

**APPENDIX B3**  
**AIR QUALITY/GHG CONFORMITY ANALYSIS**

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March 12, 2021

Ms. Julie Gilbert  
Jericho Systems, Inc.  
47 First Street  
Redlands, CA 92373

**SUBJECT: SIX BASINS STRATEGIC PLAN AIR QUALITY AND GREENHOUSE GAS ANALYSIS FOR NEPA**

Dear Ms. Julie Gilbert:

This Analysis for NEPA has been prepared for the Six Basins Strategic Plan (Project).

**AFFECTED ENVIRONMENT**

**National Ambient Air Quality Standards**

The Clean Air Act identified and established the National Ambient Air Quality Standards (NAAQS) for a number of criteria pollutants in order to protect the public health and welfare. The criteria pollutants include ozone ( $O_3$ ), carbon monoxide (CO), suspended particulate matter (PM), sulfur dioxide ( $SO_2$ ), nitrogen dioxide ( $NO_2$ ), and lead (Pb). PM emissions are regulated in two size classes: Particulates up to 10 microns in diameter ( $PM_{10}$ ) and particulates up to 2.5 microns in diameter ( $PM_{2.5}$ ).

A region is given the status of "attainment" or "unclassified" if the NAAQS have not been exceeded. A status of "nonattainment" for particular criteria pollutants is assigned if the NAAQS have been exceeded. Once designated as nonattainment, attainment status may be achieved after three years of data showing non-exceedance of the standard. When an area is reclassified from nonattainment to attainment, it is designated as a "maintenance area," indicating the requirement to establish and enforce a plan to maintain attainment of the standard.

**General Conformity Rule**

Section 176(c) of the Federal Clean Air Act states that a federal agency cannot issue a permit for, or support an activity within, a nonattainment or maintenance area unless the agency determines it will conform to the most recent U.S. Environmental Protection Agency-approved State Implementation Plan (SIP). Thus, a federal action must not:

- Cause or contribute to any new violation of a NAAQS.
- Increase the frequency or severity of any existing violation.
- Delay the timely attainment of any standard, interim emission reduction, or other milestone.

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 nonattainment or maintenance area

caused by the federal action would equal or exceed the General Conformity applicability rates specified in 40 C.F.R. section 93.153. Operation and maintenance emissions are considered exempt under 40 C.F.R. 93.153, therefore they are not included in the total direct and indirect effects of the federal action.

The Project site is located within the Cities of Claremont, Pomona, La Verne, and Upland, in addition to unincorporated County of Los Angeles, that is part of the South Coast Air Basin (SCAB) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

**Table 1** summarizes the federal attainment status of the SCAB.

**TABLE 1: FEDERAL ATTAINMENT STATUS FOR CRITERIA POLLUTANTS**

Pollutant	Attainment Status	General Conformity Applicability Rates (tons/year)
O <sub>3</sub>	Nonattainment	10
CO	Unclassifiable/Attainment	100
NO <sub>2</sub>	Unclassifiable/Attainment	100
SO <sub>2</sub>	Unclassifiable/Attainment	100
PM <sub>10</sub>	Attainment	100
PM <sub>2.5</sub>	Nonattainment	100
Pb	Unclassifiable/Attainment	25

Based on Table 1, the SCAB is currently in nonattainment for O<sub>3</sub> (precursors: VOC or nitrogen oxides [NO<sub>x</sub>]) and PM<sub>2.5</sub>; unclassifiable/attainment for CO, NO<sub>2</sub>, SO<sub>2</sub>, and Pb; and attainment for PM<sub>10</sub>. Based on the present attainment designation for the SCAB, a federal action would conform to the SIP if annual emissions are below 100 tons of CO, PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub>, or Pb, 10 tons of VOC, or 25 tons of lead.

### Greenhouse Gases

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). GHGs are emitted by natural processes and human activities. Examples of GHGs that are produced both by natural processes and industry include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Currently, there are no Federal standards for GHG emissions, and no Federal regulations have been set at this time.

