NCPA is requesting CEC approval of the additional laydown areas identified in this document.

SECTION 3

Environmental Analysis of the Additional Laydown Areas

The additional laydown areas provide the LEC project with additional staging areas during project construction. An analysis of each of the environmental areas included in the Application for Certification (AFC) is presented below. Additionally, the applicable LORS contained in the AFC have been reviewed to confirm consistency with applicable LORS.

3.1 Subject Matter Unaffected by the Additional Laydown Areas

Most of the subjects considered have no potential to be affected by the additional laydown areas. These unaffected subjects include Air Quality; Geologic Resources and Hazards; Hazardous Materials Management; Land Use; Noise and Vibration; Public Health; Socioeconomics; Traffic and Transportation; Visual Resources; Waste Management; and Worker Safety and Fire Protection.

3.2 Biological Resources

The additional laydown areas will temporarily affect approximately 9.4 acres of disturbed land adjacent to the boundary of the project site, and within areas previously disturbed during construction and operation of the present WPCF, and historically disturbed by ongoing agricultural activities. Surveys for wildlife usage, wetlands, nesting avian species and rare plants of the additional laydown areas were conducted on February 15, April 13, and June 16, 2010, by CH2M HILL biologists Rick Crowe, Dan Williams, and Russell Huddleston. As shown in Figure 1, the additional laydown areas will not be within the buffer zone previously analyzed in the AFC. No additional LORS will be triggered as a result of the temporarily impacted additional laydown areas. Therefore, any potential biological resource impacts associated with the proposed change in the size and location of the laydown areas will be less than significant after mitigation discussions with the San Joaquin County Council of Governments (SJCCOG), which implements the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (MSHCP).

Biological Setting

Laydown Area A

The CEC Final Decision approved Laydown Area A as 3.1 acres. NCPA is requesting that this area be expanded by 0.7 acres, thereby increasing total temporary impacts for Laydown Area A to 3.8 acres. The additional impacts are to the same open ruderal grassland as originally described in the AFC. Generally, Laydown Area A is a ruderal grassland consisting of dense rip-gut brome (*Bromus diandrus*), yellow-star thistle (*Centaurea solstitialis*), wild radish (*Raphanus sativa*), black mustard (*Brassica nigra*), and fiddleneck (*Amsinckia menziesii*). A few small valley oaks (*Quercus lobata*) are present at the north end of the expanded laydown area. No trees would be removed from this area.

Additionally, this ruderal grassland is routinely mowed as part of WPCF facility maintenance and fire protection practices. The area will be restored to pre-disturbance conditions following the completion of construction activities.

Laydown Area E

Laydown Area E is located directly north of the Frontage Road entrance to the LEC project site and the existing WPCF and STIG facilities near I-5. This 6.1-acre site is characterized by very dense ruderal vegetation including foxtail barley (*Hordeum murinum*), Italian ryegrass (*Lolium multiflorum*), rip-gut brome (*Bromus diandrus*), wild oats (*Avena barbata*, *A. Fatua*), soft chess (*Bromus hordeaceus*), wild radish (*Raphanus sativus*), black mustard (*Brassica nigra*), and fiddleneck (*Amensinckia menziesii*). There is a small agricultural drainage adjacent to the northern most portion of Laydown Area E; however, it is dominated by the same vegetation as the laydown area and is devoid of wetland vegetation. Wildlife observed during the February through June surveys consisted of California ground squirrels (*Spermophilus beecheyi*) and burrows along the northern edge of the site and around the perimeter of the proposed laydown area. Additionally, red-tail hawks (*Buteo jamaicensis*), Swainson's hawks (*Buteo swainsonii*), and a white-tailed kite (*Elanus leucurus*) were observed foraging and flying over the proposed laydown area along with typical grassland species. Red-winged blackbird (*Agelaius phoeniceus*), rock dove (*Columba livia*), Savannah sparrow (*Passerculus sandwichensis*), and Brewer's blackbird (*Euphagus cyanocephalus*) were observed flying over or foraging in this area. Laydown Area E is devoid of trees and therefore provides limited nesting structures for avian species. This ruderal agricultural area is routinely disked for fire suppression and cultivation. The area will be restored to pre-disturbance conditions following the completion of construction activities.

