APPENDIX B

General Conformity Analysis

GENERAL CONFORMITY ANALYSIS

Under Section 176(c)(1) of the federal Clean Air Act (CAA), federal agencies that "engage in, support in any way or provide financial assistance for, license or permit, or approve any activity" must demonstrate that such actions do not interfere with state and local plans to bring an area into attainment with the National Ambient Air Quality Standards (42 USC § 7506(c)).

The Proposed Action is located in the Sacramento Valley Air Basin (SVAB), an 11-county air basin that is designated as nonattainment with respect to the national standards for 8-hour ozone and fine particulate matter (PM2.5). To address the SVAB's nonattainment status, the regional air districts, including the Placer County Air Pollution Control District (PCAPCD), have worked together to produce implementation plans for attainment of the national standards. The General Conformity Rule ensures a federal agency's actions in a non-attainment area do not obstruct or conflict with a state or local implementation plan. The implementing regulations for the General Conformity Rule are found in Title 40 CFR, Part 51, Subpart W and Part 93, Subpart B. In addition, the PCAPCD has adopted the federal General Conformity regulations under Regulation 5, Rule 508.

Under the General Conformity regulations, both the direct and indirect emissions associated with a federal action must be evaluated. Subpart W defines direct emissions as:

> *[T]hose emissions of a criteria pollutant or its precursors that are caused or initiated by the Federal action and occur at the same time and place as the action (40 CFR § 51.852).*

Indirect emissions are defined as:

> *[T]hose emissions of a criteria pollutant or its precursors that:*
>
> *(1) Are caused by the Federal action, but may occur later in time and/or may be farther removed in distance from the action itself but are still reasonably foreseeable; and*
>
> *(2) The Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency (40 CFR § 51.852).*

A conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a federal nonattainment or maintenance area would equal or exceed specified annual emission rates, referred to as *de minimis* thresholds. For ozone precursors, the *de minimis* thresholds depend on the severity of the nonattainment classification; for other pollutants, the threshold is set at 100 tons per year. The Air Basin was designated as serious nonattainment for ozone by the US EPA in June 2004. However, due to concerns with meeting emissions reductions targets, the member air districts of the Sacramento Federal Nonattainment Area requested a

voluntary reclassification to severe, which was approved by the US EPA in June 2010. The relevant *de minimis* thresholds for the Air Basin are shown below in **Table 1**.

Table 1
General Conformity De Minimis Thresholds

Pollutant	Attainment Status	Annual Emissions (tons/year)
NO_X	Nonattainment/Severe (Ozone)	25
VOC	Nonattainment/Severe (Ozone)	25
PM2.5 (direct)	Nonattainment	100
PM2.5 (NO_X)[1]	Nonattainment	100
PM2.5 (VOC and NH_3)[2]	Nonattainment	100
PM2.5 (SO_X)	Nonattainment	100

Notes:

[1] *NO_X (oxides of nitrogen) is included for PM2.5 unless determined not to be a significant precursor. However, the NO_X threshold based on its contribution to ozone is more stringent.*

[2] *VOC (volatile organic compounds) and NH_3 (ammonia) are not included for PM2.5 unless determined to be a significant precursor. However, the VOC threshold based on their contribution to ozone is more stringent. Only very minor emissions of ammonia would be emitted to the atmosphere as a result of the Proposed Action or its alternatives.*

According to the General Conformity Rule, conformity analysis only applies to activities that trigger National Environmental Policy Act (NEPA) review. Where the federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval.[1] The U.S. Army Corps of Engineers (USACE) permit action is limited to filling of the waters of the U.S. on the project site and in the area of off-site improvements and does not extend to other construction activities, nor will the USACE maintain control over those elements of the Proposed Action or alternatives that are associated with operation of facilities constructed under the Sierra Vista Specific Plan Project. Accordingly, this

1 As stated in 40 CFR Parts 6, 51, and 93 (FRL-4805-1), Determining Conformity of General Federal Actions to State or Federal Implementation Plans, "the definition of "Federal action" is revised by adding the following sentence to the end of the definition in the proposal: Where the Federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the Federal permit, license, or approval. The following examples illustrate the meaning of the revised definition. Assume, for example, that the COE issues a permit and that permitted fill activity represents one phase of a larger nonfederal undertaking; i.e., the construction of an office building by a nonfederal entity. Under the conformity rule, the COE would be responsible for addressing all emissions from that one phase of the overall office development undertaking that the COE permits; i.e., the fill activity at the wetland site. However, the COE is not responsible for evaluating all emissions from later phases of the overall office development (the construction, operation, and use of the office building itself), because later phases generally are not within the COE's continuing program responsibility and generally cannot be practicably controlled by the COE."

evaluation will not consider the operational emissions from the development of the Proposed Action (or alternatives). Furthermore, with respect to construction emissions, the scope of the conformity analysis would be appropriately limited to the emissions associated with grading activities that would result in the filling of jurisdictional wetlands, any associated access roads, and any staging areas necessary to conduct the filling activity. Other construction activities not associated with the filling of jurisdictional waters would not be included in the conformity calculations.

