

## **5.1. Air Quality**

This section addresses potential air quality impacts that may result from construction, operation, closure and post-closure maintenance of the Desert Valley Company Monofill (DVCM) Expansion Project, Cell 4. The following discussion addresses the existing conditions on the Project site, identifies applicable regulations, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid adverse impacts anticipated from implementation of the proposed Project, as applicable.

Information used in preparing this section and in the evaluation of potential air quality impacts was derived from the Desert Valley Monofill Expansion Project Air Quality and Greenhouse Gas Study prepared by Birdseye Planning Group which is provided as Appendix F this EIR (Birdseye Planning Group 2020a).

### **Scoping Issues Addressed**

During the scoping period for the Project, a public scoping meeting was conducted, and written comments were received from regulatory agencies. No issues related to air quality impacts were raised.

### **Issues Scoped Out**

None.

#### **5.1.1. Environmental Setting**

The proposed Project is located in Imperial County, the southeastern most county in California. Imperial County is one of the hottest and driest parts of California and is located in a low latitude desert characterized by hot, dry summers and relatively mild winters. Average annual precipitation within Imperial County is less than 3 inches. The normal maximum temperature in January is approximately 70 degrees Fahrenheit (°F), and the normal minimum temperature is approximately 41°F. In July, the normal maximum temperature can exceed 107°F, while the normal minimum temperature is approximately 75°F. Relative humidity in the summer is low, averaging 30 to 50 percent in the early morning and 10 to 20 percent in the afternoon. During the hottest part of the day, the relative humidity can drop below 10 percent. However, the effect of extensive agricultural operations in the widely irrigated Imperial Valley tends to increase local humidity. The prevailing weather conditions promote intense heating during the day in summer with cooling at night. During the fall, winter, and spring, regional winds tend to come from the northwest. During the summer, winds tend to come from the southeast.

The Project site is located within the Imperial County Air Pollution Control District (ICAPCD) and is subject to ICAPCD guidelines and regulations. The ICAPCD operates a network of five (5) ambient air monitoring stations throughout Imperial County. The purpose of the monitoring

stations is to measure ambient concentrations of the pollutants to determine whether the ambient air quality meets the California and federal standards. The air quality monitoring station located nearest to the Project site (Westmorland Station) is located at 570 Cook Street in Westmorland approximately 12 miles east of the Project site.

### **Sensitive Receptors**

Federal and state ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under 14; the elderly over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. This group is referred to as “sensitive receptors”. The sensitive receptors nearest the Project site are the residences associated with the Elmore Desert Ranch located on the north side of State Highway 86 approximately two (2) miles to the northeast.

### **Methodology**

The air quality analysis conforms to the methodologies recommended in the ICAPCDs *CEQA Air Quality Handbook*. All emissions associated with construction vehicle and equipment operations were calculated using most current version of the California Emissions Estimator Model (CalEEMod) software, version 2016.3.2. Construction emissions would be associated with clearing, grading, excavation and construction of the cells, roads, berms, levees and water diversion infrastructure. These emissions would consist of diesel exhaust and dust emissions. Construction equipment that would generate criteria air pollutants includes excavators, graders, dump trucks, and loaders. It was assumed that all construction equipment used would be diesel-powered.

Construction emissions associated with development of the proposed Project were estimated based on the number and types of equipment that would be used on-site during construction (**Table 4-1**). Operation of Cell 4A and 4B would generate similar emissions to what is generated under existing conditions. These emissions are associated with 39 daily truck deliveries (38 waste trucks + 1 vendor truck), eight (8) employee trips and operation of equipment, described on **Table 3-3**, to spread and compact the waste material. To determine whether construction of the project would cause a regional air quality impact, the net increase in emissions over baseline conditions were compared with the ICAPCD’s recommended regional thresholds for emissions.

#### **5.1.2. Regulatory Setting**

##### **Federal and State**

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate emissions of airborne pollutants and have established ambient air quality standards for

the protection of public health. The Environmental Protection Agency (EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the state equivalent in California. Federal and state standards have been established for six criteria pollutants, including ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulates less than 10 and 2.5 microns in diameter (PM<sub>10</sub> and PM<sub>2.5</sub>), and lead (Pb). California has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. **Table 5.1-1** lists the current federal National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for each of these pollutants. Standards have been set at levels intended to be protective of public health. California standards are more restrictive than federal standards for each of these pollutants except lead and the eight-hour average for CO.