Laydown Area F

Laydown Area F is a 2.6-acre triangular area directly west of the existing STIG switchyard and STIG plant. This site is characterized by a lush growth of ruderal grassland, including milk thistle (*Silybum maritimum*); Italian thistle (*Carduus pycnocephalus*); perennial pepperweed (*Lepidium latifolium*); and other common ruderal grasses and forbs including rip-gut brome, soft chess, Italian rye grass, and black mustard. Laydown Area F is devoid of trees and therefore provides limited nesting structures for avian species. Wildlife observed in the vicinity of the laydown area included black phoebe (*Sayornis nigricans*), northern harrier (*Circus cyaneus*), belted kingfisher (*Ceryle alcyon*), killdeer (*Charadrius vociferus*), and ground squirrels with burrows. Coyote (*Canis latrans*) scat also was observed. This ruderal agricultural area is routinely disked or mowed for fire suppression. Laydown Area F is located just north of the giant garter snake upland habitat as identified in the Variance Request for Giant Garter Snake Upland Habitat (CH2M HILL, 2009), but it will not encroach on the 200-foot-buffer area approved in the CEC Final Decision. The upland setback area will be silt fenced to delineate the extent of disturbance and keep construction personnel and equipment out of the area. Laydown Area F will be restored to pre-disturbance conditions following the completion of construction activities.

Mitigation

Based on discussions with Mr. Steve Mayo, Senior Habitat Planner with SJCOG, mitigation is required for the loss of agricultural land from the use of Laydown Area F (2.6-acres) and

the additional acreage requested for Laydown Area A (0.7-acres). Mr. Mayo stated that mitigation for the Laydown Area E (6.1-acres) is not required because this parcel falls into Category A Exempt (No pay zone) based on the City of Lodi Compensation Map that was developed for parcels in the Lodi area by SJCOG. Therefore, the estimated mitigation costs for the temporary loss of agricultural land based on the 2010 SJCOG habitat fee structure is \$48,229.50. These monies will mitigate for the loss of 3.3-acres of agricultural land at \$14,615.00 an acre. This mitigation agreement will be entered into by submitting an application request to SJCOG.

3.3 Cultural Resources

The additional laydown areas are located adjacent to the LEC site, in areas previously disturbed during construction and operation of the present WPCF and historically disturbed by agricultural activities.

A literature search of the area, including a 1-mile radius surrounding the LEC site was conducted during preparation of the AFC. The additional laydown areas fall within this 1-mile radius. No resources have been previously documented within the additional laydown areas. CH2M HILL conducted an intensive pedestrian field survey of the revised laydown areas on May 18, 2010. The additional laydown areas are heavily disturbed and visibility was 100 percent. No cultural resources were observed as a result of the pedestrian field survey of the revised laydown areas. There are no known cultural resources in the revised laydown areas that are eligible for listing in the National Register of Historic Places or the California Register of Historic Resources.

The revised laydown areas will not result in potential impacts greater than those analyzed in the AFC, and no LORS will change as a result of the revised laydown areas. Therefore, any potential cultural resources impacts associated with the proposed change in the size and location of the laydown areas will be less than significant.

3.4 Paleontology

The additional laydown areas are adjacent to the boundary of the project site, in areas previously disturbed during construction and operation of the present WPCF and historically disturbed by agricultural activities. Because the revised laydown area has been subjected to previous ground disturbance activities and no new excavations are anticipated at the laydown areas the additional laydown areas will not result in potential impacts greater than those analyzed in the AFC and will comply with applicable LORS. Because mitigation measures proposed in the AFC will be employed, any potential paleontological resource impacts will be less than significant given application of those mitigation measures.

3.5 Soils

Soil classification of the additional laydown areas were provided in the AFC. Soil loss by water erosion during construction has been estimated for the additional laydown areas, using the Revised Universal Soil Loss Equation (RUSLE2). Results and detailed calculations are provided in Appendix A.