While grading would take place over a large area of the project site, only a small portion of the grading would involve the filling of jurisdictional waters, and only this small portion of the grading is required to be analyzed. However, since information was readily available for the effect of grading the site as a whole, the USACE analyzed this data. If this data had provided emissions greater than the threshold then further efforts to focus the analysis on the grading specific to the discharge of dredge or fill into waters of the U.S. would have been warranted. In this case, the effects of the entire grading operations do not exceed the *de minimis* thresholds. For this reason, the entire grading operations were analyzed even though the grading operations that are required to be analyzed are a small portion of the overall operation. Annual grading emissions for the Proposed Action were estimated using URBEMIS2007. Emissions totals for the alternatives are essentially the same as those for the Proposed Action or smaller, so if the Proposed Action is determined to meet the conformity criteria, then the alternatives would as well.

The resultant average annual emissions for each nonattainment or maintenance pollutant are shown in **Table 2**. As the table shows, all emission values are less than the *de minimis* threshold for that pollutant. Based on this preliminary analysis, a *detailed* conformity analysis by the USACE is not required (40 CFR § 51.858). In addition, the direct emissions associated with the Proposed Action would not conflict with or obstruct implementation of the applicable air quality plan (*i.e.*, SIP for the Sacramento Valley Air Basin).

Table 2
Direct Average Annual Construction Emissions

Source	VOC (tons/year)	NOx (tons/year)	SOx (tons/year)	PM2.5 (tons/year)
Proposed Action	0.67	4.56	0.00	16.94
Thresholds (tons/year)	25	25	100	100
Exceeds Threshold?	NO	NO	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are attached.

Regardless of whether the USACE focuses only on direct emissions associated with the issuance of a Section 404 permit for the Proposed Action or whether it looks more broadly at all emissions associated with full buildout of the Sierra Vista project site, future air quality conditions are anticipated to improve over time within the affected air basin and buildout of the Sierra Vista Specific Plan Project would not result in a lack of conformity with approved federal air quality plans or the State Implementation Plan (SIP). In April 2012, the Sacramento Area Council of Governments (SACOG) reached a favorable conformity determination in approving in its most recent Regional Transportation Plan (called the MTP/SCS). SACOG's Draft EIR for the MTP/SCS explained SACOG's reasoning as follows:

> *In general, projecting the future air quality environment and how well the proposed MTP/SCS fits within existing air quality attainment plans, and their projected maintenance or attainment strategies, is evaluated through existing federal, state, and local air district processes. A determination of conformity, or conformance with the plans, is realized when: the forecasted emissions are within budgets identified in the plans or pass the interim emissions test; the latest planning assumptions and emission models are used; the plan and program are financially constrained; and the timely implementation of transportation control measures can be demonstrated. Conformity analyzes the impacts of land use and transportation in combination at the regional level. It quantitatively measures how selected land use and transportation planning principles in combination will affect our future air quality environment. As established in the proposed MTP/SCS, behavioral changes in choice of travel directly impacts mobile source emission generation projections; reduced [vehicle miles traveled] and trip numbers result in lower emissions.*
>
> *The forecasted emissions for ozone, PM10 and CO associated with the proposed MTP/SCS are within in the conformity budgets identified within the existing plans for each milestone year. Similarly, the forecasted emissions for PM10 and PM2.5 associated with the proposed MTP/SCS pass all interim emissions tests for all milestone years.*

The SCS, formulated pursuant to Senate Bill 375, assumed development of the Sierra Vista Specific Plan Project. Since buildout of all land uses assumed in the SCS would not conflict with or obstruct implementation of applicable federal air quality plans or the SIP, the same must necessarily be true of buildout of Sierra Vista Specific Plan Project by itself.

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Urbemis 2007 Version 9.2.4

Summary Report for Annual Emissions (Tons/Year)

File Name:

Project Name: Sierra Vista Conformity Grading

Project Location: Placer County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5
2007 TOTALS (tons/year unmitigated)	0.01	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2007 TOTALS (tons/year mitigated)	0.01	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2008 TOTALS (tons/year unmitigated)	31.10	22.25	33.34	0.05	0.20	0.94	1.14	0.07	0.86	0.93
2008 TOTALS (tons/year mitigated)	31.10	22.25	33.34	0.05	0.20	0.94	1.14	0.07	0.86	0.93
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020 TOTALS (tons/year unmitigated)	0.67	4.56	3.72	0.00	80.26	0.19	80.45	16.76	0.17	16.94
2020 TOTALS (tons/year mitigated)	0.67	4.56	3.72	0.00	41.58	0.19	41.77	8.68	0.17	8.86
Percent Reduction	0.00	0.00	0.00	0.00	48.19	0.00	48.08	48.19	0.00	47.69