**TABLE 5.1-1: FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	Federal Primary Standards	California Standards
Ozone	1-hour	----	0.09 ppm
	8-hour	0.070 µg/m <sup>3</sup>	0.070 µg/m <sup>3</sup>
PM <sub>10</sub>	24-hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
	Annual	---	20 µg/m <sup>3</sup>
PM <sub>2.5</sub>	24-hour	35 µg/m <sup>3</sup>	---
	Annual	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
Carbon Monoxide	8-hour	9.0 ppm	9.0 ppm
	1-hour	35.0 ppm	0.030 ppm
	Annual	0.053 ppm	0.030 ppm
Nitrogen Dioxide	1-hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	24-hour	---	0.04 ppm
	3-hour	0.5 ppm (secondary)	---
	1-hour	0.075 ppm (secondary)	0.25 ppm
Lead	30-day average	---	1.5 µg/m <sup>3</sup>
	3-month average	0.15 µg/m <sup>3</sup>	---

Notes:

- (1) ppm = parts per million
- (2) µg/m<sup>3</sup> = micrograms per cubic meter
- No standards for this pollutant.

Source: Birdseye Planning Group, 2020a (Appendix F).

## Local

Local control in air quality management is provided by the CARB through county-level or regional (multi-county) air pollution control districts (APCDs). The CARB establishes air quality standards and is responsible for control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The CARB has established 14 air basins statewide. The Project site is located within the Salton Sea Air Basin (Basin), which includes all of Imperial County and a portion of central Riverside County. Air quality conditions in the Imperial County portion of the Basin are under the jurisdiction of the ICAPCD. The remainder of the Basin is managed by the South Coast Air Quality Management District. The ICAPCD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in “attainment” or “non-attainment.” **Table 5.1-2** shows the state and federal attainment status for the Imperial Valley portion of the Salton Sea Air Basin.

**TABLE 5.1-2: ATTAINMENT STATUS – IMPERIAL VALLEY PORTION OF THE SALTON SEA AIR BASIN**

Pollutant	CAAQS	NAAQS
Ozone (O <sub>3</sub> )	Nonattainment	Nonattainment - moderate
Carbon Monoxide (CO)	Attainment	Unclassified/ Attainment
Respirable Particulate Matter (PM <sub>10</sub> )	Nonattainment	Nonattainment - serious
Fine Particulate Matter (PM <sub>2.5</sub> )	Unclassified	Unclassified/ Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Unclassified/ Attainment
Lead (Pb)	Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment
Sulfates	Attainment	No Federal Standards
Vinyl Chloride	Unclassified	No Federal Standards
Hydrogen Sulfide (H <sub>2</sub> S)	Attainment	No Federal Standards
Visibility Reducing Particles	Unclassified	No Federal Standards

Source: Birdseye Planning Group, 2020a (Appendix F).

ICAPCD is the local air pollution control agency for Imperial County and the southern portion of the Salton Sea Air Basin. The Project site is located within the Salton Sea Basin, which is a nonattainment area for ozone and PM<sub>10</sub>. The state ozone standard was not exceeded at the Westmorland monitoring station during 2016-2018. The federal PM<sub>10</sub> standard was exceeded 18 times in 2016, 8 times in 2017 and 9 times in 2018. Insufficient data was available to determine exceedances of the state PM<sub>10</sub> standard. **Table 5.1-3** summarizes monitoring data at the Westmorland Station for ozone and PM<sub>10</sub>.

**TABLE 5.1-3: AMBEINT AIR QUALITY DATA (WESTMORLAND MONITORING STATION)**

Pollutant	2016	2017	2018
Ozone, ppm – Worst Hour	0.068	0.067	0.068
Number of days of federal exceedances (>0.070 ppm)	0	0	0
Particulate Matter <10 microns, $\mu\text{g}/\text{m}^3$ – Worst 24 Hours	733	332	414
Number of samples of State exceedances (>50 $\mu\text{g}/\text{m}^3$ )	Insuff. Data	Insuff. Data	Insuff. Data
Number of samples of Federal exceedances (>150 $\mu\text{g}/\text{m}^3$ )	18	8.1	9.1

Source: Birdseye Planning Group, 2020a (Appendix F).