With the implementation of appropriate best management practices (BMPs) that will be implemented under the Construction Stormwater Pollution Prevention Plan (SWPPP), the total projected soil loss with the additional laydown areas increases from 0.20 tons to 0.21 ton and is considered to be a minimal amount and would not constitute a significant impact. The estimate of accelerated soil loss by water is very conservative (overestimate of soil loss) because it assumes only a single BMP (i.e., silt fencing), whereas the SWPPP will require multiple soil erosion control measures.

3.5.1 Wind Erosion

Potential fugitive dust resulting from the wind erosion of exposed soil was calculated for the additional laydown area using the emission factor in AP-42 (U.S. Environmental Protection Agency [EPA], 1995; also in Table 11.9-4 of Bay Area Air Quality Management District [BAAQMD], 2005).

Appendix A summarizes the mitigated total suspended particulates (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 and laydown areas has increased from 2.18 tons to an estimated 2.43 tons over the course of the project construction cycle. This estimate of 2.43 tons would be reduced with mitigation measures, from 0.79 ton (as presented in the AFC) to approximately 0.89 ton (with the additional laydown areas) by implementing basic mitigation measures, such as water application. These estimates are conservative because they make use of emission rates for a generalized soil rather than for site-specific soil properties.

With implementation of the appropriate BMPs that will be required for this project, the additional potential soil impacts are less than significant. Revision of the laydown area will be consistent with applicable LORS, and any potential soil impacts will be less than significant.

3.6 Water Resources

Use of the additional laydown areas will require additional water for dust suppression on the 9.4 acres of additional laydown area. However, water for dust suppression for the laydown area will be minimal and is not anticipated to create impacts on either groundwater or stormwater. NCPA will use water from the WPCF for dust suppression activities during laydown area use. All of these uses are temporary and construction related. Use of the additional laydown areas will not result in potential impacts greater than those analyzed in the AFC and will comply with applicable LORS. As a result, any potential water resource impacts will be less than significant.

SECTION 4

Potential Effects on the Public and Property Owners

The proposed change described in this amendment will have no effect on the public and property owners beyond what was originally approved by the CEC².

The additional laydown areas are temporary and minimal and will result in no greater impacts on the public and property owners than those analyzed during project licensing. Therefore, impacts on the public and property owners are expected to be the same than those analyzed during the license proceeding for the project.

² CEC Siting Regulations Section 1769(a)(1)(G) and (I)

SECTION 5

List of Property Owners

The list of property owners within 1,000 feet of the proposed project provided in the AFC has not changed as a result of the additional laydown areas. Therefore, the list of property owners within 1,000 feet of the proposed project is incorporated by reference from the AFC.³

³ CEC Siting Regulations Section 1769(a)(1)(H).

Figure



LEGEND

- Proposed Plant Site
- Laydown and/or Parking
- New Laydown Areas

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

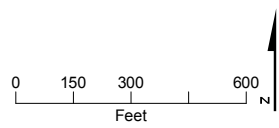


FIGURE 1
LAYDOWN AREAS
 LODI ENERGY CENTER
 LODI, CALIFORNIA

Appendix A
Soil Impact Loss Calculations

Table 5.11-3. Estimate of Soil Loss by Water Erosion Using Revised Universal Soil Loss Equation (RUSLE2)

Feature (acreage) ²	Activity	Duration (months)	Estimates Using Revised Universal Soil Loss Equation ¹		
			Soil Loss (tons) without BMPs	Soil Loss (tons) with BMPs	Soil Loss (tons/yr) No Project
Site (4.4 acres)	Grading	2	0.8	0.010	0.0233
	Construction	22	4.1	0.113	---
Laydown Areas (A through F - 18.5 acres) (0 acres exposed; either paved or gravelled)	Grading	1	1.7	0.022	0.0981
	Construction	23	0.0	0.000	---
Gas Supply Pipeline (1.30 acre trench; 9.73 acre construction corridor)	Grading	3	2.67	0.0340	0.0515
	Construction	3	1.24	0.0340	---
Transmission Line Pole (0.0004 acre for pole footprint)	Grading	0	0.00	0.00	0.0000
	Construction	0	0.00	0.00	---
Project Soil Loss Estimates	All activities listed above	20	10.53	0.213	0.173