### Emission Estimates Methodology

Emissions were estimated using the California Emissions Estimator Model™ (CalEEMod) version 2016.3.2 emission modeling software.

Estimates of lead emissions were not calculated. Lead emissions from mobile sources in California have significantly decreased due to the near elimination of lead in fuels. Thus, CalEEMod, the SCAQMD-approved emission modeling software, does not provide estimated emissions for lead.

As previously stated, O<sub>3</sub> formation is driven by two major classes of directly emitted precursors: VOC and NO<sub>x</sub>. The relation between O<sub>3</sub>, NO<sub>x</sub>, and VOC is driven by complex nonlinear photochemistry. Due to the variability in rates of O<sub>3</sub> formation, CalEEMod does not provide estimates for the compound. Instead, the emission estimates for VOCs are used as a surrogate for reporting O<sub>3</sub> emissions per the General Conformity Applicability Rates. Since the consumption of VOC in O<sub>3</sub> formation reaction is variable, actual O<sub>3</sub> levels are lower than those reported.

### **ENVIRONMENTAL CONSEQUENCES**

**No Action Alternative.** Under the No Action Alternative, the project site would remain in pre-project conditions. No construction would occur, and impacts related to air quality and objectionable odors would not occur.

### **Preferred Alternative/Proposed Action**

**General Conformity.** As part of the environmental review of the federal action, a general conformity evaluation has been completed pursuant to 40 C.F.R. 93.153. The general conformity regulations apply because the Project is situated in the Cities of Claremont, Pomona, La Verne, and Upland, in addition to unincorporated County of Los Angeles within the SCAB, and the County is designated as a nonattainment area for O<sub>3</sub>; unclassifiable/attainment for CO, NO<sub>2</sub>, SO<sub>2</sub>, and Pb; and attainment for PM<sub>10</sub>.

**Table 2** summarizes the annual construction air quality emissions and associated General Conformity Applicability Rates.

**TABLE 2: COMPARISON OF ESTIMATED ANNUAL CONSTRUCTION EMISSIONS TO  
GENERAL CONFORMITY APPLICABILITY RATES**

Pollutant	General Conformity Applicability Rates (tons/year)	Estimated Construction Emissions (tons/year)
O <sub>3</sub> (VOC)	10	0.32
CO	100	4.86
NO <sub>2</sub>	100	3.95
SO <sub>2</sub>	100	0.01
PM <sub>10</sub>	100	0.56
PM <sub>2.5</sub>	100	0.31
Pb	25	0.00

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For all pollutants, the emissions associated with construction of the federal action would be less than the applicability rates. Therefore, a general conformity determination is not required. Little to no quantifiable and foreseeable lead emissions would be generated by the construction of the proposed project. The proposed project would have no significant impacts on air quality.

**GHG Emissions.** Per discussion of GHG above, the estimated GHG emissions are included for the purpose of disclosure under NEPA. **Table 3** summarizes the total annual GHG emissions generated by construction activity.

**TABLE 3: COMPARISON OF ESTIMATED ANNUAL GHG EMISSIONS**

Pollutant	Estimated Construction Emissions (Metric Tons/Year)
GHGs (CO <sub>2</sub> equivalent)	1,222.28

***Objectionable Odors.***

The Project does not propose or require land uses that would be substantive sources of objectionable odors. Potential temporary and intermittent odors may result from construction equipment exhaust, the application of asphalt and architectural coatings, Temporary and intermittent construction-source emissions are controlled through existing requirements and industry Best Management Practices (BMPs) addressing proper storage of and application construction materials.

If you have any questions, please contact me directly at (949) 336-5987.

Respectfully submitted,  
URBAN CROSSROADS, INC.



Haseeb Qureshi  
Associate Principal

## **ATTACHMENT A: CALEEMOD OUTPUTS**