The ICAPCD has primary responsibility for ensuring that state and federal air quality standards are attained and maintained within the ICAPCD's jurisdiction. Thus, the ICAPCD is responsible for preparing clean air plans, issuing construction and operation permits, monitoring ambient air quality, as well as developing and implementing rules and regulations that govern air quality within Imperial County. The ICAPCD meets its regulatory responsibilities through the State of California State Implementation Plan (SIP). The ICAPCD adopted its first SIP in 1971 and has prepared periodic updates to the SIP. SIPs for controlling PM<sub>10</sub>, ozone, and a reasonably available control technology SIP are in place for Imperial County and constitute the Air Quality Attainment Plan (AQAP) for Imperial County.

A SIP revision for revised rules under ICAPCD Regulation VIII for fugitive dust PM<sub>10</sub> was reviewed by EPA, and the final rule was signed on March 27, 2013 and published in the Federal Register (Federal Register 2013). The ICAPCD adopted the rules on October 16, 2012 to regulate PM<sub>10</sub> emissions from sources of fugitive dust (e.g., unpaved roads and disturbed soils in open and agricultural areas). CARB submitted these rules to EPA for approval on November 7, 2012; EPA proposed approval of these revisions to the ICAPCD portion of the California SIP on January 7, 2013. Rules and regulations promulgated by the ICAPCD and in the SIP revision applicable to the proposed Project include the following:

- ICAPCD Rule 207.C.1, New and Modified Stationary Source Review (best available control technologies [BACT]), requires that any new or modified emissions unit that has a potential to emit 25 pounds per day or more of any nonattainment pollutant or its precursors, or 55 pounds per day of H<sub>2</sub>S, must include BACT as a part of the project.
- ICAPCD Rule 400, Nuisances, forbids the emission of air contaminants or other materials that would cause a nuisance to the public, including non-agricultural related odors.
- ICAPCD Rule 800 General Requirements for Control of Fine Particulate Matter (PM<sub>10</sub>), requires actions to prevent, reduce, or mitigate PM<sub>10</sub> emissions from anthropogenic (man-made) Fugitive Dust (PM<sub>10</sub>) sources generated within Imperial County.
- ICAPCD Regulation VIII, Rule 801 (Construction and Earthmoving Activities) establishes a 20 percent opacity limit, requires the implementation of a dust management control plan for all nonresidential projects of 5 acres or more, and requires compliance with other portions of Regulation VIII regarding bulk materials (Rule 802), carry-out and track-out (Rule 803), and

paved and unpaved roads (Rule 805). The rule exempts single-family homes and waives the 20 percent opacity limit in winds over 25 miles per hour (mph) under certain conditions.

- ICAPCD Rule 804 Open Areas, requires actions to prevent, reduce or mitigate the amount of fine Particulate Matter (PM<sub>10</sub>) emissions generated from Open Areas. Open areas are defined as any open area having 0.5 acres or more within urban areas, or 3.0 acres or more within rural areas; and contains at least 1,000 square feet of disturbed surface area.

On October 23, 2018, the Imperial County Air Pollution Control District Board of Directors approved the Imperial County 2018 Redesignation Request and Maintenance Plan for PM<sub>10</sub>. Also in 2018, the California Air Resources Board approved the Imperial County 2018 Redesignation Request and Maintenance Plan for PM<sub>10</sub>.

ICAPCD adopted the 2013 PM<sub>2.5</sub> plan on December 2, 2014. The plan was transmitted to CARB on December 9, 2014. CARB reviewed and approved the plan on December 18, 2014 as a revision to the California State Implementation Plan for Imperial County. The plan was submitted to the U.S. EPA on January 9, 2015 and is pending approval.