Notes:

- Soil losses (tons/acre/year) are estimated using RUSLE2 software available online [http://fargo.nserl.purdue.edu/rusle2_dataweb/].
 - The soil characteristics were estimated using RUSLE2 soil profiles corresponding to the mapped soil unit.
 - Soil loss (R-factors) were estimated using 2-year, 6-hour point precipitation frequency amount for the LEC Project site found at [<http://www.nws.noaa.gov/ohd/hdsc/noaaatlas2.htm>].
 - 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.

Other Project Assumptions as follows:

- It is assumed that 100% of the LEC site and laydown areas will be exposed during grading, and approximately 10% of the site will be bare soil during construction.
- It is assumed that grading the site will take 2 months and construction will take 22 months.
- It is assumed that grading for laydown areas will take 1 month and that the area will be covered (gravelled or paved) immediately thereafter.
- It is assumed that soil loss will be negligible from the laydown areas once it is covered.
- It is assumed that the 14,122-foot gas pipeline will be installed within a 4-ft wide trench and a 30-ft construction corridor along existing roadways.
- It is assumed that the gas pipeline will take 3 months to construct and will take another 3 months before permanent cover is established.
- The water and sewer lines will be completed on-site, so no additional soil losses are estimated for them.
- It is assumed that no new off-site transmission poles are required.

RUSLE2 Assumptions as follows:

100-ft slope length. Estimated soil unit slope is the midpoint of the minimum and maximum of the unit slope class.

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.

Table 5.11-4. Estimate of Total Suspended Particulates (TSP) Emitted from Grading and Wind Erosion

Emission Source	Acreage	Duration (months)	Unmitigated TSP (tons)	Mitigated TSP (tons)
Grading Dust:				
Project Site	4.40	2	0.151	0.053
Laydown Areas (A through F)	18.50	1	0.204	0.111
Gas Supply Pipeline	1.30	3	0.536	0.188
Transmission Line Pole Holes	0.000	0.00	0.000	0.000
Wind Blown Dust:				
Project Site	4.40	22	0.307	0.107
Laydown Areas (A through F)	0.00	23	0.000	0.000
Gas Supply Pipeline	9.73	3	1.230	0.431
Transmission Line Pole Holes	0.000	0	0.0000	0.0000
Estimated Total			2.428	0.890

Notes:

All linear feature impacts noted above are for portions outside of the project areas footprints.

Project Assumptions:

Grading for project site will be completed in a 2 month period and construction will extend an additional 18 months.

Grading for laydown areas will be completed in a 1 month period and the site will be covered (gravelled or paved) immediately.

No new excavation for transmission line pole will be required

Approximately 1/10th of the project site has bare soil exposure during the length of the construction period.

Water and sewer line connections will be on site.

The gas supply line will be 14,122 feet long and installed primarily along roadway rights-of-way in a 4-ft trench with 30-ft construction corridor.

Data Sources:

^a PM10 Emission Factor Source: Midwest Research Institute, South Coast AQMD Project No. 95040, Level 2 Analysis Procedure, March 1996

^b PM10 to TSP Conversion Factor Source: Bay Area Air Quality Management District CEQA Guidelines, Assessing the Air Quality Impacts of Projects, December 1999.

