

## 4.2 AIR QUALITY

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This section provides estimates of criteria pollutant emissions and modeled impacts associated with the construction of the Modified Project. Emissions estimates and modeling was not conducted for operation and maintenance of the Modified Project because the discontinued use of the solar thermal technology eliminates the emissions associated with the use of HTF, the consumption of natural gas, and the intensive mirror washing program of the Approved Project. The air quality emissions for operation and maintenance of the Modified Project are estimated to be a fraction of those of the Approved Project.

However, criteria pollutant emissions during construction were evaluated for the Modified Project since many of the construction activities associated with grading of the site were similar to the Approved Project, warranting a closer comparison.

### 4.2.1 Summary of Construction Emissions

The methodology for calculating criteria pollutants and modeling impacts during construction is described in Appendix D. Table 4.2-1 presents the modeling results. Also included in the table are the maximum background levels that have occurred in the last three years and the resulting total ambient impacts. As shown in Table 4.2-1, modeled construction impacts are expected to be below the most stringent state and national standards. Total (i.e., modeled plus background) impacts are greater than the state's PM10 standards because these standards are already exceeded by background ambient concentrations even in the absence of the construction emissions from the Modified Project. Total (modeled+background) concentrations all also greater than the new 1-hour federal NO<sub>2</sub> standard.

**TABLE 4.2-1  
MODELED MAXIMUM IMPACTS**

Pollutant	Averaging Time	Maximum Impacts (ug/m <sup>3</sup> )	Background (ug/m <sup>3</sup> )	Total Impacts (ug/m <sup>3</sup> )	State Standard (ug/m <sup>3</sup> )	Federal Standard (ug/m <sup>3</sup> )
NO <sub>2</sub>	1 hour CAAQS	185.9	90.2	276.1	339	-
	1-hour NAAQS	173.3	73.3	246.6	-	188
	Annual	0.44	16.9	17.35	57	100
CO	1 hour	949	3437	4386	23000	40000
	8 hour	158	768	926	10000	10000
PM <sub>10</sub>	24 hour CAAQS	16.5	324	340.1	50	-
	24-hour NAAQS	16.5	96	112.5	-	150
	Annual	0.08	35.4	35.5	20	-
PM <sub>2.5</sub>	24 hour	7.4	14.7	22.1	-	35
	Annual	0.04	7.8	7.84	12	15.0
SO <sub>2</sub>	1 hour	1.44	136.3	137.7	655	196
	3 hour	0.59	N/A	<136.9	-	1300
	24 hour*	0.13	18.42.6	18.53	105	365
	Annual*	0.001	-	2.6	-	80
Ozone	1 hour	Modeling not required.			180	-
	8 hour				137	147

Notes:

1. Background values are the limiting values, i.e., when used for both state (CAAQS) and federal (NAAQS) standards, the value that is the highest for each applicable averaging time from Table 4 is used.
2. CARB Ambient Air Quality Standards Table, 2-7-12.
3. \*Federal SO<sub>2</sub> standards for 24 hour and annual apply only to certain areas (not applicable to this project).
4. Annual values are arithmetic means.
5. ARM applied for annual NO<sub>2</sub> average, using national default ratio of 0.75. Ozone Limiting Method (OLM) applied for 1-hour NO<sub>2</sub> average, calculated by AERMOD as described above.

#### 4.2.2 Compliance With LORS

The Modified Project will not be required to submit an application for a Determination Of Compliance with the Mojave Desert Air Quality Management District (MDAQMD) because it will not have any permanent emission sources that would require permits under MDAQMD rules.

#### 4.2.3 Conditions of Certification

Conditions of Certification **AQ-1** through **AQ-64** should be deleted as they are no longer applicable to the Modified Project because the BSPP will no longer have equipment that requires MDAQMD permits.

Condition of Certification **AQ-SC6** should be revised as follows to reflect that the Modified Project will not incorporate mirrors.

**AQ-SC6** The project owner, when obtaining dedicated on-road or off-road vehicles for ~~mirror~~ **panel** washing activities and other facility maintenance activities, shall only obtain vehicles that meet California on-road vehicle emission standards or appropriate U.S.EPA/California off-road engine emission standards for the latest model year available when obtained.