In 2015, a portion of Imperial County was designated nonattainment for the 12.0 µg/m<sup>3</sup> annual PM<sub>2.5</sub> ambient air quality standard (NAAQS or standard) necessitating the need to develop a SIP. This report summarizes CARB's assessment of the Imperial County Air Pollution Control District (District) 2018 PM<sub>2.5</sub> SIP for the 12.0 µg/m<sup>3</sup> annual PM<sub>2.5</sub>NAAQS (2018 PM<sub>2.5</sub> Plan). The 2018 PM<sub>2.5</sub> Plan relies on a special provision in the Act that enables states to prepare a SIP when transport of international pollution inhibits the ability to demonstrate attainment of the PM<sub>2.5</sub> standard. The CARB staff reviewed the 2018 PM<sub>2.5</sub> Plan developed by the District and determined that it met all applicable Act requirements. CARB staff will continue to work with the District and local community groups to develop additional emission reductions beyond the SIP to protect public health. On April 24, 2018, the District adopted the 2018 PM<sub>2.5</sub> Plan to address the annual 12.0 µg/m<sup>3</sup> annual PM<sub>2.5</sub> standard for the Imperial County PM<sub>2.5</sub> nonattainment area. The nonattainment area represents a portion of Imperial County that includes the most populated area of the county, including the cities of Brawley, El Centro, and Calexico.

During operations, any development with a potential to emit criteria pollutants below significance levels defined by the ICAPCD is referred to as a "Tier I Project," and is considered to have less than significant potential adverse impacts on local air quality. For Tier I projects, the project proponent must implement a set of feasible "standard" mitigation measures (determined by the ICAPCD) to reduce the air quality impacts to an insignificant level. A "Tier II Project" is one whose emissions exceed any of the ICAPCD thresholds. Its impact is significant, and the project proponent must select and implement all feasible "discretionary" mitigation measures (as determined by the Imperial County APCD) in addition to the standard measures. Tier I and Tier II daily thresholds for operational emissions are shown in **Table 5.1-4**.

**TABLE 5.1-4: ICAPCD DAILY OPERATIONAL EMISSIONS THRESHOLDS**

Pollutant	Tier I	Tier II
NOx and ROG	Less than 137 lbs/day	Greater than 137 lbs/day
PM <sub>10</sub> and SOx	Less than 150 lbs/day	Greater than 150 lbs/day
CO and PM <sub>2.5</sub>	Less than 550 lbs/day	Greater than 550 lbs/day

Notes: NOx = oxides of nitrogen      ROG = reactive organic gas      SOx = oxides of sulfur  
Source: Birdseye Planning Group, 2020a (Appendix F).

The ICAPCD has also developed specific quantitative thresholds that apply to short-term construction activities. The daily construction emission thresholds are shown in **Table 5.1-5**.

**TABLE 5.1-5: ICAPCD DAILY CONSTRUCTION EMISSION THRESHOLDS**

Pollutant	Construction (lbs/day)	Operation (lbs/day)
NOx	100	55
ROG	75	55
CO	550	550
PM <sub>10</sub>	150	150
PM <sub>2.5</sub>	N/A	55
SOx	N/A	150

Notes:  
(1) The ICAPCD has not adopted a significance threshold for operational or construction related emission of PM<sub>2.5</sub> or construction related emissions of SOx. Recent projects in the ICAPCD have used a PM<sub>2.5</sub> threshold for operation emissions of 55 pounds per day based on the SCAQMD’s Final Methodology to Calculate PM<sub>2.5</sub> and PM<sub>2.5</sub> Significance Thresholds.  
Source: Birdseye Planning Group, 2020a (Appendix F).

The Imperial County General Plan contains goals, objectives, policies and/or programs to conserve the natural environment of Imperial County, including air quality. Table 5.1-6 summarizes the Project’s consistency with the applicable air quality goal and objectives from the General Plan.

**TABLE 5.1-6: CONSISTENCY WITH APPLICABLE GENERAL PLAN AIR QUALITY GOALS AND OBJECTIVES**

General Plan Policies	Consistency	Analysis
<b>Land Use Element (LUE) (a)</b>		
LUE Objective 9.6: Incorporate the strategies of the Imperial County AQAP in land use planning decisions and as amended.	Yes	The AQAP includes the rules and regulations promulgated by the ICAPCD that are applicable to land use projects in Imperial County. The proposed Project must comply with applicable ICAPCD rules and regulations, either through project design or inclusion of mitigation, to obtain the necessary permits for construction and operation.