SCAQMD CEQA Handbook (1993) Table 11-4 for mitigation efficiency rates (as summarized in Table 8.9-4)

Soil Type	Acreage	Slope	Soil Loss Estimates Using RUSLE2 software (tons/ac/year)			
			Grading	Construction w/o BMPs	Construction with BMPs	No Project
Site	4.40	1.0	1.1	0.51	0.014	0.0053
subtotal			4.84	2.24	0.06	0.0233
Laydown Areas (A through F)	18.50	1.0	1.1	0.51	0.014	0.0053
subtotal			20.35	9.44	0.259	0.0981
Gas Supply Pipeline	9.73	1.0	1.1	0.51	0.014	0.0053
subtotal			10.70	4.96	0.136	0.0515
Transmission Line Pole	0.00	1.0	1.1	0.51	0.014	0.0053
subtotal			0.00	0.00	0.00	0.00
Process Water Line	0.00	1.0	1.1	0.51	0.014	0.0053
subtotal			0.00	0.00	0.00	0.00
Sewer Line	0.00	1.0	1.1	0.51	0.014	0.0053
subtotal			0.00	0.00	0.00	0.00

Assumptions:

Assumes slope is the mid-point of the slope class

100% of project site would be bare soil during grading.

100% of pole holes will be bare soil during grading/excavation.

The No Project soil loss assumes a 'dense grass, not harvested' management scenario.

Project: LEC Lodi Project
Dust from Wind Erosion - With and Without Mitigation

Grading		MRI factor of 0.011 tons/acre/month is based on 168 hours per month of construction activity. Fact Sheet, 4/26/2007.
PM10 Emission Factor (ton/acre/month) ^a	0.011	
Project Site		
Duration (months):	2	Assumes 2 months of active grading.
Site Acreage:	4.40	Assumes 100% of site is graded
PM10 Emitted (tons):	0.10	
TSP Emitted (tons) ^b :	0.151	assume TSP is 64% PM10
Mitigated TSP Emitted (tons):	0.053	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Laydown Areas (A through F)		
Duration (months):	1	Assumes one month to grade
Site Acreage:	18.50	Sum of Laydown areas A, B, C, D, E and F
PM10 Emitted (tons):	0.20	
TSP Emitted (tons) ^b :	0.318	Assume TSP is 64% PM10
Mitigated TSP Emitted (tons):	0.111	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Gas Supply Line Trench		
Duration (months):	3.0	Assumes 3 months to construct pipeline
Site Acreage:	1.297	Assumes a 4-ft wide trench
PM10 Emitted (tons):	0.0428	
TSP Emitted (tons) ^b :	0.0669	assume TSP is 64% PM10
Mitigated TSP Emitted (tons):	0.0234	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Transmission Line Pole Hole		
Duration (months):	0.00	Assumes no transmission lines poles needed to connect
Site Acreage:	0.000	
PM10 Emitted (tons):	0.000	
TSP Emitted (tons) ^b :	0.000	Assume TSP is 64% PM10
Mitigated TSP Emitted (tons):	0.000	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Process Water Line Trench		
Duration (months):	0.0	Assumes on-site construction
Site Acreage:	0.000	
PM10 Emitted (tons):	0.000	
TSP Emitted (tons) ^b :	0.000	Assume TSP is 64% PM10
Mitigated TSP Emitted (tons):	0.000	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Sewer Line Trench		
Duration (months):	0.0	Assumes on-site construction
Site Acreage:	0.000	
PM10 Emitted (tons):	0.000	
TSP Emitted (tons) ^b :	0.000	Assume TSP is 64% PM10
Mitigated TSP Emitted (tons):	0.000	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Total Unmitigated TSP Emitted (tons)	0.536	
Total Mitigated TSP Emitted (tons)	0.188	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

^aEmission Factor Source: Midwest Research Institute, South Coast AQMD Project No. 95040, March 1996, Level 2 Analysis Procedure

^b Conversion Factor Source: Bay Area Air Quality Management District (BAAQMD) BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans. December 1999

