

E.2.11 Air Quality

E.2.11.1 Environmental Setting

The air quality setting for the BCD Alternative is similar to that of the Central Link, which is described in Section D.11.2.3. The BCD Alternative is wholly within San Diego County, administered by the SDAPCD.

E.2.11.2 Environmental Impacts and Mitigation Measures

This section presents a discussion of impacts and mitigation measures for the BCD Alternative as a result of construction, operation, and maintenance of the alternative. Table E.2.11-1 summarizes the impacts of the BCD Alternative on air quality.

Table E.2.11-1. Impacts Identified – BCD Alternative –Air Quality

Impact No.	Description	Impact Significance
BCD Alternative and BCD South Option		
AQ-1	Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants	Class I
AQ-2	Operation, maintenance, and inspections would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants	Class III
AQ-3	Power generated during transmission line operation would cause emissions from power plants.	Class III
AQ-4	Project activities would cause a net increase of greenhouse gas emissions	Class I

Overall air quality impacts of the BCD Alternative would be similar to those of the Proposed Project described in Section D.11.13. Construction impacts vary because of the route, but impacts related to power generated during transmission line operation (Impact AQ-3) and the overall net increase of greenhouse gas emissions (Impact AQ-4) would be identical for this alternative transmission line route. This means that mitigation measures identified for overall air quality impacts in Section D.11.13 [Mitigation Measures AQ-1h (obtain NO_x and particulate matter offsets), AQ-4a (offset construction-phase greenhouse gas emissions), AQ-4b (offset operation-phase greenhouse gas emissions), and AQ-4c (avoid sulfur hexafluoride emissions)] would remain applicable to the BCD Alternative as with the overall Proposed Project.

Impact AQ-1: Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants (Class I)

The BCD Alternative would generate dust and exhaust emissions from concurrent construction activity with multiple crews operating off-road equipment and on-road mobile sources at separate locations. General construction, structure foundation excavation, structure delivery and setup, wire installation, and fugitive dust from travel along the ROW could each occur simultaneously on any given day of construction. Table E.2.11-2 shows the estimated emissions for construction of the BCD Alternative.

Table E.2.11-2. Emissions from Construction of BCD Alternative Transmission Line

Construction Activity	NOx (lb/day)	VOC (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	CO (lb/day)	SOx (lb/day)	CO ₂ (lb/day)
Off-Road Equipment and On-Road Vehicles	998.9	134.5	52.3	52.3	463.8	21.2	98,630.5
Fugitive Dust	---	---	1,451.1	169.3	---	---	---
Daily Activity Totals	998.9	134.5	1,503.4	221.6	463.8	21.2	98,630.5
Significance Criteria	250	75	100	55	550	250	0
Exceed Significance Threshold?	Yes	Yes	Yes	Yes	No	No	*

Source: EIR/EIS Appendix 10.

* For discussion of impact significance of CO₂ emissions and greenhouse gases, see Section D.11.13.3.

The air quality impact of building the 500 kV segment for 19.5 miles under the BCD Alternative would cause emissions over the thresholds, and these emissions would occur as part of the remainder of the overall Interstate 8 Alternative. The construction equipment and emissions from motor vehicles used to mobilize the workforce and materials for construction would result in temporary significant ozone and particulate matter impacts. The APMs listed in Table D.11-10 (Section D.11) would reduce this impact, but dust and exhaust emissions would exceed the significance thresholds. Mitigation Measures AQ-1a and AQ-1b would further reduce these impacts, but as described for the I-8 Alternative (Section E.1.11) and the Proposed Project (Section D.11.13), the construction-phase emissions would be significant and unavoidable (Class I). (See Appendix 12 for the full text of the mitigation measures.)

Mitigation Measures for Impact AQ-1: Construction would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants

AQ-1a Suppress dust at all work or staging areas and on public roads.

AQ-1b Use low-emission construction equipment.

Impact AQ-2: Operation, maintenance, and inspections would generate dust and exhaust emissions of criteria pollutants and toxic air contaminants (Class III)

Dust and exhaust emissions generated during activities necessary for the operation, maintenance, and inspection of the BCD Alternative would involve new vehicle trips to patrol the portions of the alternative corridor that are new and that do not follow existing transmission lines. A minor increase in dust and exhaust emissions from the mobile sources would occur when compared to the existing conditions. Mobile source emissions related to vegetation clearing would also occur, but only occasionally, and the associated emissions would not contribute to a potentially significant impact. The incremental increase of emissions that would be caused by vehicular traffic for inspection and maintenance activities would be less than the thresholds for operation significance in Table D.11-8. Direct emissions from vehicular traffic for maintenance activities would cause an adverse but less than significant impact, and mitigation measures are not required (Class III).

Impact AQ-3: Power generated during transmission line operation would cause emissions from power plants (Class III)

The BCD Alternative would facilitate transmission of power into San Diego County from power plants that would increase operation outside of San Diego County, and it would reduce the need to generate power in San Diego County. Although some existing fossil fuel-fired power plants could increase operation, this would only occur within previously permitted limits. As in Overall Impacts of Proposed Project (Section D.11.13), the air quality effect of power plant operation would be adverse but less than significant (Class III).

Impact AQ-4: Project activities would cause a net increase of greenhouse gas emissions (Class I)

The BCD Alternative would cause an overall net increase of GHG emissions identical to that described in Overall Impacts of Proposed Project (Section D.11.13). Mitigation would reduce the GHG impact but not to a less than significant level (Class I).

Mitigation Measure for Impact AQ-4: Project activities would cause a net increase of greenhouse gas emissions

AQ-4a **Offset construction-phase greenhouse gas emissions with carbon credits.**

AQ-4b **Offset operation-phase greenhouse gas emissions with carbon credits.**

AQ-4c **Avoid sulfur hexafluoride emissions.**

E.2.11.3 BCD South Option

The impacts from construction-phase emissions (Impact AQ-1), emissions from operation, maintenance and inspections (Impact AQ-2), impacts related to power generation (Impact AQ-3), and the overall net increase of GHG emissions (Impact AQ-4) would be similar for the BCD South Option as for the remainder of the BCD Alternative.