**TABLE 5.1-6: CONSISTENCY WITH APPLICABLE GENERAL PLAN AIR QUALITY GOALS AND OBJECTIVES**

General Plan Policies	Consistency	Analysis
<p>LU Objective 9.7: Implement a review procedure for land use planning and discretionary project review which includes the Imperial County Air Pollution Control District.</p>	<p>Yes</p>	<p>As the air pollution control district for the County, the ICAPCD must review all projects subject to environmental documentation. This review may entail the required inclusion of mitigation or other measures to reduce project emissions to levels acceptable per ICAPCD rules and regulations.</p> <p>The ICAPCD will review the proposed Project as part of the CEQA process and is identified on Table 4-2 as a Responsible Agency under CEQA.</p>
<b>Conservation and Open Space Element (COSE) (b)</b>		
<p>COSE Goal 7: The County shall actively seek to improve and maintain the quality of air in the region.</p> <ul style="list-style-type: none"> <li>• COSE Objective 7.1: Ensure that all project and facilities comply with current Federal, State, and local requirements for attainment of air quality objectives.</li> <li>• COSE Objective 7.4: Enforce and monitor environmental mitigation measures relating to air quality.</li> <li>• COSE Objective 7.6: Explore and assess strategies to reduce greenhouse gas emissions in the County.</li> </ul>	<p>Yes</p>	<p>The ICAPCD seeks to improve and maintain the quality of air in Imperial County through issuance of air quality management plans, rules, and regulations that reflect both state and federal requirements for meeting air quality objectives. The proposed Project has incorporated mitigation measures to comply with the requirements of these plans, rules, and regulations.</p> <p>Enforcement and monitoring requirements for mitigation measures related to air quality are presented in Section 5.1.4.</p> <p>An assessment of project-related greenhouse gas emissions was prepared for the Project and presented the <i>Desert Valley Monofill Expansion Air Quality and Greenhouse Gas Study</i> (Appendix F).</p>
<p><b>IV. Implementation Programs &amp; Policies</b></p> <p>B.5 Protection of Air Quality and Addressing Climate Change Policy: Reduce PM<sub>10</sub> and PM<sub>2.5</sub> emissions from unpaved roads, agricultural fields, and exposed Salton Sea lakebed.</p>	<p>Yes</p>	<p>The primary mechanism to implement the Goals and Objectives of the COSE is through incorporating environmental concerns into land use planning. This occurs primarily through the discretionary permit process.</p>
<b>Circulation and Scenic Highways Element (CSHE) (c)</b>		
<p>CSHE Objective 3.8: Attempt to reduce motor vehicle air pollution. Require all major projects to perform an air quality analysis to determine the amount of pollution, as well as the alternative reduction options.</p>	<p>Yes</p>	<p>An assessment of emissions from motor vehicle and other sources was prepared for the Project and presented the <i>Desert Valley Monofill Expansion Air Quality and Greenhouse Gas Study</i> (App. F).</p>

Sources: (a) County of Imperial General Plan, 2015. (b) County of Imperial General Plan, 2016. (c) County of Imperial General Plan, 2008.

### 5.1.3. Analysis of Project Effects and Significance Determination

#### *Guidelines for Determination of Significance*

A project would be considered to have a significant impact if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan?
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
3. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?
4. Expose sensitive receptors to substantial pollutant concentrations?

#### *Impact Analysis*

#### **Impact 5.1-1: Conflict with or obstruct implementation of the applicable air quality plan.**

#### *Site Preparation and Construction Emissions*

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) and exhaust emissions (CO and NO<sub>x</sub>) from heavy construction vehicles and trucks. It is anticipated that Cell 4A, with an expected lifespan of 28.6 years would be constructed first. Cell 4B would be constructed when Cell 4A approaches capacity. To conservatively estimate grading emissions and for fugitive dust control purposes, the analysis assumed that the entire 55.2-acre area comprising the Cell 4A (and 32 acres for Cell 4B) would be disturbed daily. For modeling purposes, it was assumed that all spoils would be stored on-site and used for cover material (in lieu of using soil sealant); thus, no off-site haul trips would occur. The construction year is 2024 for Cell 4A and 2050 for Cell 4B. Construction emission estimates are shown in **Table 5.1-7**.