Wind Blown Dust		
TSP Emission Factor (ton/acre/year)	0.38	Emission Factor Source: AP-42, Section 11.9 Western Surface Coal Mining Table 11.9-4, January 1995.
Project Site		
Acres exposed	4.40	
Duration (months)	22	Assumes 22 months of construction for Project site area after grading
TSP Emitted for Site (tons):	0.307	Assumes 1/10th of the site is bare soil during 18 month construction period
Mitigated TSP Emitted (tons):	0.107	Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Laydown Areas (A through F)		
Acres exposed	0.000	Sum of 6 laydown areas is 18.5 acres but all these areas are covered with gravel or other material after grading
Duration (months)	23	Assume 24 months for construction period (minus 1 month for grading)
TSP Emitted for Site (tons):	0.000	
Mitigated TSP Emitted (tons):	0.000	Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Gas Supply Line Corridor		
Acres exposed	9.726	Assumes 14,121.6-ft pipeline to east of site and construction corridor is 30 feet along side of road
Duration (months)	3	Assumes 3 months after excavating trench that permanent cover (i.e., paving) is established
TSP Emitted for Site (tons):	0.924	
Mitigated TSP Emitted (tons):	0.323	Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Transmission Line Pole Footprint		
Acres exposed	0.00	Assumes no new poles are needed to connect to existing T-line
Duration (months)	0.0	
TSP Emitted for Site (tons):	0.000	
Mitigated TSP Emitted (tons):	0.000	Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Process Water Line Corridor		
Acres exposed	0.000	Assumes on-site construction
Duration (months)	0	
TSP Emitted for Site (tons):	0.000	
Mitigated TSP Emitted (tons):	0.000	Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Sewer Line Corridor		
Acres exposed	0.000	Assumes on-site construction
Duration (months)	0	
TSP Emitted for Site (tons):	0.000	
Mitigated TSP Emitted (tons):	0.000	Assume 65% reduction in TSP with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4
Total (tons) without mitigation	1.230	
Total (tons) with mitigation	0.431	Assume 65% reduction in PM10 with watering thrice daily per SCAQMD CEQA Handbook (1993) Table 11-4

Project: LEC- Steve Long input for areas on 5/30/08 - last revision on June 17, 2010

OBJECTID	AREASYMBOL	Portion	Area or Length	Acres	Acreage_tot
LEC Site	149- Devries SL	100.0%		3.79	4.40 From Sarah Madams email dated 7/10/08 0.44 Assumes only 10% of site is bare soil during construction
Laydown Area A	149- Devries SL	100.0%		3.10	3.10 From Mike Haskell email dated 5/5/08; revised by Megan Sebra 6/16/2010
Laydown Area B	149- Devries SL	100.0%		2.20	2.20 From Mike Haskell email dated 5/5/08
Laydown Area C	149- Devries SL	100.0%		1.60	1.60 From Mike Haskell email dated 5/5/08; revised by Megan Sebra 6/16/2010
Laydown Area D	149- Devries SL	100.0%		2.90	2.90 From Mike Haskell email dated 5/5/08; revised by Megan Sebra 6/16/2011
Laydown Area E	149- Devries SL	100.0%		6.10	6.10 New laydown area provided by Megan Sebra 6/16/2012
Laydown Area F	149- Devries SL	100.0%		2.60	2.60 New laydown area provided by Megan Sebra 6/16/2013
					18.50 Assumes laydown areas are completely covered (paved or gravelled) during construction. Revised by email from Megan Sebra June 16, 2010
Natural gas supply pipeline -trench	149- Devries SL	100.0%	14121.6	1.297	1.30 Edit from 2.5 miles based on email revision from M. Sebra on 2/6/2009. Assumes 4 foot wide trench
Natural gas supply pipeline-corridor	149- Devries SL	100.0%	14121.6	9.726	9.73 Edit from 2.5 miles based on email revision from M. Sebra on 2/6/2009. Assumes 4 foot wide trench
					11.02
					Sum 29.962 Assumed 100% exposed during construction
					Construction
					Pole Holes
Transmission Line Pole	149- Devries SL		0	0.0000	0.0000 Assumes no 4x4 ft holes are needed off site to connect to existing OH lines
0	sum	0	0	0.0000	0.0000
					0.0000 Assumed pole hole footprint will be unprotected until pole installed
					Construction
					Trench acres
Process water supply pipeline	-	0			0 Assumes on-site connection
Sewer Line	-	0			0 Assumes on-site connection
					Corridor acres