**TABLE 5.1-7: ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS (UNMITIGATED)**

Construction Phase	Maximum Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	SO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Project Construction (Cell 4A) – Year 2024	3.3	32.4	0.06	28.6	19.4	9.96
Project Construction (Cell 4B) – Year 2050	2.9	10.1	0.07	23.2	8.6	4.8
<i>ICAPCD Regional Thresholds</i>	<i>75</i>	<i>100</i>	<i>No Standard</i>	<i>550</i>	<i>150</i>	<i>No Standard</i>
Threshold Exceeded?	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Birdseye Planning Group, 2020a (Appendix F).

As shown in **Table 5.1-7**, construction of Cell 4A and Cell 4B would not result in emissions of criteria pollutants that exceed ICAPCD thresholds. Therefore, construction-related air quality impacts would not be significant.

While no significant air quality impact would occur during construction, all construction projects within Imperial County must comply with the requirements of ICAPCD Regulation VIII for the control of fugitive dust. For this reason, to minimize fugitive dust and general construction emissions, fugitive dust control measures per ICAPCD Rules 801 and 804 are included as **MM AQ-1** and **MM AQ-2**. Implementation of Mitigation Measures AQ-1 and AQ-2 would provide additional reduction strategies to further improve air quality and ensure that construction impacts would remain less than significant.

Additionally, the air quality control measures implemented for the existing Solid Waste Facility Permit (No. 13-AA-0022) as well as those in the Authority to Construct and Permit to Operate (2120 B-3) described in Section 3.4 of the EIR, shall continue to be implemented for the proposed expansion.

### Site Operational Emissions

**Table 5.1-8** summarizes emissions associated with operation of the expanded facility. Emissions include the daily truck trips delivering geothermal wastes to the site, employee trips and use of equipment to spread and compact the waste material. As shown on **Table 5.1-8**, the ICAPCD thresholds for operational emissions would not be exceeded.

**TABLE 5.1-8: ESTIMATED OPERATIONAL EMISSIONS**

Operation	Maximum Emissions (lbs/day)					
	ROG	NOx	SOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
Operation of Cell 4A or Cell 4B	0.2	8.1	3.3	0.08	2.4	0.6
<b>ICAPCD Thresholds</b>	<b>55</b>	<b>55</b>	<b>150</b>	<b>550</b>	<b>150</b>	<b>55</b>
Threshold Exceeded?	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Birdseye Planning Group, 2020a (Appendix F).

### Carbon Monoxide Hotspot

A CO hotspot analysis is recommended if an intersection meets one of the following criteria:

- 1) the intersection is at Level of Service (LOS) D or worse and where the project increases the volume to capacity ratio by 2 percent, or
- 2) the project decreases LOS at an intersection to D or worse. A CO hotspot is a localized concentration of CO that is above the state or national 1-hour or 8-hour CO ambient air standards.

Localized CO “hotspots” can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal AAQS of 35.0 parts per million (ppm) or the state AAQS of 20.0 ppm.

California Department of Transportation 2017 traffic counts on SR-86 shows average daily trip volumes (ADT) of 1,150 at the intersection with SR-78 northwest of the Project site and 1,250 ADT at the intersection of Bannister Road southeast of the Project site. Because the proposed expansion would not increase the maximum number of truck trips per day allowed to access the monofill, it would not increase traffic levels beyond those already permitted. Thus, the Project will not add traffic to SR-86 and the existing volumes are not high enough to cause or contribute to congested conditions. No CO hotspot would occur under operating conditions.

In summation, while implementation of the proposed Project would increase air pollutant emissions during site preparation and construction; operations and closure/post-closure maintenance, the emissions would not exceed ICAPCD thresholds. Therefore, the Project’s potential to conflict with or obstruct an applicable air quality plan is considered less than significant with mitigation incorporated. Nonetheless, because all construction sites, regardless of size, must comply with the requirements contained within Regulation VIII – Fugitive Dust Control Measures, MM AQ-1 and MM AQ-2 will be implemented to further reduce construction impacts.

**Impact 5.1-2: Cumulatively considerable net increase of any criteria pollutant.**

As discussed under Impact 5.1-1, implementation of the proposed Project would increase air pollutant emissions during Project construction. The proposed Project is consistent with ICAPCD plans and would not exceed pollutant thresholds during operation. The Project’s potential to result in a cumulatively considerable net increase of any criteria pollutant is considered less than significant with mitigation incorporated. With implementation of MM AQ-1 and MM AQ-2 impacts would be less than significant.

**Impact 5.1-3: Other emissions, such as odors that adversely affect a substantial number of people.**

The proposed Project would generate odors from construction (i.e., diesel exhaust) and the operation of heavy equipment. Construction emissions would not exceed ICAPCD impact thresholds; thus, short-term odors are not expected to be significant. Further, the nearest sensitive receptor is located approximately two (2) miles northeast of the Project site. Odors from the site would not be detectable at that distance. Additionally, the monofill does not accept organic wastes, the decomposition of which could generate odors.

No significant impacts or mitigation measures related to odor were identified. Odor impacts would be less than significant.

**Impact 5.1-4: Exposure of sensitive receptors to substantial pollutant concentrations.**

The nearest sensitive receptor to the Project site are residences associated within the Elmore Desert Ranch located approximately two (2) miles northeast of the site. As discussed above, the emissions from site preparation and construction, operation, closure or post-closure maintenance would not exceed the ICAPCD thresholds with implementation of **MM AQ-1** and **MM AQ-2**. Sensitive receptors would not be exposed to substantial pollutant concentrations, and impacts would be less than significant.

**5.1.4. Mitigation Measures**

The following Mitigation Measures would reduce impacts to below a level of significance.

**MM AQ-1: Prepare and Implement Dust Control Plan**

Prior to commencing construction, the Applicant shall be required to submit a Dust Control Plan to the ICAPCD for approval. The Dust Control Plan will identify all sources of PM<sub>10</sub> emissions and associated mitigation measures during the construction and operational phases (see Rule 801 F.2). The Applicant shall submit a “Construction Notification Form” to the ICAPCD 10 days prior to the commencement of any earthmoving activity. The Dust Control Plan submitted to the ICAPCD shall meet all applicable requirements for control of fugitive dust emissions, including the following measures designed to achieve the no greater than 20-percent opacity performance standard for dust control and address the following parameters:

- All disturbed areas, including bulk material storage that is not being actively used, shall be effectively stabilized; and visible emissions shall be limited to no greater than 20-percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material, such as vegetative groundcover. Bulk material is defined as earth, rock, silt, sediment, and other organic and/or inorganic material consisting of or containing particulate matter with 5 percent or greater silt content. For modeling purposes, it was assumed that watering would occur twice daily.
- All on-site unpaved roads segments or areas used for hauling materials shall be effectively stabilized. Visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by restricting vehicle access, paving, application of chemical stabilizers, dust suppressants and/or watering.
- The transport of bulk materials on public roads shall be completely covered, unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks shall be cleaned and/or washed at the delivery site after

removal of bulk material, prior to using the trucks to haul material on public roadways.

- All track-out or carry-out on paved public roads, which includes bulk materials that adhere to the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto the pavement, shall be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers, or by sheltering or enclosing the operation and transfer line except where such material or activity is exempted from stabilization by the rules of ICAPCD.

*Timing/Implementation: Prior to and during construction.*

*Enforcement/Monitoring: Imperial County Air Pollution Control  
District and Imperial County Planning and  
Development Services Department*

#### **MM AQ-2: NO<sub>x</sub> Emission Controls**

The Applicant shall implement all applicable standard measures for construction combustion equipment for the reduction of excess NO<sub>x</sub> emissions as contained in the Imperial County CEQA Air Quality Handbook and associated regulations. These measures include:

- Use alternative-fueled or catalyst-equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- Minimize idling time, either by shutting equipment off when not in use or reducing the time of idling to five minutes at a maximum.
- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. Replace fossil-fueled equipment with electrically driven equivalents (assuming powered by a portable generator set and are available, cost effective, and capable of performing the task in an effective, timely manner).
- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing construction activity during the peak hour of vehicular traffic on adjacent roadways.

- Implement activity management (e.g., rescheduling activities to avoid overlap of construction phases, which would reduce short-term impacts).

*Timing/Implementation:*                      *Prior to and during construction.*

*Enforcement/Monitoring:*                      *Imperial County Air Pollution Control  
District and Imperial County Planning and  
Development Services Department*

***Level of Significance After Mitigation***

Impacts would be less than significant after mitigation.